Co-Creation for Academic Enhancement in Higher Education

Research-Informed Case Studies

Edited by Md Golam Jamil
Catherine O'Connor · Fiona Shelton

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This edited collection is dedicated to all higher education students—past, present, and future—who, as individuals and a community, illuminate our shared journeys through the realms of learning, growth, failure, and success.

Foreword 1

Community and Relationships at the Heart of Co-creation

Co-creation between students and staff is becoming an exciting reality in many universities around the world. Over the last decade, we have been privileged to witness the growth of interest, research, and practice in this exciting area of work. Co-creation and Students as Partners (SaP) are terms often used interchangeably or understood in a variety of ways, and these definitions are explored further in the second Foreword to this book. In my own work, I envisaged a continuum of different collaborative terms, with co-creation and SaP both involving shared decision-making, and negotiation of goals, values, and processes, but co-creation does not necessarily involve claims of equality between stakeholders, as is often the case with partnership (Bovill, 2020a). Both co-creation and SaP lead students and staff to engage together in meaningful ways that differ from the more traditional hierarchical norms of higher education.

It is impossible to effectively co-create without first establishing a trusting and respectful environment. Positive relationships between staff and students and between students and their peers are needed for co-creation, but are also enhanced through co-creation (Bovill, 2020a). Whether colleagues are co-creating a small project with a few students and staff, focused on co-creating learning resources on anti-racism, or whether a teacher and 50 students are co-creating the assessment for a course, building foundational relationships will play a key part in enabling the work to

proceed successfully. Building positive relationships between staff and students is how we can embody values of co-creation, such as trust, empathy, respect, authenticity, care, reciprocity, and shared responsibility. Sometimes I hear colleagues say that they tried co-creation but it did not work very well. When I ask for more information about what they have been doing, nine times out of ten, it is clear that something is missing in the relational aspect of the work. Relationships need to be authentic and we need to model the kinds of trust, respect and shared responsibility we wish to engender in co-creation. If we have not established trust, we should not be surprised if students or staff are reluctant to co-create. Even where we do establish trust, we also need to be aware that students and staff may feel more or less confident to lead or participate in co-creation at different stages for many different reasons: the relational is human and messy and unpredictable.

In this book, the chapters highlight a common thread within much co-creation practice: a sense of community. Establishing positive relationships and enacting the values of co-creation often leads to the development of community. Additionally, we should not underestimate the value of a sense of community in supporting students to feel that they matter and belong at university (Carruthers Thomas, 2019; Pedler et al., 2021; Thomas, 2012). Indeed, evidence from one study of co-created curriculum in Scottish universities found that not only were the 15 different co-created courses students experienced, the best courses they studied during their degree, but in some cases the sense of community developed was enough to prevent students dropping out of university (Lubicz-Nawrocka & Bovill, 2023). Co-creation offers the possibility for us to focus more on community and on the communal rather than individual aims, processes, and outcomes. So much of university life is focused on individual assessments and individual outcomes, and while this is important, it often leads us to overlook the benefits of communal projects, assessments, and outcomes. The students as partners literature highlighted some early concerns with projects that involved only a few individual students, asking questions about how students were being recruited and whether there was a tendency to select already super-engaged students to co-create, and thereby further exacerbate inequalities (Mercer-Mapstone & Bovill, 2020). Some of these concerns still

remain, but whole class approaches to co-creation offer some compelling possibilities to bring co-creation, relational pedagogy, community, and inclusivity together (Bovill, 2020b).

There are some fantastic examples of co-creation projects involving only a few students and staff that have had very positive impacts, so this is not to detract from that work, but rather to advocate for the powerful possibilities of whole class co-creation. What I am referring to here is 'co-creating learning and teaching with a whole class of students (including face-to-face, blended, and online settings, and including lectures, tutorials, laboratories, and other methods of teaching); in other words, it is co-creation integral to students' programmes and courses of study' (Bovill, 2020b, p. 1023). By the nature of involving whole classes of students, it is already more inclusive, although efforts must still be made to ensure typically underserved or less engaged students are offered meaningful opportunities to participate fully. Ultimately, this is about changing the way that many teachers approach their teaching, towards building relationships and community, and to ensure teaching and learning is done with students rather than to them.

As we continue to explore the possibilities of co-creation, this book is an important part of the narrative. The chapters explore a range of co-creation research and practices including smaller group co-creation, whole cohort co-creation and whole institution-wide co-creation, as well as investigating the implications for institutional change, learning gain, equity, and wellbeing. Importantly, the book explores these ideas across a range of international settings. These case studies add to existing collections of examples that have been published (see, e.g., Barrineau et al., 2019; Bovill, 2020a; Cook-Sather et al., 2014; Mercer-Mapstone & Abbott, 2020; Werder & Otis, 2010), and extend our understandings of co-creation.

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Foreword 2

Students as Partners and Co-creation

My focus here is on students as partners (SaP) and co-creation in learning and teaching in higher education (HE). I recognise that both terms may also apply to extra-curricular activities and student representation (Chap. 2; Healey, 2023)—though I note there are important differences between student representation and SaP (Matthews & Dollinger, 2023). Students may also work in partnership with employers and other stakeholders (Chap. 3). In this Foreword, I concentrate on unpacking the terms SaP and co-creation and discussing how learning communities may be built through SaP and co-creation in the context of enhancing learning and teaching in HE. It complements the other Foreword to this book, which focuses on establishing a trusting and respectful environment, developing a sense of community, and arguing for whole-class approaches to co-creation.

Unpacking Students as Partners and Co-creation

Although both SaP and student-staff co-creation have historical pedigrees going back several decades and even centuries (Chap. 1), they have only come into common use in the literature in the last 15 or so years. Hence it is perhaps not surprising that there is conceptual divergence in the way the two terms are used in the literature. For the editors of this book, SaP is a subset of co-creation (Chap. 1), while the authors of the two Forewords

have both used the term co-creation as a subset of SaP (Bovill et al., 2016; Healey & Healey, forthcoming).

SaP is commonly defined as 'a collaborative, reciprocal process through which all participants have the opportunity to contribute equally, although not necessarily in the same ways, to curricular or pedagogical conceptualization, decision making, implementation, investigation, or analysis' (Cook-Sather et al., 2014, pp. 6–7). Co-creation of learning occurs 'when staff and students work collaboratively with one another to create components of curricula and/or pedagogical approaches' (Bovill et al., 2016, p. 196). A distinction may be made between co-creation *of* the curriculum and co-creation *in* the curriculum (Bovill & Woolmer, 2019). The former involves students 'co-designing a programme or course *before* the programme or course takes place', while the latter engages students in the 'co-design of learning and teaching within a course or programme usually during the course or programme' (p. 409). Both SaP and co-creation are forms of active learning (Healey & Healey, 2020) that engage students through working in partnership with staff and/or other students.

The editors of this collection suggest that

> Students as Partners (SaP) is largely aligned to radical social justice roots (Cook-Sather, 2022; de Bie et al., 2021). On the contrary, the focus of co-creation is broader which is often co-creating value, in any form or volume, among the stakeholders. Therefore, while all SaP may be perceived as co-creation, not all co-creation is SaP.

I see (SaP) as being broader than is implied here. Healey et al. (2014, 2016) recognise four overlapping areas of partnership activity—learning, teaching and assessment; curriculum design and pedagogic consultancy; subject-based research and inquiry; and scholarship of teaching and learning (SoTL). The first two may be seen as co-creation activities (Bovill et al., 2016; Cook-Sather et al., 2019), while the second two engage students in discovery through research and inquiry (Healey & Jenkins, 2009) (Fig. F2.1) (Healey & Healey, forthcoming). Many student-staff partnership (SSP) initiatives draw on more than one of these activities.

It is important to note that some authors use the term co-creation to also refer to the co-production of knowledge through discovery-led learning (Chaps. 5 and 11). Indeed, I have used the term co-creation in this way, when referring to the 'Student as Producer' initiative at the University of Lincoln and the 'Students as co-creators' programme at the University

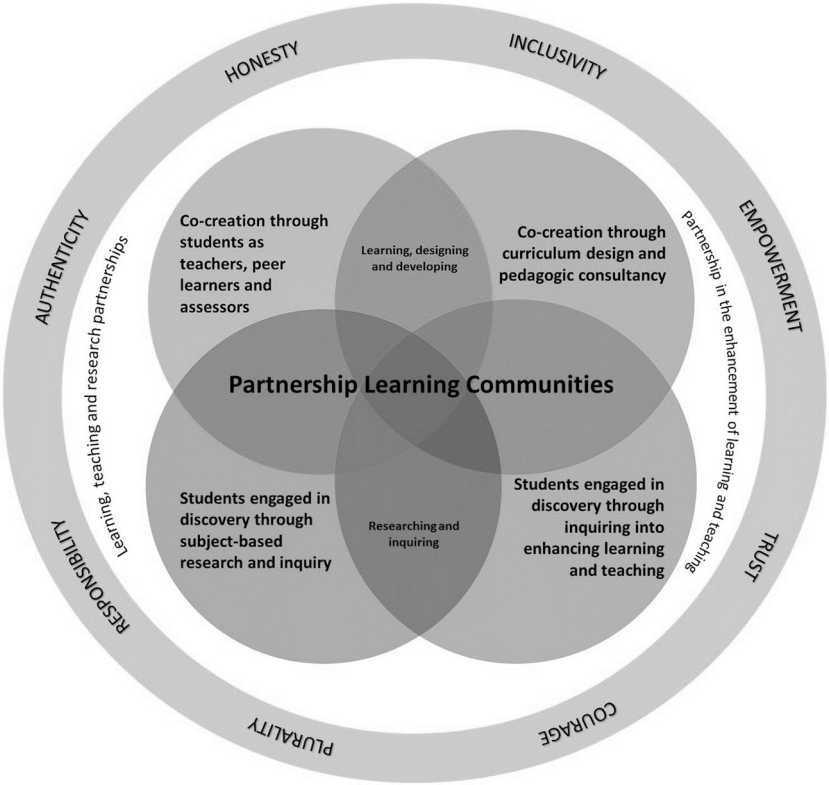

Fig. F2.1 Students engaged as partners in discovery and co-creation of learning. *Source*: Healey and Healey (forthcoming) based on a modification of Healey et al. (2014, p. 25) and HE Academy (2015)

of Westminster (Healey & Healey, 2019). If this broader definition of co-creation is accepted, then there is little to distinguish between SaP and co-creation and they can be seen as by and large interchangeable terms. A possible exception is that some examples of co-creation may not involve students, and involve, for example, academic staff co-creating with professional staff, or staff in HE co-creating with colleagues from business or public service (Chap. 2). SaP by definition must involve students—co-creating with other students, or with staff based in HE and/or business and public service. At this stage in the development of the literature, I

suggest that SaP and co-creation may best be seen as largely synonymous and closely overlapping terms.

Building Learning Communities through Partnership and Co-creation

A common feature of SaP and co-creation is that they are 'a way of doing things, rather than an outcome in itself' (Healey et al., 2014, p. 7). Both move the discourse away from 'students as consumers' to position students as 'more than customers' (Gravett et al., 2019). Fundamentally, they are 'about building meaningful relationships that challenge traditional teacher-student dynamics and break down hierarchies to reposition students and staff as colleagues and peers to one another' (Healey & Healey, 2024).

Both students and staff benefit from engaging in SSP and co-creation. Partnership enhances the relationship between students and staff. Trust has been cited as one of the most common benefits highlighted in the literature (Mercer-Mapstone et al., 2017). This enhanced relationship of trust through partnership is based on the development of a relational pedagogy, greater inclusivity, and increased understanding of the other's experience (Bovill, 2020; Healey & Healey, forthcoming). Engagement of students and staff in SaP and co-creation has the potential to drive change (Riley & McCabe, 2021).Effective SaP and co-creation of learning focus on the process of working together rather than the outcomes (Healey et al., 2014). Successful partnership learning is underpinned by nine values (Table F2.1) (Healey and Healey, forthcoming). These values have emerged from the literature on effective partnership practice and engaged student learning. Exploring these values and articulating their relative importance for individual partners early on, offers opportunities to develop more inclusive and innovative partnerships (de Bie et al., 2021; Mercer-Mapstone & Marie, 2019).

Working together in SSP and co-creation is about relationships, and relationships tend to be underlain by emotions (Felten, 2017; Felten & Lambert, 2020; Healey & France, 2024). Hence, we need to make space to explore the emotional underpinnings of partnership learning within sharing and supportive communities of practice. Frequent reflection and discussions of the values of partnership lay the foundation for the development of partnership learning communities (Healey & Healey, 2019).

Table F2.1 Partnership values

Authenticity: the rationale for all parties to invest in partnership is meaningful and credible.	*Honesty*: all parties are honest about what they can contribute to partnership and about where the boundaries of partnership lie.	*Inclusivity*: there is equality of opportunity and any barriers (structural or cultural) that prevent engagement are challenged.
Reciprocity: all parties have an interest in, and stand to benefit from, working and/or learning in partnership.	*Empowerment*: power is distributed appropriately and ways of working and learning promote healthy power dynamics.	*Trust*: all parties take time to get to know one-another and can be confident they will be treated with respect and fairness.
Courage: all parties are encouraged to critique and challenge practices, structures and approaches that undermine partnership, and are enabled to take risks to develop new ways of working and learning.	Plurality: all parties recognise and value the unique talents, perspectives and experiences that individuals contribute to partnership.	*Responsibility*: all parties share collective responsibility for the aims of the partnership, and individual responsibility for the contribution they make.

Source: HE Academy (2015)

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CHAPTER 1

Introduction: Co-creation in Higher Education—a Conceptual and Historical Overview

Md Golam Jamil and Kelsey Howard-Matthews

Backdrop of the Story: Putting Together a Book on Co-creation

In contemporary higher education, co-creation is gradually becoming a pivotal educational concept and a practical approach to enhancing academic and professional experiences, both individually and holistically.

Our key motivation to compile this edited collection was the nuanced appreciation and practice of co-creation at Leeds Trinity University (LTU), situated within the higher education landscape of the United Kingdom. We have observed the important role played by the integration of student voices and engagement in diverse academic and administrative activities, indicating that co-creation is a powerful catalyst for shaping the ethos of this university. Co-creation is embedded within LTU's core academic strategies including the ongoing work on transforming curriculum for equity and social justice. In the pursuit of creating effective learning

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environments, the university expects that all its academic programmes should embrace opportunities for collaborative decision-making between staff and students. From the perspective of broader student experience, it also expects that colleagues working in the academic programmes should facilitate collaborative and creative learning environments by maintaining openness, transparency, and respect. The general aim of co-creation at this university is to achieve a fair sharing of power between staff and students in all academic activities and institutional change processes in which they feel engaged and empowered.

We acknowledge that defining co-creation is not straightforward because its features overlap with the ethos and practices of similar educational concepts, predominantly with the principles of Student as Partners (SaP). As Healey suggests, co-creation, with its traditional definitions, is a subset of SaP; however, the wider scope of co-creation in academic and non-academic decision making and implementation brings the two terms very close allowing them to be used interchangeably (see Foreword 2). Bovil also identifies a common ground for them which is their basis for challenging the traditional hierarchical decision-making structure and engaging stakeholders in many meaningful ways (see Foreword 1). We argue that co-creation has strengths to be embedded as a mainstream practice, although to different degrees and in different phases, in higher education curricula. The case studies reported in this book demonstrate this wider scope of co-creation beyond pedagogies, for example, in addressing issues of belonging, equity, wellbeing, social justice, extracurricular activities, student representation, employer-university collaborations, and greater institutional changes. We claim that, in co-creation activities, power-differences between staff and students can be minimised significantly which is also a key feature of SaP.

Driven by the aforementioned considerations, we attempt to address two fundamental questions in this introductory chapter, (1) if the notion of co-creation is adequately distinguishable, for example, from the concepts of co-production and partnership; and (2) if the case study approach followed in individual chapters of this book is credible enough to provide evidence of impact and procedural guidance with contextual references.

Co-creation and Its Value in Contemporary Higher Education

The literature encompasses various purposes of co-creation in higher education; for instance, research and scholarship building (Werder & Otis, 2010), student representation in working groups and organisational decision making (Buckley, 2014), curriculum development (Bovill & Woolmer, 2019), and the enhancement of pedagogical practice and active student engagement (Deeley & Bovill, 2017; Healey & Healey, 2020).

When considering staff-student co-creation, the commonly perceived expectation is to facilitate an engaging environment so that the students feel motivated and empowered, can take control of their narratives, choose tools and resources to shape their pathways, and can establish authority over their academic development and learning journeys. Altogether, there are plausibly two overarching goals of co-creation. First, the approach is expected to remove hierarchical barriers for key stakeholders including students, staff, and leaders in decision making. Second, it can foster an inclusive academic culture through shared ownership and values. The aspects of shared values include identity, cultural alignment, communication, and trust which can strengthen one's sense of belonging as well as promote cohesion, collective understanding, and relationships (Schlesinger et al., 2017; Spry et al., 2020). However, several factors appear to hinder the process, for example, varied motivation and expectations of the stakeholders for engaging in a particular co-creation process or activity, effects of their dissimilar familiarisation with the respective context, practicality of the approaches to enabling power balance, and the extent of influence on leadership, policies and strategies. The chapters in this book individually and collectively address some of these issues with real-world case studies and evidence from the field.

Co-creation Concepts: A Brief Historical Overview

Co-creation in formal education is not a brand-new concept. Views around this topic can be traced back to 2500 years, when Aristotle discussed the importance of relationships in learning (Bingham & Sidorkin, 2004). Similarly, Dewey's call for democratic student participation in co-designing pedagogies (Dewey, 1916); Freire's critical, imaginative, and dialogical praxis in the classroom (Freire, 1970); Vygotsky's constructivist theory or co-construction of knowledge through social and cultural interaction (Vygotsky & Cole, 1978); Giroux's critical pedagogy and staff-student

negotiation in creating new knowledge (Giroux, 1983); and Hooks' critical analysis of power and balance (Hook, 1994) point to some forms of co-creation and their importance in formal education.

In recent years, increased attention and informed practices are evident in staff-student co-creation in higher education (Doyle et al., 2021). The literature links co-creation with several commonly known educational concepts and actions, such as, partnership (Bovill, 2019; Lubicz-Nawrocka & Simoni, 2018), collaboration (Bovill et al., 2016), co-production (Dollinger et al., 2018), and shared endeavour (Bovill, 2020). In broad terms, the literature explains co-creation as an active process of engagement (Healey et al., 2014), an opportunity for learner-centredness (Zmuda et al., 2015), a source of new and co-created knowledge (Bovill, 2019), and an enabler of learning community formation (Lubicz-Nawrocka, 2017). According to Bovill et al.,

> one way to conceptualise co-creation is occupying the space in between student engagement and partnership, to suggest a meaningful collaboration between students and staff, with students becoming more active participants in the learning process, constructing understanding and resources with academic staff. (Bovill et al., 2016, p. 197)

Generally, co-creation is a divergent way for students and staff to participate (and also not to participate) in actions for change through collective powers and enhanced opportunities. Co-creation environments are expected to be safe for the participants, and they should enable autonomy and proactiveness for all (Galpin et al., 2022). Overall, a co-creation scheme should be an active and dynamic process which is capable of facilitating shared experiences and improved relationships among the participants (Tarı Kasnakoğlu & Mercan, 2022).

Co-creation for Academic Enhancement: Transforming Ideas into Reality

The rationale behind embedding co-creation as a core teaching/learning practice includes the need to acknowledge diverse student views, make learning relevant and suitable, and utilise students' inquisition, knowledge, and leadership as useful resources for curriculum development (Bron & Veugelers, 2014; Bron et al., 2018). Both the benefits and challenges of co-creation in formal education are discussed in the literature.

Perceived Contribution of Co-creation to Higher Education Policies and Practices

Benefits of co-creation as an innovative and participatory educational approach include lifting of power structures between staff and students (Dianati & Oberhollenzer, 2020); enabling democratisation (Bovill, 2019; Jensen & Krogh, 2017); building personal and social capital through enhanced ownership of learning (Lubicz-Nawrocka, 2017); increasing active engagement, collaboration, and interaction (Bovill et al., 2016); encouraging creativity and inquiry (McWilliam, 2008); developing cognitive ability and authentic learning through critical analysis and applications of theories, reflection, and social meta-learning (Cook-Sather et al., 2014); and creating an environment for empathy and mutual learning (Akoglu & Dankl, 2021). These capabilities have been captured in empirical research within various academic disciplines, such as Business (Doyle et al., 2018), Medicine (Greenhouse et al., 2022), Education (Lubicz-Nawrocka & Bovill, 2023), and Engineering (Ribes-Giner et al., 2018) in higher education across the world.

Contrary to the benefits, examples of the drawbacks of co-creation include students' lack of understanding of the concept (Lizzio & Wilson, 2009; Mercer-Mapstone et al., 2017), low participation (Mendes & Hammett, 2020), difficulty in ensuring equity and inclusiveness (Bovill et al., 2016), absence of structured and continuing staff guidance (Dollinger & Lodge, 2019), time constraints (Bovill et al., 2011), and problems in ensuring equal opportunities and freedom for all students (Galpin et al., 2022).

Gaps between Theory and Practice

Despite the many features, benefits and challenges of staff-student co-creation illustrated in the literature, the meaning of co-creation remains largely at a conceptual level (Doyle et al., 2021; Dollinger et al., 2018). For example, in terms of curriculum and pedagogy, there is a lack of practical understanding of the types and forms of co-creation, and any variations within the types (Dollinger & Lodge, 2020). It also needs to be clear how educators can use co-creation in teaching (Chemi & Krogh, 2017), how authenticity of co-creation can be ensured (Dollinger & Lodge, 2020); how co-creation can have better impacts on student engagement and success (Kahu & Nelson, 2018); and how those who do not

participate can be engaged more (Galpin et al., 2022). Additionally, it seems important to explore suitable approaches to making co-creation equitable (Wright et al., 2021), and ensuring effective methods of communication with the partners in the process (Curtis & Anderson, 2021).

Bridging the Concept and Practice: An Applied Definition of Co-creation

From a conceptual viewpoint, co-creation is broadly a participatory and collective decision-making process that often originates and is motivated by stakeholders' needs and expectations. The discussion around co-creation in higher education demonstrates three major influencing perspectives: environment, identity, and relationships.

The Role of Environment, Identity, and Relationships in Co-creation

First, conceptually, co-creation maintains the principles and processes of constructivism which defines learning as a process of continuous interaction and meaning making with people, society, and the world (Piaget, 1923). Both co-creation and constructivism consider culture to be a driving force that shapes the process (Bruner, 1990). One of the strengths of co-creation is its ability to shift the learning environment from a traditional teacher-centred educational model to an engaged process in which students play an active role and contribute as protagonists (Kaminskiene et al., 2020). Therefore, the quality and impacts of co-creation can be perceived through enhanced dialogue and feedback, tolerance, information sharing, and interpersonal connection among the participants (Ventura-León et al., 2023).

Second, co-creation can contribute to reshaping the identity of students and academics in many ways, for example, the commitment they feel as students or academics, their sense of belonging within the educational environment, their relationship with their peers, and their overall understanding of academic processes and their importance (Dollinger et al., 2018; Lystbæk et al., 2019). In successful co-creation activities, togetherness and shared values are expected to be embedded and nurtured through various forms including cultural alignment, trust, and enhanced communication.

Third, a meaningful connection or relationship between academic staff and students is the foundation for effective co-creation. A positive relationship builds trust, engages the stakeholders in academic practices, and enables active learning (Bovill, 2020; Ryan & Tilbury, 2013). There are approaches which can help build effective relationships in academic settings, for example, creating safe and welcoming learning environments, developing participants' social skills, and managing disruptive behaviours or actions (Reeves & Le Mare, 2017; Yassine et al., 2020). It is also essential to build awareness and create support mechanisms for stakeholders with varied identities due to cultural differences (Senyshyn, 2021). The process is multilayered, and it involves various actors, including academic and professional service staff members, policy makers and even any non-university entities which are linked to learning and teaching practices. Particularly, curriculum designers and academic developers can play an important role in ensuring effective relationships in academic practice, for example, by fostering a 'relational pedagogy mindset' through a functioning community of practice (Su & Wood, 2023).

Co-creation and Similar Concepts: A Brief Comparison

In both academic and non-academic fields, co-creation commonly refers to a certain ethos and various practical processes of collaboration, cooperation, and shared endeavour among stakeholders. Whereas collaboration, cooperation and shared endeavour are the general terms for thinking and working together; co-creation has gained a technical identity that resonates with other established educational approaches including partnerships, co-design, co-production, and Students as Change Agents (SCA). Yet, because of several unique features of co-creation, there are slight differences between these concepts and actions. Here are a few examples:

1. Students as Partners (SaP) is largely aligned to radical social justice roots (Cook-Sather, 2022; de Bie et al., 2021). On the contrary, the focus of co-creation is broader which is often co-creating value, in any form or volume, among the stakeholders. Therefore, while all SaP may be perceived as co-creation, not all co-creation is SaP.
2. Co-design mainly refers to the design phase of a product or process. The focus is on inventions through incorporating stakeholder' views and actions (Vargas et al., 2022). Co-creation is broader than this as it can be a pre- or post- design stage, for example, any activities for

identifying the need for a product, and contextualising its perceived outcomes. Therefore, similar to Students as Partners, all co-design is likely co-creation, but not all co-creation is co-design.

3. Co-production is very similar to the concept of co-design, and it is mainly oriented towards the building or construction of a product or process. The dominant part of the literature on co-production defines it as the collective construction of knowledge which is often generated at the end of the value chain or lifecycle of a product or process (Vargas et al., 2022). On the other hand, co-creation engages stakeholders at all phases of the process including initiation, design, implementation, and evaluation (Ansell & Torfing, 2021; Voorberg et al., 2015).
4. In Students as Change Agents, students are the key stakeholders and take the roles of leaders and decision makers in the change process (Kay et al., 2010). Compared to SaP, co-design, and co-creation; in SCA students enjoy more power and autonomy for intervening and making any targeted changes. However, this may place an unfair burden on them because of the passive or dependent role of other stakeholders including staff members. Co-creation is more inclusive in this aspect as it places responsibilities on all stakeholders, although staff members may drive student agency to enact any changes.

An Applied Definition of Co-creation for Higher Education

Based on the ethos and unique applied features of co-creation, we propose the following definition of co-creation within a higher education context:

> Co-creation is an inclusive and shared approach to thinking, decision making, and implementation of plans in which stakeholders hold the power and responsibilities to enact any projected developments or changes. The process is expected to construct communal values among the participants through enabling autonomy, shared experience, and improved relationships.
>
> The focus of co-creation can be on any aspect of educational practice, environment, or policy. Examples include, curriculum design, teaching enhancement, research, embedding social justice, and academia-industry collaboration. The practice may originate at any stage of a project or process and continue to its any stages or across all stages including problem identification, scoping out, initiation, design, implementation, evaluation, and

the use of actionable findings in a change process. Because of its wider, flexible, and inclusive nature; co-creation has the capacity to include all the features of partnership, co-design, co-production, and Students as Change Agents.

Co-creation Case Studies and the Trajectory of this Edited Volume

This edited collection contains 12 chapters. The Introduction chapter (Chap. 1) provides a foundation for the book and delves into three critical aspects of co-creation: the historical development of co-creation concepts, the perceived value of co-creation in higher education practices, and a practical definition of co-creation based on its unique features. The Conclusion chapter (Chap. 12) revisits all the case studies and evaluates significance of the reported co-creation practices in attaining academic excellence. Here, the authors identify authenticity, value, and change as the three core elements of co-creation concepts and practices. The remaining ten chapters are research-informed case studies which address three broad areas: conceptual clarity and the framework of co-creation (Chaps. 2 and 3), co-creation as a pedagogical tool (Chaps. 4–8), and wider implications of co-creation in higher education (Chaps. 9–11).

- In Chap. 2, McIntosh and May propose a 3 C's model (Collaboration, Community and Cohesion) for enabling co-creation within academic, professional, and administrative dimensions. They discuss the strengths of the model in capturing impacts of the practice.
- In Chap. 3, Arm reflects on a cross-institutional co-creation project and provides the rationale for moving from a hierarchical to a matrix organisation structure which appears to be more effective for co-creation practices in complex higher education settings.
- In Chap. 4, Polkinghorne, McIntyre-Bhatty, and Roushan report a series of pilot studies exploring the effectiveness of co-creation-based teaching and variances in student learning based on gender, level of study, and other similar factors in such learning environments.
- In Chap. 5, Islam, Islam, Rashid, Islam, Mansur, and Mohiuddin show how co-creation schemes at Bangladeshi universities foster mutual respect among participants, promote community wellbeing, and enhance the sustainability of university services.

- In Chap. 6, Torn and Whitaker provide an analysis of co-designing a higher education academic programme with students. They discuss the practicality of embedding student perspectives in curriculum development as well as in pedagogical decision making.
- In Chap. 7, Joseph-Richard and Ringrose discuss how an academia-industry co-creation scheme bridges theory-practice gaps, strengthens value propositions and institutional relevance, and enhances individual and shared learning grounded in real-world needs.
- In Chap. 8, Teh and Chong explore the tripartite relationship of knowledge exchange dynamics among academics, students and practitioners in a whole-class co-creation activity embedded with adaptive strategies, such as flexibility, autonomy, and diversity.
- In Chap. 9, Shakir and Siddiquee share the experiences of a student-led co-creation project aimed at tackling race, equity, and social justice related challenges in higher education. They discuss the importance of creating safe co-created spaces to facilitate student voices.
- In Chap. 10, Mahgoub, Murkaz, Idris, Hassan, and Aman offer insights into a co-creation scheme with student representatives during a time of conflict. They highlight the need for having clear institutional strategies and extended roles of student representatives in such disruptive academic environments.
- In Chap. 11, Devis-Rozental, O'Sullivan, Polkinghorne, and Clarke provide an account of the co-creation approach for developing socio-emotional intelligence among students which can prepare them to engage in challenging academic activities in higher education.

The Original Contribution of this Book

Academic practices in higher education are continually evolving and new approaches are being implemented with the expectation of positive changes. It is plausible that the results of these practices differ due to diverse educational settings and varied contextual factors including practicality of strategies, availability of resources, demographics of stakeholders, and nature of institutional policies and governance. Therefore, to ascertain the relevance, efficacy, sustainability, and impacts of academic practices; it is necessary to evaluate them regularly through credible measures.

A systematic evaluation of any academic practice can also help propose realistic actions for improvement (Austen & Jones-Devitt, 2023; Carlucci et al., 2019; Jessop & Tomas, 2017). However, to enable a beneficial and sustained change process, it is vital to document and report the findings 'in a reliable way so that the knowledge of educational processes as well as struggles and success of the associated people can guide future educational philosophies and actions' (Jamil & Morley, 2022). Case studies have strengths to accommodate these demands, particularly by including the natural context, such as space, time, and people in rich narratives (Hancock et al., 2021). In this book, we follow the case study approach and focus on the higher education sector, the whole-institution, and specific academic programmes in individual chapters. The case studies are informed by systematic inquiry which ensures the credibility of the discussion and learning points. They are also written in plain language which helps reach wide-ranging readerships including those who lack strong theoretical knowledge or research experience in the discipline of education.

We acknowledge that there is a lack of established measurement instruments to gauge the impacts of co-creation in education (Ventura-León et al., 2023). To address this gap, this book discusses several approaches, for example, 3 C's model (Collaboration, Community and Cohesion) and a Matrix structure opposed to the traditional hierarchical structure; and various factors, such as socio-emotional intelligence, mutual respect, community wellbeing, equity, and social justice for evaluating success and failure of co-creation practices.

In this book, we keep our focus on practices around staff-student co-creation at universities although academia-industry co-creation is also reported in one case study. In the chapters, the authors explore the impacts of co-creation on academic and non-academic affairs and, when possible, suggest changes based on the lessons learned through systematic evaluations. Overall, the book integrates two distinct fields of scholarship: (1) practical and evidence-based scenarios illustrated through real-world case studies, and (2) critical evaluation and research-informed discussion of co-creation approaches and schemes. One novel approach we employed is peer-reading by all the authors who went through each other's case studies and explored connections between the discussion points across the chapters. As a result, the case studies have gained more nuanced angles of vision, reflections, and enhanced criticality as well as they now collectively explain several applied and conceptual aspects of co-creation.

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CHAPTER 2

The 3 C's: A Model for Co-creation of Student Success in Higher Education

Emily McIntosh and Helen May

Introduction

This chapter is structured in two parts. The first part explores the 3 C's model of staff-student co-creation: (1) community, (2) collaboration and (3) cohesion, developed by McIntosh and May (2024). These three core features coalesce around high-quality relationships and relational pedagogic practice to impact student belonging and connectedness in the academy and support improved student outcomes. The model is research-informed and can be applied in a variety of higher education settings, which will be explored further in the second part of this chapter. The model is built on traditional Freirean philosophy of pedagogy and other models of relational and relationship-rich education (Felten & Lambert, 2021; Bovill, 2020; Lyle, 2019). It is also built upon social constructivist learning theories (Vygotsky, 1978; Lave & Wenger, 1991), giving prominence not only to relational pedagogies, but also to the context and

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culture in which they occur. The first part of the chapter explores the three features of co-creation—collaboration, cohesion and community—as interrelated and distinct, and will argue that these need to be in balance for co-creation to work effectively within any given context. It offers an understanding of how relationships, knowledges, legitimacies and spaces are at the heart of working with students (McIntosh & Nutt, 2022a, b). It also focuses on the dialogues between staff and students as a core feature of integrated academic practice and to influence cross-departmental working (Shelton, 2022). It draws on various change models, highlighting the importance of shared thinking (McKinsey 7s Model, Peters & Waterman, 1982); coalitions and dialogue within a change process (Kotter, 2012) and coaching leadership styles (see Stanier, 2016).

The second part of the chapter focuses on how the 3 C's model can be put into practice within a higher education (HE) context. It outlines several domains where the model can be applied, reflecting on the legitimacy and practice of doing so. These domains include:

(a) *Curriculum design:* including co-creation of learning outcomes, curriculum content and design processes;
(b) *Learning, teaching and assessment:* including co-creation of pedagogical practice, assessment and feedback and technology-enhanced learning;
(c) *Student support:* covering co-creation of academic advising and student support;
(d) *Building academic communities:* covering co-creation of engagement and voice, communities of practice and sense of belonging;
(e) *Progression through and beyond HE:* covering progression between levels, to employment or further study;
(f) *Enhancement and change leadership:* covering change projects, initiatives and developments at local and institutional level, designed to enhance the quality of the student experience;
(g) *Quality assurance, evaluation and impact:* covering approaches to evaluating (both qualitatively and quantitatively) the quality of learning and student outcomes.

The second half of the chapter also offers a research-informed blueprint/framework to follow which will enhance a narrative of co-creation. It reflects on the impact of implementing the 3 C's model via the theory of change approach, outlining the development and embedding of

staff-student co-creation in the short, medium and long term. The chapter features some visual diagrams of the model and its application and these are used to illustrate its impact in practice-based settings.

Definitions of Co-creation

There are several definitions of co-creation in global higher education settings, many of which seek to understand the process by which staff and students work together to develop meaningful and engaging learning experiences and these have already been explored in Chap. 1. According to Katz: 'co-creating with students is a process…based on constructivist learning theory, which says learners construct knowledge and meaning from lived experiences rather than from passively taking in information…meaningful learning opportunities are made possible by honouring student voices' (2021). This is also prevalent in Vygotsky's zone of proximal development (1978), which explores the scaffolding and support required for a learner to achieve maximum cognitive growth. Genuine co-creation is therefore inherently dialogic and can only be built on the strength of various key relationships within the learning experience, many of which are of a supportive nature. But what underpins these relationships, and what are the conditions that must exist for these relationships to be nurtured? The research-informed 3 C's model has therefore been developed by McIntosh and May (2024) to respond to these questions, and to underpin the elements that are fundamental to co-creation by fostering both dialogue and the development of staff and student relationships in UK HE. The model, explored in more detail later in this chapter, has three core features, exploring the importance of: (1) community, (2) collaboration and (3) cohesion to the development of strong staff-student or student-student co-creation initiatives. The model can be applied in various HE contexts, and the second half of this chapter considers these in more detail. The model is of particular applicability to the thematic exploration of co-creation in this collection, providing some additional context for the importance of a research-informed approach, and theory of change narrative, to co-creation. It is also useful for balancing power dynamics in credible co-creation endeavours.

The 3 C's model is designed to be inclusive and has relevance to several academic and non-academic actors in HE. For example, it is informed by a 'whole of institution, whole of student' approach to student transition and success (Kift & Nelson, 2005), and can be applied to the macro, meso

and micro levels of organisations that exist in contemporary HE, allowing us to foster a greater sense of focus on the importance of linking up more disparate elements of the academy, though that dual lens of dialogic and relational working. To that end, the model can help identify and underpin university-wide initiatives and strategies to inform change through co-creation. Other applications at the macro level include its uses to regulatory and policy bodies and in the HE sector more generally—its general applicability to organisations with differing missions and contexts is especially useful in considering the challenges of diversification and massification in UK HE. Most importantly, it can also be adopted and inform change at a meso level, such as within specific faculties, schools or academic departments. At a micro level, the model is of particular importance to individual actors in HE such as academics, professional services colleagues and students themselves, in identifying the conditions they can co-create to bring about change.

The concepts of dialogue and relational education, upon which the 3 C's model is built, are both inherent in the recent literature exploring the scholarship of learning and teaching in higher education. In particular, the three themes of community, collaboration and cohesion (the 3Cs) are especially central to the way in which scholars conceptualise and write about co-creation, through a lens of dialogue and relationships. As Bovill writes (2020) co-creation has gained increased interest internationally over the last 10–15 years (particularly in the exploration of students as partners) and this aligns with an increased interest in relational pedagogy in HE over the last 20 years. It is important to recognise that these concepts draw on historical and more common theoretical frameworks and authors which are themselves not new. Bovill draws our attention to the works of Aristotle (seventh century), Dewey (1916), Rogers (1969) and Freire (1970), all of which are written in the context of more democratic and socially just educational environments, with a nod to increased participation and support. For Freire, dialogue and relational education were not mutually exclusive and were fundamental to the exchange of knowledge and ideas in a co-creation setting: 'the dialogical character of education…does not begin when the teacher-student meets with the students-teachers in a pedagogical situation, but rather when the former first asks herself or himself what she or he will dialogue with the latter about'. Bovill states, however, that we continue to experience 'challenges with co-creation and relational pedagogy in bridging the gap between espoused ideals and actual practice' (2020, p. 6).

Several authors, including Bovill, have therefore focussed on relationships and relational pedagogy as a way of bridging the divide between theories of co-creation, and the development of praxis across international higher education settings, many of which are closely tied with the three themes of community, collaboration and cohesion. Bovill has recently explored the types of relationships in learning and teaching, noting that these relational encounters are between humans and are therefore difficult to 'judge, measure or capture' in a quantitative way (2020, p. 10). A rich learning experience is about the cohesion, collaboration and connection that takes place within and between curricular, co-curricular and extra-curricular communities. It therefore applies to the entirety of our higher education environment. Thus, it is important to note that co-creation is everywhere in the academy, and to that end, the concept of relationships and relational education extends beyond the classroom (Kuh & Hu, 2001). As such, relational education also underpins the exploration of belonging and community as the foundation for the overall student experience, and this is particularly evident in Thomas' work (2012, 2017). Recently, Felten and Lambert (2021) have explored the meaning of 'relationship-rich' education, looking especially at connections that exist across the academy, both in the classroom and 'everywhere' (Chap. 5). Felten and Lambert's concept of relational pedagogy relies on making relationships a cultural priority through a culture of support and dialogue. Felten and Lambert's work has also extended to a student handbook on relationships where students are empowered to benefit from their own commitment to co-creation (Felten & Lambert, 2023). Relationships are also fundamental to the concept of academic advising and personal tutoring in HE, where recent literature has focussed on improving the quality of dialogue between students and staff to improve the overall student experience (Lochtie et al., 2017). Advising by its very nature, is a Freirean activity and, as Stenton argues, is based on dialogic encounter and learning conversations—if advising is teaching (and it is) there is no need to switch out of teaching mode and into student support mode (2018). This is especially important when we consider that students lead busy lives, and so we can use these processes to instil and inculcate deep learning and authentic engagement. We argue that it is in the exploring the connections between curricular, co-curricular and extra-curricular settings where the 3 C's model has particular impact. If co-creation applies to our learning and working environment more broadly, then the 3 C's which underpin co-creation can help join the dots between different academic, social and

administrative learning experiences, fostering the connections which Felten and Lambert focus on and culminating in what Shelton calls 'cross-departmental working' (Shelton, 2022).

The 3 C's Model of Co-creation: Inputs

In this chapter, we argue that co-creation requires the following interconnected pre-conditions to be present, and these are informed by the literature:

(1) *Community*: a felt sense of connection and common purpose between a group of people;
(2) *Collaboration*: two or more members of the community working together;
(3) *Cohesion*: unity between members of the community and their collective endeavours (whether strategic, tactical or operational).

For the purposes of this chapter, co-creation is taken to mean the process, involving two or more stakeholder group(s) working together on purposeful activity (such as design or enhancement) for the benefit of one or more of those group(s). For such activity to be meaningful, we also argue that attention is given to the following assumptions:

- *Senior sponsorship:* assuming the process is appropriately resourced, and any outputs of the process are fully integrated, valued and recognised.
- *Common purpose*: assuming all members of the group have a shared understanding and/or define and set the goal for the process together.
- *Shared ownership*: assuming ownership of the process and any associated outcomes are shared between members of the group from the outset.
- *Inclusivity*: assuming those set to benefit from the co-creation outcomes are effectively represented and equitably contributing to the collaborative and generative process from the outset.
- *Flexibility*: assuming the process can be adapted both to emerging changes as the process ensues and to the individual needs of group members over time.
- *Authenticity*: assuming the validity and relevancy of the process and outcome is addressed, as relating to the task, group, the community, discipline, or institution.

But who are the co-creators in higher education? As identified in the literature, co-creation applies to the breadth of the higher education settings (curricular, co-curricular/extra-curricular or communities) between the following stakeholder groups:

- students
- student(s) and staff (both academic and professional)
- students and industry/professional/business partners
- staff and staff (both academic and professional).

Co-creators can be local or global and be organised virtually or in person. As we explore later in the chapter, co-creation should be viewed as an integral part of learning in higher education and drawn upon as an authentic, and effective methodology to support improvement.

And how does co-creation benefit those involved and the outcome? The benefits of co-creation are well documented in associated literature (Bovill, 2020). They can be summarised as follows:

- Co-creation draws on different strengths of those involved, recognising that each person brings different ideas, viewpoints and perspectives that can enrich the process
- Co-creation improves relationships and connections between individuals, contributing to a sense of belonging within any given community
- Co-creation can help ensure that any outcomes derived from the process are relevant and meaningful to the beneficiaries
- Co-creation offers the opportunity for greater levels of creativity and innovation, arising from different ways of thinking as well as diverse ideas and perspectives
- Co-creation can make a task more engaging and fun when worked on with other people
- Co-creation can enhance self-awareness, efficacy and confidence amongst those involved in the process.

What helps to set co-creation apart, as distinct from engagement or participation, is a shared sense of responsibility and ownership. The 'co' element of co-creation presupposes that these are acted upon jointly and that those brought together to work on a creation task, are enabled to exert an element of power or influence over both the process and the outcome (c.f. May, 2003). The levels of influence that people have in the

decision-making process about matters that affect them can be visualised through Arnstein's ladder of citizen participation (1969). The ladder illustrates the varying levels of control and power dynamics at play between decision-makers and stakeholders impacted by those decisions. It has been instrumental in highlighting variations in efficacy and quality associated with collaborative working. This has been applied to education (May, 2003), as illustrated in Fig. 2.1, and used to review the effectiveness of and/or benchmark student engagement activity (May & Felsinger, 2010; NUS/HEA, 2010).

The efficacy of co-creation as a methodology requires consideration of authenticity, not only in relation to whose voices are represented within the process but also in terms of the effectiveness of the process in supporting a genuine partnership. The well-regarded saying 'nothing about us without us', conveys a simple but fundamental message—the importance of engaging those impacted by any proposed decision or the change that follows. Authentic co-creation depends on ensuring that both the stakeholders and beneficiaries of the process are represented. Throughout the shared endeavour, attention is given to the power dynamics at play, reflecting on the nature of the dialogue, the exchange and use of ideas, and approach to constructing a way forward. In their study of collaborative learning in higher education (Scager et al., 2016), identify eight factors that contribute to the effectiveness of collaboration—as associated with both the design (or organisation of the task) and the process. Their study concludes, as others have, that positive interdependence is a critical factor influencing the effectiveness of collaboration—a notion that we explore further under cohesion.

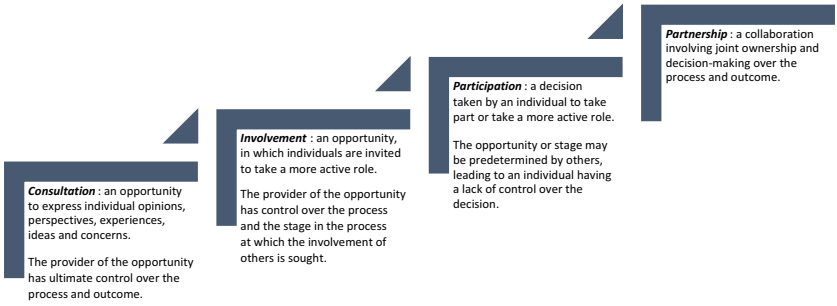

Fig. 2.1 Ladder cited in May and Felsinger (2010)

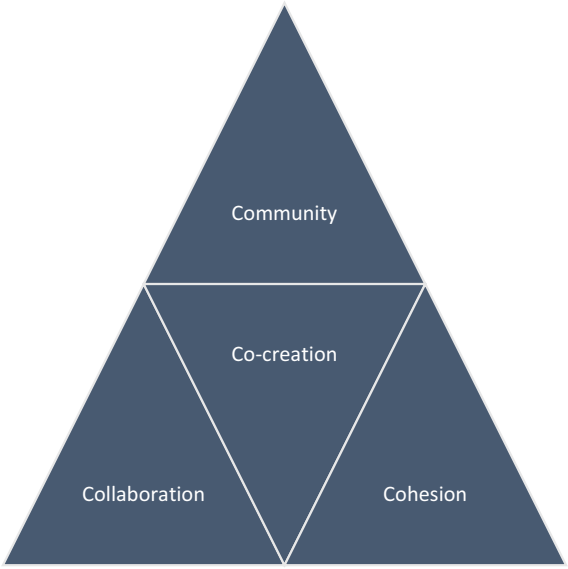

Fig. 2.2 The 3 C's model of co-creation (McIntosh & May, 2024)

Figure 2.2, illustrates the inter-relationship between the 3 C's and their impact on co-creation. In the sections that follow, we shall explore each of the 3 C's in more detail.

Community

In the context of co-creation, community can be broadly defined as 'a felt sense of connection and common purpose between a group of people'. Community can often mean different things to different people, as communities (plural) often coalesce around a sense of shared values or interests and/or a shared identity. In an HE setting, communities exist within and across many of the stakeholder groups identified above, and across curricular, co-curricular and extra-curricular settings. For example, in curricular settings, communities often exist around an academic subject area, learning (including peer education) and professional practice. In co-curricular settings, communities exist around student engagement, peer support and representation. In extra-curricular settings, communities exist around academic clubs and societies, cross-campus engagement initiatives

and applied work experience. In this sense, communities and their creation are what constitute a whole eco system of higher education. Communities also exist across the HE sector, often when stakeholders engage with networks which are national or international in nature. Wenger-Trayner & Wenger-Trayner (2015) conceptual framework of Communities of Practice (CoPs) is most commonly applied to the idea of community in higher education. The framework suggests that CoPs have three characteristics: (1) a shared domain of interest, (2) they help forge relationships which promote collective learning and (3) these shared interests and interactions help grow shared resources and strategies to tackle recurring problems.

Fundamental to the idea of community engagement (regardless of the type of stakeholders involved in that community) is a sense of belonging. The idea of belonging and community is also present in the literature around student success and retention (e.g. Thomas & May, 2011; Thomas, 2012, 2017; Thomas, K) and student transition (Lizzio & Wilson, 2004; Kift & Nelson, 2005). A sense of belonging must endure for the community to grow and thrive, and for its members to continue to participate and engage and it is this endured sense of belonging that can be described as connectedness. In that sense, a community is ever dynamic and fluid, and that fluidity has implications for the concept of co-creation, especially with students. Wenger went on to describe the ways in which members of a community engage over time. Inbound is where an individual decides to engage and invest their identity in a group. Peripheral members are significantly committed to the community but are limited in terms of time. Boundary individuals tend to belong to a number of communities and the balance of their participation varies over time. Finally, outbound individuals engage in the process of leading a community of practice, either through a change of circumstances or of outlook (Wenger in Jawitz, 2009, p. 134). These four groupings have significant implications for the way in which co-creation plays out via the ever-changing dynamic of the HE community.

When we consider the multiplicity of identity of both staff and student stakeholders, as well as the limitations to engagement (time, money, location, language etc.) it is easy to see the way in which community, and hence co-creation, can be impacted by the circumstances and environments in which they occur. Here, we argue that this can be traced back to the importance of relationships and dialogue—HE communities coalesce around relationships and relational practice. The quality of these relationships and relational practice determines how inclusive a community is, its shared purpose, its shared ownership, and its flexibility. Without these preconditions it is difficult to build a sense of belonging and then connection

which are both fundamental to a community enduring and developing. Without any of these environmental factors, co-creation cannot exist. In recent years, our focus on student transition, retention, progression and satisfaction has developed around our increasing understanding of our educational community—and from these, new approaches to engagement have also evolved. In reference to current HE, our ability to co-create is dependent on fostering engaging, dynamic, inclusive and flexible communities. These communities must exist across curricular, co-curricular and extra-curricular settings, but also be designed for maximum engagement, whilst also being mindful of the multiplicity of commitments and identities that HE stakeholders now have.

Collaboration

For the purposes of this chapter, we define collaboration as 'two or more members of the community working together'. Collaboration is therefore of central importance and a pre-condition of co-creation; the act of something being shaped 'with' rather than 'on behalf of' someone. As Cook-Sather et al. (2014) indicate in an education context, its where 'learning and teaching are done with students, not to them'. Collaboration is active, acted upon by all parties involved. It is synonymous with engagement or participation and recognised to be a prerequisite to working in partnership. As referenced above, the act of collaborating typically brings members of different communities together—staff and students; students at different levels of study; students across different disciplines; students with related interests; professional and academic staff; students and professions, businesses and/or industry. A collaborator may be requested to represent one or more community/ies.

The benefit of collaborative working has been widely referenced. Vygotsky (1978) was instrumental in this, arguing that learning improved within social and cultural settings. His works emphasised that language and culture play a key role in learning and cognitive development and that knowledge is co-constructed through dialogue. What followed was a move towards social constructivism, upholding the notion that knowledge is constructed by individuals based on their previous experience and understandings whilst heralding the role of interaction in learning, with collaboration at the heart. Social constructivism has since been recognised as a paradigm shift in learning and teaching (see Saleem et al., 2021), with successive theories—such as social-cultural or connectivism—retaining the social, cultural as well as personalised dimensions as critical to learning.

There has been a growing interest in collaborative learning theory and relational pedagogies, emphasising relationships, interactions and dialogue within the context of communities, as referenced earlier in the chapter. This highlights the importance of attention being paid to the quality of the collaborative process. In their work, Cook-Sather et al. (2014, 2019) have identified four factors requiring development to enable collaboration to be inclusive of and responsive to students—a co-creation mindset, vocabulary, confidence and structures and the efficacy of the collaboration has a corresponding impact on the improvement of student outcomes.

Collaboration is therefore a precondition for co-creation—not just in ensuring that members of the community are brought together to work on a shared endeavour but within a spirit of collaboration—where there is genuine interest in a collaborative endeavour.

Cohesion

In the context of this chapter, we refer to cohesion as 'unity between members of the community and their collective endeavours (whether strategic, tactical or operational)'. We argue that unity can be felt by members of any given community, akin to belonging. Our incorporation of cohesion in relation to co-creation recognises that its efficacy and impact requires a commitment to achieving unity. There are different domains in which cohesion can be addressed:

Cohesion Within a Community

Community cohesion can take time to build and effort should be applied to fostering an ethos in which students, staff and external stakeholders want to and/or feel comfortable to participate. To help safeguard the environment for its community, several HE providers lay out 'ground rules', by stipulating roles and responsibilities or expectations for incoming staff and students, in the form of a student charter or code of conduct. These recognise that the behaviour and conduct of individuals contributes to a collective ethos and culture. When people are brought together for the first time, it can make a big difference where time is devoted to establishing ways of working or behaving, building relationships, bonding, networking and identifying interconnections—the foundations for sense of belonging and of social capital (see May & Jones, 2018). Tuckman (1965)

referenced four stages of team development, storming, norming, forming and performing, identifying that an effective 'team' dynamic is a process. This serves to remind us that cohesion isn't necessarily achieved from the outset. With an increasing emphasis on extended inductions, transition and the first-year experience, it is acknowledged that there is an ongoing need for activities to be scaffolded and/or extra support to be available to help students integrate into a full range of curricular and co-curricular communities they may join, associated with their cohort, programme, discipline, department/faculty, areas of interest, travel, accommodation, or university life.

Cohesion Between Co-creators

Bringing people together to work collaboratively and generatively on something meaningful necessitates cohesion. This requires attention to the cohesion between co-creators, as a group of people. Cohesion can be supported by devoting time from the outset for co-creators, as discussed above, to establish ways of working and behaving, get to know one another and identify one another's strengths and perspectives. As the process ensues, time is also needed to allow for both divergent and convergent thinking, enabling meaningful dialogue and full consideration of new or opposing perspectives and ideas, whilst still maintaining momentum, making decisions and agreeing a way forward. The presence of a facilitator, the size of the group, organisation and makeup of the group can positively impact group dynamics and relations. Cohesion is also supported where individuals comprehend the relevancy and benefit/value of the task and have a shared sense of purpose or goal. Having areas of common interest, whether that be on account of prior experiences, their discipline, programme, or future aspirations, can help motivate and generate commitment in the endeavour. The organisation of the process aids cohesion, where roles and responsibilities are shared and clear and the group has defined realistic timeframes/milestones and how they will work (e.g. timings, number and regularity of meetings; or organisation of whole group/subgroups; phasing of the generative task).

Cohesion Between Initiatives

There have been a plethora of initiatives emerging within higher education, aiming to improve students' experience and outcomes and eliminate

any differentials, identified across characteristic groupings, of outcome or experience. The effectiveness, impact and sustainability of such initiatives depends on them resonating with a wider vision, mission or strategic direction, be that at the University, Faculty or Department level. Whatever the method used to achieve the initiative, cohesion is needed for unity to be achieved and impact maximised. Any initiative runs the danger of operating in silos and/or leading to pockets of 'effective' practice where one doesn't make a connection with another. It is the collective endeavour that has resonance when it comes to demonstrating excellence or improving student outcomes. Thus, systematic and consistent and scalable approaches are fundamental. This benefits from cohesion, giving prior (and ongoing) consideration to the alignment and interconnections between one piece of work and another as well as their general application beyond the University—whether to students' lives, the workplace (professions, industry, research or business) or society.

Cohesion is thus a pre-condition of co-creation, representing the bond that holds the process together as well as interconnecting the outcomes of the process within and outside the institution.

Applying the 3 C's Model

The first section of this chapter explores the 3 C's model and the fundamental importance of community, collaboration and cohesion as preconditions for co-creation. In this second section, we explore how the 3 C's model can be applied within higher education and there are notably similar examples of elements of the model 'in-action' later in this book, for example, in Chaps. 3 and 4. The potential application of the model is extensive, covering a multitude of activity within the academy, from curriculum design and student support to quality assurance, evaluation and impact. The model can help achieve improved outputs and outcomes. In the current HE climate, this has significant resonance. The focus on student outcomes in Higher Education has never been more prevalent, with a requirement from OfS (in England) that institutions meet B3 conditions (continuation, completion, degree outcomes and progression) to maintain their registration. In Scotland, a focus remains on the quality enhancement agenda, with an enhancement themes approach coordinated by QAA Scotland which has led to a similar focus and commitment to improving student outcomes.

To focus on outputs and outcomes from the model, here we specifically apply research and scholarship to produce a framework which demonstrates the impact of the 3 C's model in practice. It reflects on the impact of implementing the 3 C's model via the theory of change approach, outlining the development and embedding of staff-student co-creation in the short, medium and long term.

	Application and impact
Curriculum design and development	Co-creation complements curriculum design and development and can be applied for the generation of (amongst others) learning outcomes, curriculum content or approaches to teaching, learning, assessment and evaluation. Involving the beneficiaries of a programme (students and employers) in curriculum design from the outset, can lead to one that is more relevant and authentic, as it is founded on what they need or value. The co-creation process can be used to deliberate relevancy, addressing how principles, such as inclusivity, flexibility, innovation, or personalisation, will be achieved across every aspect of the curriculum. Design should be a dialogical process, drawing on different perspectives and expertise from within the immediate and wider community. Programme validation and revalidation panels typically involve programme teams presenting and defending their design, with discussion leading to identification of any adjustments. To engage students and/or employers at that stage, after decisions have been taken, is characteristic of consultation at the lower end of the engagement continuum. Co-creation thus offers a tangible method of achieving a more constructive, collaborative and generative design, drawing on the interconnections within and beyond the university. The use of co-creation within curriculum design is reflected in scholarship, for example, exploring cases of co-design at modular, programme and university level (Cook-Sather et al., 2019), academic perceptions, (Newell & Bain, 2019) or the impact on students (Billett & Martin, 2018). Billett and Martin (2018) embedded co-creation of knowledge and design into the 2nd year of a sociology degree and tracked the outcomes through engagement in class discussion, completion of reading, assessment performance and perceived levels of engagement. The findings demonstrate that the co-creation led to students engaging more deeply in the learning process. Following the latest round of submissions to the Teaching Excellence Framework, one of the case studies published by the OfS from the University of Portsmouth showcases the role of co-creation in design (the EnABLe process) and corresponding impact on student outcomes. Co-creation has since been embedded into policy and practice at all levels.

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	Application and impact
Learning, teaching and assessment	The 3Cs model has significant application in this domain, as evident within the research and scholarship literature. In reviewing this body of work, Bovill et al. (2016) highlight the distinction between co-creation 'of' curriculum (co-design of a programme before it takes place) and co-creation 'in' the curriculum (co-design of learning and teaching *during* the programme). The distinction is important, as co-creation of learning and teaching, despite its common use, does not always benefit those involved. From a social constructivist theoretical perspective, one could go further in stating that the learning process itself 'is' a form of co-creation and thus should not solely be associated with the enhancement activity. Our 3C's model adds a further dimension to the literature in this domain highlighting the pre-conditions for success. So many different communities have the potential to benefit students learning, from within the cohort, the programme, the department, wider university and workplace. We argue it is important to give time and scaffold activities to foster the community cohesion (sense of belonging, bonding, conduct) required for collaboration to be effective. Creating a community where everyone feels comfortable and safe should be recognised as a co-constructed process, whether in online or face-to-face contexts. A safe space can encourage the community to disrupt / challenge ideas and thinking, explore different perspectives or think creatively and divergently. The methodology of co-creation has resonance with assessment and feedback practices. The Transforming Assessment in HE framework (Advance HE, 2016) draws on 6 tenets associated with assessment standards; one of which frames these standards as constructed in communities. It follows that given such standards are socially constructed, dialogue is needed for students to understand what is required from and entailed in the assessment process. Deeley and Bovill's work (2017), demonstrates that there are several benefits to creating a democratic assessment approach, outweighing any associated risks, including enhancing students' motivation, sense of community, agency and assessment literacy.

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	Application and impact
Student support (including academic advising / personal tutoring)	The 3 C's can also be applied to co-creation in student support contexts. The model is especially relevant to recent developments in academic advising and personal tutoring. Co-creation can ensure that advising and student support are embedded in curricular, co-curricular and extra-curricular contexts where students are supported to reflect on their academic, personal and professional development. The 3 C's, are essential preconditions for this work, where new approaches have been adopted in the development of what has been called an advising curriculum, with synoptic learning outcomes designed to support student mental health, wellbeing and employability across their academic programme (McIntosh, 2023 cited in Picton et al., 2024; Lochtie et al., 2017). For example, a curricular approach to advising can ensure that all stakeholders, including specialist professional support services and academics, as well as students, are involved in group advising and delivery approaches within the classroom. Here, students benefit from being connected to broader employability and mental health/wellbeing and library professionals as part of their curricular learning experiences. An advising curriculum is also intended to support collaborative approaches to the development of students as learners and to develop both an individual learner and a cohort identity (Whannell & Whannell, 2015), where a community of learners supports the development of co-creation. Recent innovations in advising are also cognisant of employing a relational pedagogy which, as discussed above, is critical to the creation of learning communities. With the 3 C's as pre-conditions for co-creation, more dialogue can be encouraged between students, academic and professional colleagues regarding the development of the learner.

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	Application and impact
Building academic communities	The 3 C's can also be applied to co-creating and building academic communities. Examples of co-creation in this context include student engagement and voice activities, peer education initiatives such as Peer Assisted Study Sessions (PASS) and peer mentoring, academic societies and communities of practice, all of which are based on a strong sense of belonging. The development of the 'community' in this context is of course a huge pre-cursor to the development of collaborative and cohesive approaches to co-creation. Peer education is an especially good example of co-creation in this context. Embedded peer learning and support interventions also promote a sense of belonging, articulated in the 'What Works?' reports (Thomas, 2012, 2017). There are several approaches to peer learning and models of peer education (Ody & Carey, 2013). These include formal academic and pastoral peer mentoring programmes, which have a positive impact on student transition experiences, especially in a community context where students, their peers and academic tutors work in partnership (Cornelius et al., 2016). There is significant evidence that PASS specifically improves student retention, performance and success (Bowles & Jones, 2004; Etter et al., 2001; Hodges et al., 2001). With PASS, the opportunity to bring a variety of stakeholders together (academics, students, peer leaders) provides a space where collaboration can happen around the development of a variety academic and study skills. PASS has positive impacts on cohesion as the community is brought together with a particular focus. There are several well-documented benefits to this work, including the co-creation of learning activities and resources. PASS leaders in particular are able to co-create activities to support their peers to learn effectively in their subject area, with improved outcomes and employability skills (McIntosh, 2019). Similarly, the 3 C's are prevalent in the creation of academic and professional communities in HE. Recently, for example, in support of the development of advising for students, the notion of third space and integrated practice has been applied to the way in which academics and professionals affiliate to support students (McIntosh & Campbell, 2023).

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	Application and impact
Progression through and beyond HE	The 3 C's model can also be applied to co-creation of initiatives to support student transition and progression through and beyond HE, to employment or further study. An example of co-creation in this space is the development of transition pedagogy which requires a 'whole of institution, whole of student' approach to supporting student transition into and across their degree programme (Kift & Nelson, 2005; Kift, 2015). Transition pedagogy was developed through collaborative first year experience (FYE) communities in Australia and has developed significantly over the past 18 years to be a leading philosophy around the co-creation of student success. The community which advocates for transition pedagogy in Australia is the STARS (Student Transition Achievement, Retention and Success) conference and journal. Transition pedagogy has six associated principles which are all heavily dependent on community, collaboration and cohesion in order to co-create student success. The six principles are: (1) transition, (2) diversity, (3) design, (4) engagement, (5) assessment and (6) evaluation and monitoring. In the years since transition pedagogy was first developed in 2005 it has been used extensively in a global setting to support the development of co-creation initiatives centred around belonging and connectedness such as creating communities around welcome and induction, understanding diverse learning communities. Other models of co-creation in this space include Morgan's student experience practitioner model (2013, 2022) which recognises the importance of a phased transition for student progression, focussing on induction, re-induction and out-duction to support the holistic student journey. A key part of the development of Morgan's model is its focus on developing a cohesive learning community, which is predicated on scaffolding the learning experience around key milestones.

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	Application and impact
Enhancement and change leadership	The 3 C's model can be applied to various change projects within the broad area of learning, teaching and student experience. Such initiatives and developments exist at local, institutional and sector-wide levels, and are designed to enhance the quality of the student experience. Several examples of best practice exist in this area, where broad communities are brought together to effect change. For example, many universities bring together cross-institutional groupings of staff (both professional and academic) and students to work on overarching student experience initiatives like employability, student learning development, curriculum design and student engagement. These communities represent broad coalitions for co-designing initiatives where a variety of stakeholders are involved in collaboration. For co-design to occur, these communities need to be cohesive, and often they have shared values around the outcomes they want to see. An example of this is the development of the LEAP framework at the University of Bolton (McIntosh & Barden, 2019). At a sector level, initiatives have existed to support colleagues and students to co-creation interventions that can be adopted more widely. For example, on an annual basis, Advance HE advertises its Collaborative Development Fund (CDF) where colleagues are invited to bid for funding to support universities to collaborate around a change initiative, with a number of reports and outputs published across the sector. The stakeholders and beneficiaries in these cohesive communities are both staff and students—staff are supported to research and publish case studies of best practice and students benefit from both being involved in the projects and supported learning outcomes. This work is related to Kotter's philosophy of building a guiding coalition (2012), colleagues often embrace the 3 C's to lead change across a number of HE organisations, for the benefit of a variety of stakeholders. Another example of change in this space is the JISC Change Agents network, a network of staff and students which meets on an annual basis to discuss and collaborate around curriculum enhancement and innovation with technology. Through this work over the last 10 years, the network has created 'CANagogy' which is a pedagogic approach based on staff and student partnership in this space: What is the Change Agents' Network?—Change Agents' Network (jiscinvolve.org). Related to Wenger's community of practice, significant change has been brought about over the last decade through regular collaboration in this community. Co-creation approaches have been facilitated by the development of a cohesive community space over time. Much of this work is based on adopting the 3 C's as pre-conditions for enhancement.

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	Application and impact
Quality assurance, evaluation and impact	The model of co-creation can be effectively applied to quality assurance, evaluation and impact. With increasing interest in the voice of students and other stakeholders, there is recognition that quality, effectiveness and/or impact should be judged from the perspective of its beneficiaries. To that end, attention is focused on ensuring that evidence sources are systematic and representative of the communities they support or that consistent measures are applied from which to make comparisons between contexts or over time. There is an opportunity in this space to examine the efficacy of the quality assurance process itself—whether it is fit for purpose. As a methodology, co-creation can be applied to all stages of the process—from the design of the quality assurance approach to the integration of evaluation, in advance, during and following any form of intervention. There is inherent value in ensuring evaluation keeps the spirit of 'working with' rather than 'done to' as collaborators rather than recipients of evaluation. Furthermore, there are opportunities to use co-creation to support evaluation and enhancement in action. Schon's (1991) distinction between reflection *in* action and reflection 'on' action can be usefully applied to evaluation. There is inherent value of evaluating during the process because adjustments are readily actionable and set to benefit those involved. Evaluating post-event will only set to benefit the subsequent cohort of students. Moreover, evaluation 'in' action lends itself to adjustments being more readily created as a community, as a genuine collaborative and generative venture. Improvements are best acted upon continually and collaboratively as an embedded part of practice than identified and acted upon once a cohort has moved on.

Conclusion

In conclusion, the 3 C's model of co-creation is underpinned by an overarching theory of change approach. The use of co-creation goes beyond the impact on higher education to impact the societies in which we all live and contribute. Co-creation has the potential to support truly democratic societies in which authenticity, inclusivity, flexibility and social justice are upheld. We aim for our students, graduates and staff to promote, advocate and embrace co-creation as a community-based collaborative exercise in everyday life.

This chapter highlights that there are multiple benefits of co-creation for a variety of stakeholders, including students and staff—whether they

be short term changes to learning or behaviour, medium-term changes to conditions or longer-term cultural changes. By giving students continual lived experience of co-creation, as authentic and relevant to their studies and throughout their time in HE, equips them with a range of interpersonal competencies, which in turn builds their confidence and resilience within the co-creation process. Cook-Sather et al. (2019) refer to the development of mindset, vocabulary, confidence and structures as needed for effective co-creation. The process and products of co-creation are inherently stronger when drawing on a variety of different perspectives (Syed, 2019) and when considered from a holistic and interconnected standpoint. An enduring sense of belonging and connectedness, as an outcome of co-creation, is heavily dependent on a participant's ability to contribute to, and engage in, a community or communities on a regular basis. This, of course, is made all the more challenging given that many of today's students lead complex lives. These communities are spaces in which collaboration is expected and supported, and cohesion is then developed. Through relational approaches and dialogue in collaboration, the quality of relationships between staff and students and students themselves, improves. Co-creation has been found to have a significant impact on student outcomes, including student satisfaction, continuation, completion and progression (OfS, 2023; Billet & Martin, 2018). Through the 3 C's approach, co-creation has the potential to evolve and endure.

For these outcomes to be realised, focus should also be given to the inputs of the process. Throughout this chapter, we have highlighted the importance of time, to support and sustain community cohesion and collaborative activity. This in turn depends upon senior leadership sponsorship and strategy, through which such activity is recognised and rewarded, and the outcomes integrated into the curriculum and enhancement processes. This may require an investment of money, resources and for the stakeholders to effectively engage.

Drawing on theory of change, we thus argue that (1) community (2) collaboration and (3) cohesion are preconditions for co-creation. These preconditions coalesce and should be considered as interconnected. They are not mutually exclusive. As communities evolve, collaboration is fostered, and over time cohesion within and between communities improves – those three elements support the dynamic process of co-creation. We position flexibility, inclusivity, authenticity and senior leadership as underlying assumptions for change and co-creation to happen, where all play a part in creating a foundation for the preconditions of change to exist.

Our chapter highlights a number of domains within HE where the 3C's model can be effectively applied to enhance student outcomes and impact. In terms of community building, the chapter has highlighted some specific pedagogical approaches that have materialised through a focus on co-creation—thus transition pedagogy, relational pedagogy and 'CANagogy' (the pedagogy that is informed by change agency) have all been developed through co-created approaches.

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CHAPTER 3

Staff-Student Co-creation in a Matrix Environment

Karen Arm

Introduction

Co-creation breaks down hierarchies and builds collaboration. It does this by establishing a space for shared understanding and action among stakeholders. A space where passive recipients become active participants. A space where the disempowered become empowered. A space where the marginalised become mainstreamed. For students in higher education, this process of 'becoming' has been conceptualised in a myriad of ways. For Sparqs (2018) students climb the staircase from being information providers (completers of surveys) to actors (collectors and analysts of feedback), to experts (recognised as experts in learning) and finally partners (engaging in authentic and constructive dialogue). Similarly, Healey et al.'s (2014) levels of participation begin with student consultation moving up to involvement, participation and then partnership. In Bovill and Bulley's (2011) ladder of student involvement in curriculum design, the lower rungs of a tutor-dictated curriculum can be climbed to reach the higher ones that are more student controlled. These models demonstrate

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the possibilities of a steady assent from participation as object—where decisions are taken by teachers—to participation as subject—where decisions are taken by learners (Varwell, 2021).

Although all these tools differ in the details of their conceptual categorisation, they share one thing in common—an assumption that the most meaningful co-creation takes place at the pinnacle level of student participation. Yet despite the metaphorical emphasis on 'movement' in many of these conceptual models, surprisingly few studies have explored the implementation of co-creation over time. Most studies focus on co-creation in a time-bound context (with an emphasis on outcomes rather than processes). As such, co-creation can appear static in description and the conditions that enable (or disenable) it become downplayed. This case study tackles these issues head on by providing an autoethnographic account of an institution-wide co-creation initiative at Solent University over a three-year period. Autoethnography is a powerful way of systematically analysing (GRAPHY) personal experience (AUTO) to understand culture (ETHNO) (Ellis et al., 2011). Drawing on personal reflections as well as 'habitual' and 'emergent' (Speedy, 2008) insights from the students and staff involved in the project over its lifetime, the case study situates experience within the broader social, political and historical context of our institution (Spry, 2011).

Solent University is an industry and employment-focused higher education provider on the South Coast of England. It's achievement of three Gold ratings in the 2023 Teaching Excellence Framework (OfS, 2023), recognises that our commitment to student engagement positively impacts on the outcomes of our students across our unique portfolio of practice-based courses. High-quality teaching is supported by the Education Office (formally the Solent Learning and Teaching Institute)—a central service working in partnership with our academic teams. The Education Office represents an interface between our academic and professional staff. This 'third space' is occupied by a team of 'in between professionals' (Whitchurch, 2015) who support learning and teaching enhancement through a range of developmental activities and initiatives. The Student Partner project discussed in this case study is located within the Education Office. It aims to:

- Support students to work in partnership with academic staff to enhance their learning and teaching in line with our Inclusive Real-World Curriculum Framework.

- Co-create and shape the academic practices at Solent University by valuing the diverse voices and perspectives of our students.
- Enable students to gain valuable experience which develops their confidence and employability.

This case study demonstrates how changes to our ways of working have created the conditions needed for meaningful student/staff co-creation to flourish and be sustained across Solent University. The case study starts by outlining the evolution of the co-creation initiative in our context. It then shares our experiences of moving our project into a matrix environment via three key themes: (1) losing sight and gaining visibility, (2) cohesive and conflicting identities, and (3) ground moving and groundbreaking. The chapter concludes by reflecting on the lessons learned to date and proposes some possible ways forward for a matrix co-creation project. The autoethnographic chapter is written by the Project Lead and is interspersed with written narrative data generated from participants in the initiative. Ethics approval was provided by the Solent University Research Ethics Committee and individual permissions were obtained for the inclusion of the data in this chapter.

A Project in Motion

In 2020, disruption caused by Covid-19 initiated pedagogic innovation across the sector at a surprising speed (Jamil & Morley, 2022). Solent University, like many others, responded to the national lockdown with an emergency shift to online learning and teaching. This pivot, which was especially challenging for our practice-based course portfolio, was made possible through the 'Transformation Academy', a major cross institutional change initiative. Led centrally by the Solent Learning and Teaching Institute, the Transformation Academy developed a support infrastructure for developing accessible and engaging pedagogy for the pandemic. The success of the initiative has been credited to its 'explosion' of organisational hierarchies that created space for shared decision-making and collaboration between colleagues across the institution (Heard-Lauréote & Buckley, 2022). Between March and September 2020, the Transformation Academy supported 150 courses to move learning and teaching online. Whilst Solent University has now returned to campus-based teaching, the legacy of this work remains in Solent University's new Learning Design Framework which integrates in person delivery with digitally enhanced

delivery in an inclusive learning and teaching environment (Buckley & Heard-Lauréote, forthcoming).

It is no accident that 2020 was also the year when the Student Partners Project at Solent University began. Recognising that co-creation is central to the success of a large-scale pedagogic change process, six students were recruited into the paid role of 'Student Inclusive Curriculum Consultant' for six months to support the work of the Transformation Academy. Employed at the central Solent Learning and Teaching Institute, these new roles helped to co-create inclusive pedagogies for the pandemic. Working cohesively as a centralised team, the Student Inclusive Curriculum Consultants co-constructed a checklist of inclusive, accessible and usable features of online delivery which they then applied in an institution-wide module review (see Fig. 3.1). Student Partner feedback was provided to the courses in a written format detailing three strengths of the online module, three areas for improvement and three suggestions going forward. These pointers were used by academic teams to develop a co-created approach to online module development (Arm, 2021, 2023a, b). During the national lockdown, the Student Inclusive Consultants provided

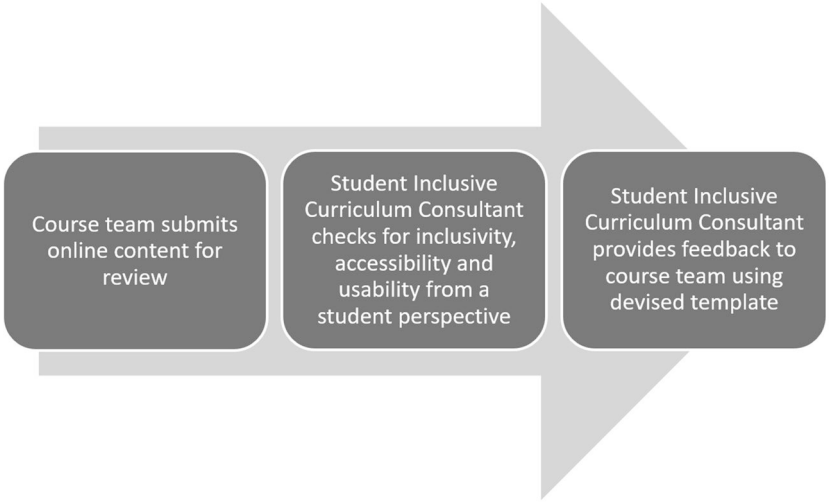

Fig. 3.1 Project workflow

feedback on approximately 380 modules spanning all academic departments. The work was fast-paced and 'third space' (Whitchurch, 2008).

As in other third space partnership projects, the students grappled with 'becoming' in a loosely boundaried role (Burns et al., 2019). They needed help to navigate the liminal space that educational developers notoriously occupy between academics and management of the university (McIntosh & Nutt, 2022). They needed help to develop tacit knowledge of academic resistance and despondency to student voice (Manathunga, 2007). In addition, they needed help to surrender their ideas of academic expertism on learning and teaching in higher education (Jessop et al., 2019). Yet our project launched at a time when third space professions were gaining gravitas in higher education institutions. Academics and managers alike were turning to their educational development colleagues for crisis support in developing engaging, inclusive and accessible online learning and teaching. They also recognised that the success of this was dependent on doing this WITH students not for them. Put simply, the pandemic created the optimal conditions for third space partnership work to flourish.

Our Student Inclusive Curriculum Consultants were recruited from the most disadvantaged sections of our learner population in line with our commitment to inclusion (de Bie et al., 2021; Lygo-Baker et al., 2019). They come from a range of disciplinary backgrounds in recognition of the importance of their positionality as a learner, rather than a subject expert (Cook-Sather et al., 2014). In many ways this mirrors the profession where educational developers often migrate to the role from non-education fields (Shay, 2012). Acutely aware of Manathunga's (2006) warning that educational development must not do what it does not support, we avoided using the student voice as a canon by which to transmit our pedagogic knowledge. Operating instead within the ethos of reciprocal exchange, we shared student enhancement suggestions with course teams on the premise that they could be used to co-create learning and teaching in a contextualised way. Our project was inevitably still met with scepticism from some discipline-based colleagues who complained of the students' lack of understanding of the nuance and specifics of their individual pedagogic context. Third space co-creation carries these challenges in ways that disciplinary housed co-creation does not (see Torn and Whitaker, Chap. 6; and Teh and Chong, Chap. 9).

Although operating at the lower rungs of student participation (Sparqs, 2018), our pandemic project was an efficient way of doing co-creation fast, on a large scale and from a third space. The sheer number of interactions that our students had with academics during this time helped to build an internal reputation for the project and grow greater recognition of the value of co-creation pedagogic pursuits. Indeed, since then, there has been a noticeable rise in colleagues co-creating learning and teaching with their own students and in their own disciplinary contexts. Senior University management were also pleased with the contribution that the Student Inclusive Curriculum Consultants had made to the successful shift to online teaching. As such, the continuation of funding for the salary costs of the project was secured along with the permanency of a 0.5 FTE Coordinator role. Yet once the pandemic pedagogy was embedded, a lull in consultancy demand meant that we had to rethink the focus of the project. In a bid to remain closely connected to the strategic direction of the University in enhancing the inclusivity of the curriculum (Solent University, 2021), we changed the tack.

In our new wave of work, Student Inclusive Curriculum Consultants facilitated workshops with students exploring the inclusivity of their curriculum. This work was targeted in courses with large racialised awarding gaps and was informed by actions in the University's Race Equality Charter (Solent University, 2022) and Access and Participation Plan (Solent University, 2020). The whole project team of staff and students co-designed and delivered a series of data gathering workshops in these contexts to explore the inclusivity of learning, teaching and assessment from a student perspective. This challenging work exposed the Student Inclusive Curriculum Consultants to the real-world of research-led teaching (Dassanayake et al., 2023) and workshop outcomes were presented back to course teams to use for curriculum enhancements. Unlike our previous activity, this approach was more dialogic in style and provided our Student Inclusive Consultants with their first opportunity to work directly (and in person) with academic staff and other students. A total of 122 students took part in the student partner-led workshops from five selected courses.

Staff restructuring and the development of an Education Office at Solent University in 2022 presented an opportunity to reflect on the future of the Student Inclusive Curriculum Consultancy initiative. In

recognition of project capacity to positively contribute to a wider range of activities across the Education Office and beyond, the student roles were renamed 'Student Partners' and corresponding job descriptions were broadened beyond a focus on inclusive curriculum. The move away from 'Consultant' to 'Partner' in the student job title also captured our intention to foster more authentic and equitable collaboration between staff and students. Operationalising these changes resulted in a radical shift in the way that the project was delivered. Whereas the project had previously run on a team of six to eight students, these new ways of working required a larger bank of students to draw from. As such, a team of twenty paid Student Partners were recruited for one year. Whereas the students had previously been employed to work on a single project housed an the Solent Learning and Teaching Institute, the broadening of the role meant that students were now able to work on several education initiatives across the University. As such Student Partners were deployed by the Education Office in multiple projects relating to learning and teaching, student success and graduate employability. Whereas the training and management of the students had previously fallen solely under the Project Leaders, different staff from different departments and services were now leading and developing small groups of Student Partners in their individual projects. Put simply, the project had moved into a matrix environment.

A Project in Matrix

A matrix environment supports the operationalisation of multiple co-creation projects in a single organisation. It breaks down hierarchal management lines and allows students to report to temporary project leads—to meet objectives—whilst simultaneously being coordinated from a permanent functional department (Wright & Greenwood, 2017). In 2023, our project was reorganised into a matrix in a bid to make better use of the capacities of our Student Partners and to be more efficient in third space co-creation. While the overall coordination of the project remained with Leaders in the Education Office, Student Partners were allocated to multiple co-creation projects across departments and services at the University according to skills, interests and availability. This was a radical change to our previous hierarchical ways of working as shown in Fig. 3.2.

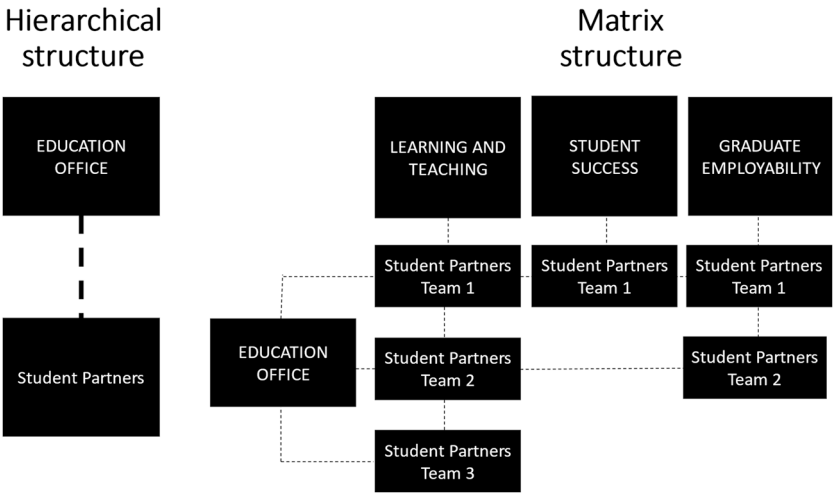

Fig. 3.2 Change in organisation

The new matrix environment created an opportunity for our Student Partners to be co-creators across a wider range of institutional departments and processes than when organised hierarchically. As such, the project moved away from taking a whole team approach to delivering a single project to instead delivering against several smaller projects in student subteams (see Table 3.1).

Although these new matrix ways of working have brought some benefits to our cross-institutional co-creation initiative at Solent University, they have also created some unexpected challenges for the operationalisation of our project. Drawing on reflections from the team, these mixed experiences will now be discussed via three themes.

Losing Sight and Gaining Visibility

The vision for our project had always been to achieve the pinnacle level of student participation—deep, meaningful and authentic co-creation with our academic community. This had been historically challenging from an educational development third space which is notoriously associated with university management agendas and chasing metrics (Arm, 2019; Bamber,

Table 3.1 Examples of projects

Name of project	*Student Partner role*	*Team size*
Solent Impactful Interventions Programme	To support course teams to develop and implement an enhancement action plan.	4 Student Partners
The use of AI in Learning and Teaching	To co-develop guidance on the use of Artificial Intelligence (AI) for staff and students.	4 Student Partners
Developing an online course in Maritime	To review and evaluate the usability of a new online maritime course.	2 Student Partners
Staff development steering groups	To contribute to learning and teaching staff development meetings.	3 Student Partners
Developing digital capabilities	To co-create guidance for staff and students that supports the development of digital capabilities.	2 Student Partners
Enhancing student engagement with the Living CV	To co-develop initiatives to increase student engagement with the Living CV.	3 Student Partners
Guided Learning helpdesk advisors	To support the delivery of face-to-face support, delivering digital skills and advice to students via the helpdesk.	4 Student Partners
Inclusivity workshops	To support academic teams by gathering student feedback and data on the inclusivity of teaching, assessment and course content.	3 Student Partners
EDI course Review	To field test an online Equality, Diversity and Inclusion (EDI) course and give feedback.	3 Student Partners
Solent Futures—HEBCI data return	To analyse Higher Education Business and Community Interaction (HEBCI) data regarding graduates' progression into employment.	4 Student Partners
Student Success—inclusivity guidelines	To review materials and provide feedback and suggestions for improvements.	2 Student Partners
Student experience workshops	To lead focus groups and gather feedback and data on the student experience.	5 Student Partners
Access and Participation Plan	To collaborate on the development on the new Access and Participation Plan.	5 Student Partners

2020). Indeed, in its hierarchical form, our project was met with much resistance from academic colleagues who viewed Student Partners as our 'foot soldiers' rather than genuine co-creators of learning and teaching (Bovill et al., 2016). Reorganising ourselves into a matrix has helped us to debunk this myth, build stronger relationships between staff and students, and better demonstrate the co-creation value of our team. By redistributing our Student Partners into a range of academic departments and professional services to work on smaller enhancement projects with defined

objectives, we have been able to increase the visibility of our team across the University. Feedback from project leaders has been overwhelmingly positive and colleagues have now started to approach the Education Office directly to ask for Student Partner input and support.

> Both [Name of Student] and [Name of Student] have been absolutely brilliant to work with. Throughout the project, they've both been really personable yet professional. During our initial meeting, I appreciated their enthusiasm towards working collaboratively to define objectives, roles, timelines, etc. I feel that this evidences their ability to listen actively and work well as part of a team. Myself and my team are so grateful for how meticulous they've been in looking over all of our SOL pages to provide us with such comprehensive and practical feedback. (Project Lead—Student Success)

Leading the Student Partners in a matrix environment has, however, been difficult. As central leaders in the Education Office we have experienced an unsettling move from being the project 'authority' to becoming one of facilitation and coordination. Part of this shift has resulted in us having less direct contact with our student team and, as a result, less sight of their contributions and successes. Reflecting on this change, our Student Partner Coordinator says:

> This year (2023-2024) the project has moved to supporting smaller, different initiatives across the University meaning that students are working more independently in smaller groups (2-4) in a wide range of contexts … This has led to me coordinating and communicating with staff on their varied initiatives, following up with staff to find out if students are working as expected and to gain feedback on their progress. Although I make sure that I am available to answer questions, troubleshoot and offer support, there is less emphasis and time this year working with students. (Student Partner Coordinator)

As well as the logistical complications of organising a large team of Student Partners to meet the needs of a wide range of projects—in multiple departments and services—and with different objectives and timelines, the matrix environment has created workload management difficulties and a complex reporting style, for our Student Partners as described below:

> Signing up for multiple projects promotes more difficulties. It's another project to keep track of, people to communicate with and multiple projects

> require task switching and keeping on top of each workload which can be hard. Again, adding to the difficulty of keeping on top of everything – there are two email inboxes this year and a general Student Partner [Microsoft] Teams chat and then separate [Microsoft] Teams chats for different projects … – all in all very overwhelming – way too complicated and hard to manage checking all the different chats and keeping up to date. (Student Parter)

Indeed, in a matrix environment, greater time and effort are needed to maintain a strong connectedness with, and across, the Student Partner team.

Cohesive and Conflicting Identities

Although the Education Office remains host of the Student Partner continuous professional development programme (which aims to create and maintain a strong team with shared understanding of, and skills in, co-creation), the matrix Leads now take responsibility for the training needed within projects. As the Student Partner Coordinator points out, this can leave some Student Partners being less equipped for their role:

> The project leads oversee the vision and goals for each of the projects and I wonder whether this means that students are not always adequately prepared or trained for the work they are being asked to do. (Student Partner Coordinator)

Although the Student Partners remain connected to the Education office hub through regular whole team communication and progress meetings, the working arrangements of the matrix environment have compromised the project's shared vision and goal. This has been noted by the Student Partners who have expressed their preference for whole group projects and greater opportunities for peer-to-peer collaboration. Indeed, some of the long-term members of the team describe a newfound loneliness and less sense of belonging in the matrix environment when comparing it to our previous ways of working:

> This year's style is a lot more individual work – there is not as much group work and if there is group work it's in way smaller groups. I find I am less connected to the wider group of Student Partners and this feels like it effects my sense of belonging- I don't feel as invested or a part of a group in the same way. The mission of the group feels like it is also very separate as we all

> have different projects and we don't seem to have one central goal or project we are all working on …. I also feel that this way of working is a bit more lonely/ isolated as although on the project I'm working on does have some group interaction, it is mainly working alone. Which can feel difficult. (Student Partner)

These difficulties have been compounded by conflicting understandings and applications of co-creation across our different projects. Indeed, whilst most of the Student Partners have had the opportunity to be involved in meaningful co-creation activity where they have worked collaboratively with staff 'to create components of curricula and/or pedagogical approaches' (Bovill et al., 2016, p. 196), some of our Student Partners have been asked to undertake tasks that fall outside of the Project's original conceptualisation of co-creation. For example, in one project, students were asked to complete basic administration tasks such as data entry. In another, students have been working on a helpdesk providing IT-related advice to other students. In these cases, students have been used in a way that arguably extends an existing workforce rather than drawing on their positionality as a student to contribute to something new. While co-creation can refer to a wide range of different research and practices (as discussed in Chap. 1), it arguably does require active contributions from students as partners to make it authentic and meaningful (Bovill, 2019). This can be compromised in a matrix environment where the operationalisation of co-creation is not managed centrally but rather is facilitated by individual project leads who hold different (and sometimes competing) understandings and visions of co-creation.

Ground Moving and Groundbreaking

Co-creation that is groundbreaking for one project is not necessarily groundbreaking for another. By working in a matrix environment, we have learnt that different departments, services and teams at our university are at very different starting points in their co-creation journeys. While some are pioneering projects that engage students at the pinnacle levels of participation (interacting with them in constructive dialogue and as genuine experts) others are only just starting to recognise the potential of students as information providers through consultation activities. Each brings innovation and change to a higher education culture that is otherwise historically dependent on lingering hierarchies between staff and students

(Dollinger & Mercer-Mapstone, 2019). However, centrally facilitating university-wide co-creation through a matrix team does mean that students are distributed to work in projects with different conceptualisations of their role. This can, in turn, make them feel they are not being given sufficient freedom to contribute and build their skills as co-creators. It can also detrimentally impact on their sense of professional development as one of our Student Partners explains:

> It is hard to assess fully all the skills I am developing and hard to know if this way of working is therefore increasing and adding more skills than the previous year and therefore improving my employability … I felt because of the work we were required to do, the previous Student Inclusive Curriculum Consultant role for me helped me to develop some key employability skills-which I have evidenced in my own course professional development portfolio I had to produce in an assignment. The skills such as presenting, data analysis, data collection, group work etc have all been good evidence for this portfolio and clear employability skills that I have developed. (Student Partner)

Indeed, the matrix environment of ways of working has made it more difficult for our Student Partners to incrementally build their co-creation confidence and skills. This is because they are working across different projects which requires them to develop and employ attributes according to need. In some cases, Student Partners have complained that their contribution has felt repetitive across projects. In others, they noted that their level of contribution lessened rather than increased with experience. This can have a detrimental impact on a student's sense of professional trajectory in co-creation work, leaving them disillusioned with the employment opportunity that was presented to them.

On the other hand, Student Partners have expressed their appreciation of the matrix environment in creating varied and changing opportunities for co-creation. Student Partners have been given greater ownership over the decision-making in identifying what projects they would like to contribute to (and when) in ways that were not possible in the previous approaches. Nevertheless, the ever-moving nature of the project has been unsettling for some members of the Student Partner team who were hoping for more stability and structure in the project:

> Because the organisation of what was needed to be achieved was sometimes communicated last minute or because the whole team did not understand

> the ultimate vision of what was being achieved this meant it was hard to know what would happen next. (Student Partner)

> I have felt like week to week it's been quite disorganised and therefore it's been hard to know what the expectation of our role is. (Student Partner)

> I have felt disengaged because of the unstructured approach to working. (Student Partner)

By connecting our project with the strategic direction of the University, we have needed to remain agile and responsive to developing priorities in departments and services. This has helped us to have a greater impact across the University and sustain the project over time. Yet due to the matrix ways of working, this has not necessarily been well received by the students involved in the project who have expressed concern that, in this dispersed way of working, their value has diminished:

> The different way of working this year has been a lot less responsibility which in some ways is good due to an increase in university workload, but in other ways I feel the impact of the project has decreased. (Student Partner)

> It is difficult to gauge the impact that I am having in this role … There is also more 'behind the scenes' work which is fine as the impact still may be important to the overall goal of improving the EDI ethos and closing gaps at the university, but it does feel hard to not be working face to face with students and [Education Office] staff in the same way. (Student Partner)

> It is difficult to see how impactful the team was or is, for myself it has been disheartening as when speaking to other students they would ask what had been done with works we had completed and the data acquired, and I cannot give a definitive answer though I can inform them that the data are being compiled to create a greater understanding of what is needed, and ideas and strategies are being formulated. At times it felt as if the efforts made were redundant. (Student Partner)

Aligning the project too closely to institutional outcomes has overshadowed the personal value of co-creation for some of our Student Partners. They have struggled to identify the process-oriented benefits of their contribution and, because of the matrix environment working conditions, cannot always articulate how outcomes from smaller scale projects they are involved in contribute to the attainment of wider institutional goals.

Concluding Remarks

This case study has provided an autoethnographic discussion of an institutional programme of co-creation at Solent University over the three years since its inception. In particular, it has drawn attention to our mixed experiences of moving the operationalisation of the scheme from a hierarchical structure—led from our 'third space' Education Office—to a matrix environment. In this final section of the chapter, I will reflect on the lessons learned so far and pose some possibilities for taking forward an institutional co-creation scheme of this type. I hope that (1) our case study fills a gap in the existing literature which is typically dominated by discussion of single short-term co-creation projects located within one department (Mercer-Mapstone & Bovill, 2020, explore some interesting exceptions), and (2) helps others respond to the complexities of scaling up co-creation work. I also hope that our case study encourages colleagues across the sector to share their examples of coordinating cross-institutional co-creation initiatives over time, in their own contexts, so that we can continue to learn from each other.

Reflecting on the development of our institutional initiative over a three-year period has helped us to understand the importance of situating co-creation in spatial and temporal contexts. Indeed, the re-organisation of the Student Partners project into a matrix environment in 2023 was made possible only by the flattening of hierarchies, collaboration and shared interests created by the Transformation Academy at Solent University in the years preceding this (Heard Laureote & Buckley, 2022). The breaking down of departmental silos at the University during the pandemic era, helped us 'third space professionals' (Whitchurch, 2015) in the Education Office to connect with and support a broader range of colleagues with co-creation than previously. This meant that we were able to move the project beyond a single focus on learning and teaching and co-create in areas beyond the curriculum, including graduate employability and student success. This created greater visibility of the Student Partners across both the academic and professional spheres of our university community, inspiring other colleagues to co-create.

For these reasons, we believe that a matrix environment is an effective way of embedding cross-institutional co-creation from a third space. The matrix embodies the non-hierarchical notion of co-creation by developing multiple 'liminal spaces within which power and exclusion can be deconstructed, critiqued, and potentially redressed' (Dollinger & Mercer-Mapstone, 2019, p. 79). This is markedly different from an institution-wide

project led by one department. However, a matrix environment has setbacks and challenges. Centrally coordinating Student Partners through a matrix environment is time consuming and logistically complex. It requires an enormous amount of time and effort to ensure that students are appropriately matched to projects. Less cohesion in the role can leave Student Partners feeling disconnected from the central project aims. This is conflated by different operationalisations of co-creation across projects. Students working in smaller teams (with only one or two other students) report loneliness and a diminishing sense of belonging in the matrix environment.

Going forward, we recognise the need to create time and space, in a matrix environment, for our Student Partners to come together to develop a collective identity and support network between them. Sharing project experiences and troubleshooting as a team is highly appreciated by the students. It also provides an opportunity for Student Partners to be supported in understanding both the institutional impact (outcomes) and personal value (process) of their role as co-creators—therefore supporting their articulation of skills to support future employability. Creating a more cohesive team of Student Partners may also help to nurture greater confidence in our students to propose bottom-up co-creation projects and therefore move us away from the top-down staff-initiated co-creation that currently dominates in our institution. Indeed, as Mercer-Mapstone and Bovill (2020) remind us, if co-creation is too tightly aligned to staff agendas and institutional benefits, then it becomes an empty rhetoric when it is scaled up in neoliberal environments.

Our Student Partner project is three-and-a-half-years-old. Forty-nine students have participated in the programme to date. Although modest in size, our cross institutional matrix project is growing, and it sits alongside several other examples of co-creation within our university (for example, within individual courses). As Mercer-Mapstone and Bovill suggest, 'where institutions wish to embed a partnership culture, a multilevel approach of project-based and curricular partnership models may be the most successful way to ensure access to partnership is as equitable as possible' (2020, p. 2554). To achieve this, we recognise the need to develop institutional spaces for collaboration, community and cohesion (see McIntosh & May, Chap. 2) that foster understanding of the theory and practice of co-creation, its social justice principles, the multiple variants it takes, and the different contexts it can take place in (Lygo-Baker et al., 2019; Bovill, 2019). From experience, we know that this process of 'becoming' will take time for both our staff and our students.

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CHAPTER 4

A Tailored Co-creation Approach to Contextualising the Student Voice in Higher Education

Martyn Polkinghorne, *Tim McIntyre-Bhatty*, *and Gelareh Roushan*

Introduction

The marketisation of higher education in the UK refers to the shift towards a more market-oriented and competitive system (Chapleo & O'Sullivan, 2017) in which students are viewed as being consumers (Roohr et al., 2017). This transformation involves the application of market principles to the management, funding, and delivery of higher education services, and has been driven in the UK by the introduction of tuition fees for university education. This topic is further discussed by Mahgoub et al. in Chap. 10.

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Alongside this change in the funding model, there has been an increase in the competition amongst universities, with institutions seeking to improve their rankings in national and global league tables to enable them to attract more students (Williamson et al., 2020). Rightly or wrongly, such league tables have been influential in shaping our perceptions of educational standards.

Furthermore, universities are now more accountable to students for the quality of the teaching provided to them, and for their subsequent employability within the job market, and so consequentially they need to demonstrate that they offer value for money (Polkinghorne et al., 2017a). This marketisation of higher education supports managerialism (Alajoutsijärvi et al., 2021) and is aligned to the dominant conceptualisation of higher education proposed by Skelton (2005) in which universities exist as a mechanism to train the future workforce required by a country, opposed to the alternative conceptualisation in which students attend university to develop into critical thinkers capable of contributing to the social, economic, and political debates of the time.

Supporters of the marketisation agenda claim that it fosters competition, improves efficiency, and enhances the quality of education (del Cerro Santamaría, 2020), whereas critics express concerns about the potential impact upon inclusion and access, and that market-driven metrics place an emphasis on the commodification of higher education (Silverio et al., 2021) at the expense of educational goals related to learning. To maintain the balance, it is important for universities to continue an ongoing dialog with their students to ensure that the education that they are providing is considered to be valuable by the students receiving it. Listening to the student voice has become pivotal in this regard.

The student voice refers to the collective opinions, perspectives, and feedback of the student body. It encompasses the students' views on various aspects of university life, including academic programs, facilities, support services, and extracurricular activities. The student voice in this sense encompasses everything from 'staff–student partnerships to campaigning and protest' (Canning, 2017, p. 520). Whilst our understanding of the student voice, and how to respond to it, is still developing (Seale, 2010), it is increasingly becoming an issue of primary importance across higher education sector (Healy et al., 2014), and it is therefore necessary to recognise that 'student voices are not always heard or [even] articulated' (p. 520), and that not all students who are heard, represent the combined student body. This means that as educators we have a responsibility to reach out to those students whose voice is underrepresented, and whose

views may easily be overlooked. However, listening to the student voice in itself does not represent co-creation as to be effective, and as described by Jamil and Howard-Matthews (Chap. 1), one of the dimensions of co-creation is about then developing solutions together that meet both institutional and student needs.

It should be said that this desire to listen to the student voice is also not about assuming that students necessarily even always know what is best for them:

> [J]ust as with students' persistent obsession with class contact hours … their views about what they want are sometimes flatly contradicted by research evidence about what is good for them. (HEPI, 2016, p. 14)

Instead, it is about ensuring that we listen, understand, and value how the learning experience is working for them (Seale, 2010; Young & Jerome, 2020), and that we appreciate the pedagogical developments that they perceive to be beneficial. Alongside this, we need to recognise the power imbalance that exists between students and educators, which may mean that important issues remain unvoiced in the interests of maintaining good relationships (Canning, 2017).

However, it is clear that listening to the student voice is a key element of co-creation both in terms of co-creating the provision of a high-quality learning experience, and also with regard to co-creating the learning environment itself. Torn (Chap. 6) draws a similar conclusion. If we can involve students as partners in the development of their education, and as co-creators of their own learning experience, then the value of their education, and their engagement with that education, will be significantly improved through an enhanced sense of belonging (Healy et al., 2014; Cook-Sather & Felten, 2017). This sense of shared ownership is a concept also considered by McIntosh and May in Chap. 2.

Students in the UK have a diverse range of opportunities to express their opinions through internal surveys, focus groups, the Students' Union, and also at a range of committee meetings. They can also express their views through national surveys including the National Student Survey (NSS) organised by the Office for Students and which only applies to undergraduate students (Office for Students, 2023), or the Postgraduate Taught Experience Survey (PTES) and Postgraduate Research Experience Survey (PRES) that are both organised by Advance HE (Advance HE, 2023a, b). Whichever channels the data relating to the student voice is collected through, it can play a crucial role in influencing decisions and policies

within our universities (Brooman et al., 2014; Peseta et al., 2015). Feedback is a key element of co-creation (Jamil & Howard-Matthews, Chap. 1), and so when we make changes based upon such student feedback, we need to ensure that they know this has occurred, and that we have taken their views seriously. This chapter specifically considers co-creation development (Bron et al., 2018; Yassine et al., 2020) with respect to the learning gain of students. It includes examples of our practice, and reports on some of the key lessons that we have learnt from these experiences.

Evaluating Student Learning Gain

Learning gain (also known as educational gain by organisations such as the UK's Office for Students) is a term that refers to the progress that a student makes in terms of their academic knowledge and skills over a period of time, and as such it can be used to assess the effectiveness of educational interventions.

There are five different approaches that are commonly used to evaluate learning gain, these being grades, standardised tests, self-reporting surveys, mixed methods and qualitative reflection (McGrath et al., 2015; Polkinghorne & Roushan, 2017). Whilst there is broad agreement across the higher education sector that an appropriate measure of student learning gain would be an advantageous addition to existing metrics (Gunn & Fisk, 2013; Gunn, 2018; Polkinghorne et al., 2021b, c), due to its complexities, what such a measure would look like in practical terms is still under debate, as even recent studies conducted for the UK Office for Students concluded that existing methods for determining student learning gain require enhancement, so that they can accommodate important differences in local contextual factors (Jones-Devitt et al., 2019; Howson, 2019).

Arico et al. (2018) have proposed that student learning gain (educational gain) is now of increasing importance, and it has become a key dimension of the student learning journey, which needs to be factored in when policy makers, such as the UK Office for Students, are considering how effective our university-based educational delivery actually is. However, since at the current time there is little clear direction for the sector in this regard, Andrade (2018) helpfully suggests that each university should determine its own definition of learning gain, and that we should do this within the context of our own institutions to ensure that it is an appropriate mechanism for enabling us to enhance our teaching delivery

(Evans et al., 2018). As a result, universities are testing a range of approaches to evaluate the learning gain of their students, and for those who would like to explore this topic further, a helpful summary of these various approaches is provided by Tight (2021).

Bournemouth University is a public university in the UK founded in 1992, with origins as a place of higher education dating back to the early 1900s. At the time of writing, the student population of the University exceeded 18,000 at undergraduate, masters, and doctorate levels. Recognising the strategic importance of learning gain, the university undertook preliminary research on the topic (Polkinghorne et al., 2017a), and from this research, an alternative model for evaluating student learning gain was developed and presented at a Higher Education Academy conference (Polkinghorne et al., 2017b). Unlike conventional thinking of the time, which only considered learning gain in terms of distance travelled (McGrath et al., 2015), this new model proposed that student learning could be considered to be composed of both distance travelled, and journey travelled. Further work undertaken by Polkinghorne et al. (2021a) was able to explain that distance travelled relates to explicit knowledge gained by a student which is often in the form of theories and models, whereas journey travelled refers to the tacit knowledge gained by a student which can be alternatively described as being experience and/or know-how.

The new model was successfully utilised to assess student learning on a range of different teaching modules, with the conclusion that it provided an indication of how students perceive their own learning, and where the teaching had been more (or less) effective (Polkinghorne et al., 2021c, 2022). These student perceptions are increasingly important within the higher education sector (Kandiko Howson & Mawer, 2013), and such informed understanding can prove to be a great help to the individual academic, as it empowers them to make changes to their teaching. These changes can be affected as part of the continuous improvement process, ready for the next delivery cycle, safe in the knowledge of which aspects of an academic's own teaching need to be evolved to enhance student understanding, and which need to be retained in their current form.

One of the limitations of the previous studies using this model was that they were relatively small in nature, and primarily based around business and management degrees. However, from a co-creation perspective, in terms previously discussed by Dollinger et al. (2018) and Cook-Sather (2022), they did enable teaching teams and students to work together to identify ways to enhance the learning experience for future cohorts,

thereby enabling students to have more control regarding curriculum design which is a concept discussed previously by Arm in Chap. 3. This chapter reports on the learning from these early pilots, and describes how the original concept was expanded to form the basis for a much larger pilot delivered across all four faculties at the university, and from which a new university-wide survey was ultimately developed that was opened-up to all of the university's undergraduate and postgraduate taught students as a new channel to listen to their views and opinions.

Research Procedure

The research described in this chapter draws upon a series of self-reflective surveys. Devis-Rozental (Chap. 11), and Torn (Chap. 6), both describe alternative co-creation approaches to collecting student data using surveys which they found to also be successful.

The data in this study was collected was based upon the personal thoughts, views and perceptions of the participating students, and in each case the research was seeking to understand the aspects of the teaching delivery that had been effective, and those that needed further development. This understanding was achieved by asking the students to reflect upon how much they considered that their own understanding of the topics in question had changed. By using this approach, it took into account certain key considerations. For example, at the start of a new teaching module, students simply don't know what they don't know, and only by expanding their horizons regarding the topic in question can they start to appreciate the full scope of the subject area. Evaluating their learning at the end of the teaching module, and asking them about how they consider their own learning to have developed, helps students to recognise the journey that they have been on. It also takes into account that all students within a given cohort will have started a teaching module with a unique combination of understanding, skills and experience, that may, or may not, have provided them with a good foundation upon which to build new knowledge.

The following pilot studies were undertaken to explore different dimensions of the student population:

(1) A cross-sectional pilot study based upon final year degree students undertaking self-managed autonomous research projects (Polkinghorne et al., 2020, 2021b, 2022).

(2) A cross-sectional pilot study based upon final year degree students undertaking group-work based taught modules (Polkinghorne et al., 2023).
(3) A cross-sectional pilot study based upon final year degree students undertaking individual assessment based taught modules (Polkinghorne et al., 2021c).
(4) A longitudinal pilot study based upon first year undergraduate degree students undertaking individual assessment based taught modules (Polkinghorne et al., 2021a; O'Sullivan et al., 2022).
(5) A longitudinal pilot study based upon final year degree students studying online during the global Covid-19 pandemic (Leidner et al., 2022).
(6) A cross-sectional pilot study based upon a full university-wide roll out of a new institutional student survey.

Students participated in these co-creation studies on a volunteer basis and their data was collected anonymously. Because of the size of the samples, these are considered to be non-probability studies from which we can gain understanding, but from which generalisation must be limited. The wording of the questions presented to students were informed by Blooms (revised) Taxonomy of Higher Order Thinking Skills (Anderson & Krathwohl, 2001). The studies themselves were each performed in line with the principles of the Declaration of Helsinki with approval being granted by the Ethics Committee of Bournemouth University (References 30119 [2020]; 25624 [2018]; 16246 [2017]; 13829 [2017]; 9236 [2015]).

Findings and Discussion

In Chap. 2, McIntosh and May emphasise the importance of the student voice. Building upon this concept, in order to test the learning gain model, and to contextualise the student voice through co-creation, we conducted a series of six pilot studies which are detailed below, and each of which builds upon the findings of the previous study.

Pilot Study 1

Initially uncertain about the practical value of the learning gain model, we decided to test it with a small group of Level 6 Business and Management

students engaged in a range of project types (dissertation, reflective, consultancy). Twelve participants (6 males, 6 females) were included in the study, and all the students were supervised by the same academic to ensure a consistency of experience and support. Questions focused on learning changes during the project module that related to the teaching objectives, and addressed distance travelled (e.g., understanding research proposal creation) and journey travelled (e.g., skills for structuring project reports). Reporting options included 'no change', 'minor improvement', 'moderate improvement', 'significant improvement', and 'exceptional improvement'.

Whilst exceptional improvement wasn't anticipated, some students reported it, particularly with regard to project planning, signalling successful teaching, and the potential for best practice to be shared. Conversely, minor improvements reported by some students, especially in terms of innovation and creativity, prompted reflection by the academic on the support offered, and a consideration of alternative delivery methods that could be used in the future.

Analysis revealed female students reporting stronger learning gain in practical skills and know-how (journey travelled), whilst male students reported stronger learning gain relating to theoretical concepts and models (distance travelled). Combining results, females reported significantly stronger overall improvement.

From Study 1, it became evident that the learning gain model stimulated productive dialogue between academics and students, offering valuable insights for evolving teaching practices.

Pilot Study 2

After demonstrating the efficacy of the learning gain model when applied to autonomous project modules, we shifted our focus to a group-based taught module in a Level 6 Business and Management degree. Seventy students participated in the study (30 males, 40 females). Questions were aligned with module objectives, and explored changes in learning, addressing aspects such as the understanding of professional conduct (distance travelled), and the ability to assess performance and talent (journey travelled). The reporting options ranged from 'no change' to 'exceptional improvement', mirroring the previous study.

Similar to Study 1, the learning gain model facilitated discussions in a supportive co-creation environment. Some students reported low

learning, highlighting areas such as the inter-relatedness of business functions, for which teaching adjustments could be undertaken. Actions were integrated into the continuous improvement process and discussed with the external examiner, with plans for ongoing monitoring put into place. Conversely, some students reported high learning levels with regard to running graduate assessment centres, where mock-ups allowed them to experience both applicant and assessor roles.

As in Study 1, the analysis of Study 2 data confirmed higher learning gain reported by female students. However, both genders reported lower learning than anticipated by the academic team. Despite acceptable grades, students expressed less confidence in their learning progress than anticipated, revealing a misalignment of perceptions.

Study 2 results reassured us about the learning gain model's applicability to group-based taught modules. Co-creation had fostered dialogue, and provided valuable insights into teaching effectiveness that we could employ for future improvements.

Pilot Study 3

Study 3 aimed to apply the learning gain model to individual assignments in taught modules. Previously successful in autonomous and group-based units, the co-creation approach had been seen to encourage students to share views on their own learning. We explored its effectiveness in modules with individual assessments, focusing on a Level 6 Business and Management research methods module with 60 participants (30 male, 30 female) in the study.

As before, questions were aligned with module objectives that addressed, for example, changes in a student's understanding of business research processes (distance travelled) and their ability to conduct a literature review (journey travelled). Response options were maintained as being from 'no change' to 'exceptional improvement'.

Data analysis revealed diverse student perspectives, with some reporting strong learning and others the opposite. Variations included strong learning with regard to distance travelled, but low learning for journey travelled, and vice versa. Specific questions, especially those related to literature review skills, uncovered that the students had faced challenges. This information, not evident in formal assessments, guided targeted improvements for teaching.

Furthermore, in Study 3, male students reported higher learning gains overall in both distance and journey travelled categories. This finding contrasted with that of Studies 1 and 2. The co-creation approach once again provided valuable insights into student thinking and perceived learning that were previously unknown.

Pilot Study 4

Having confirmed that the learning gain model sparked a positive co-creation dialogue with final-year students, we subsequently applied it to first-year students enrolled on a Level 4 taught module as part of a Marketing degree. Our aim was to gather benchmark data for the year 2018, with 59 students (37 males, 22 females) participating. Following this, we sought to identify and implement changes to teaching based upon the analysis of this data. Subsequently, we collected data again in the following year (2019) to assess the impact of these changes, with 50 students (18 males, 32 females) participating. Both data collections occurred before the pandemic, and so were based upon face-to-face teaching.

We ensured that the questions asked aligned with module objectives, addressing changes in distance travelled, such as understanding marketing principles, and journey travelled, for example the ability to identify marketing problems. Response options still ranged from 'no change' to 'exceptional improvement'.

In the benchmark data, students reported robust learning in certain areas, such as marketing practice, but perceived learning levels were considerably lower in other areas, particularly concerning marketing solutions. Only a few students reported exceptional improvements, whilst a significant number reported only minor improvements in their learning for some, or all, of the questions asked. In response to these findings, the teaching team increased the emphasis on the identification, understanding, and resolution of marketing issues. New seminar materials were introduced the following year, accompanied by supporting case studies.

Upon analysing the data for the subsequent cohort, there was a noticeable improvement across the board, with fewer students reporting minor improvements, and a significant number now reporting exceptional improvement. This improvement was particularly evident in the question areas that had shown weaknesses in the benchmark data, and that had received concentrated focus. The reported perceived student learning in these areas was now aligned with the learning across the rest of the module.

The use of the learning model, and establishing a dialogue with the students, enabled the teaching team to pinpoint specific areas of learning that were proving to be ineffective. Remedial action was taken, and the next cohort of students reported improved learning levels as a result.

Pilot Study 5

Due to the Covid-19 pandemic and ensuing national lockdowns, UK universities, and others globally, transitioned from in-person to online teaching. Given the marketisation of higher education, it was crucial to understand the impact of this delivery shift on student learning.

To assess this, we again employed a co-creation approach using the learning gain model for a Level 6 Business and Management module focused upon organisational leadership. Data had previously been collected in 2019 (pre-pandemic), and therefore we repeated the study in 2021 (during the pandemic). Analysis compared how students perceived their learning in both delivery modes, specifically exploring differences between those receiving online and face-to-face teaching.

Questions continued to be aligned with module objectives, and considered changes in distance travelled, such as understanding of the nature of leadership, and journey travelled, including the ability to critically analyse organisational challenges. Response options continued to be in the range 'no change' to 'exceptional improvement'.

Contrary to expectations, not all students undergoing online teaching reported decreased learning. Notably, female students seemed to highly value the online educational experience. For instance, a question about the understanding of future leadership practices showed a significant increase in response rates from females in the online cohort compared to the previous classroom-based one. In contrast, males in the online cohort reported a significant decrease in perceived learning. Overall, females, whether for distance or journey travelled, generally reported increased response rates, whilst males taught online showed responses similar to their face-to-face counterparts. This suggests that organised and self-responsible students may find online engagement convenient, benefiting from the additional support materials provided, and from the recorded sessions which facilitated review and recap.

The learning gain model facilitated a comprehensive comparison of teaching methods. The constancy of the academic team, curriculum, and

course for both cohorts, increases the likelihood that reported variations stem from the shift from face-to-face to online delivery.

Pilot Study 6

Building on the success of Studies 1–5, we then considered implementing the learning gain model on a university-wide scale. This encompassed more than 2000 teaching modules across 15 academic departments in four faculties, spanning Level 0 (Foundation Year students) to 7 (Master's students). Unlike the previous process-oriented student survey which had been in place for a number of years, this new survey focused more on learning outcomes. Given the diverse nature of the academic programmes within Study 6, the questions had to be more generic, whilst still trying to remain informative about each student's perceptions of their own learning.

The survey maintained the concept of questions related to both distance travelled (understanding of knowledge) and journey travelled (ability to apply knowledge). Additional questions covered the United Nations Sustainable Development Goals (UN SDGs) and the global climate and ecological crisis. Response options were modified to range from 'strongly disagree' to 'strongly agree', with satisfaction being defined by student responses in the strongly agree and agree categories. Following the principles of Bloom's taxonomy (Anderson & Krathwohl, 2001), the first four questions of the survey were varied depending upon the level of the module. The survey was undertaken at the end of semester one teaching with more than 5000 students participating, and then again at the end of semester two teaching when more than 6000 students participated.

Analysing the results, one department achieved an average satisfaction above 90% across all questions and levels at both the semester one and semester two data collection points. Three more departments achieved an average satisfaction of 80% or more on both occasions. In contrast, four departments achieved an average satisfaction of less than 70% both times which meant that teaching on their modules was subjected to additional scrutiny.

Level 0 students were generally satisfied with the learning on their modules, but reported low levels of understanding regarding the climate and ecological crisis. Levels 4 and 5 students indicated substantial perceived learning in both distance and journey travelled. However, they reported a lack of understanding regarding the relevance of certain modules to their future careers. Islam et al. also explore the need for personal

and professional growth of this kind in Chap. 5. Additionally, they expressed dissatisfaction with perceived support for sustainability issues.

For Level 6 students, the results were quite similar in terms of reported high distance and journey travelled learning on the modules. Again, more support for addressing sustainability and ecological issues was requested. In contrast to Levels 4 and 5 students, those students at Level 6 appreciated the help, support, and guidance of the associated staff much more. Level 7 students reported the highest learning and were the most satisfied in terms of distance and journey travelled, that is, understanding the knowledge taught and also knowing how to apply it. Staff were reported as being helpful. However, similar to other student responses, they did not feel there had been enough emphasis on sustainability and ecological issues.

From this study, the model and its co-creation approach to listening to the student voice based upon students' own perceptions of their learning, has demonstrated its value by playing an important role in stimulating conversations, that can be used to inform the continuous enhancement of our educational delivery.

Summary of Findings

Taking an overview of the six pilot studies undertaken, the learning gain model, coupled with a co-creation approach, proved valuable in stimulating dialogue, identifying areas for improvement, and enhancing the overall educational delivery and student experience across different modules and levels within the university. Specifically, Study 1 considered final year project students, and the model stimulated a productive dialogue between academics and students, revealing areas of exceptional improvement, and prompting reflection on teaching methods. Study 2 shifted the focus to group-based taught modules, confirming the model's applicability. Students reported both high and low learning levels, leading to adjustments in teaching methods. Study 3 applied the model to modules based upon individual assignments, revealing diverse student perspectives, and prompting targeted improvements in teaching. Study 4 extended the model to first-year students, leading to identified areas of ineffective learning. Remedial action was taken, resulting in improved learning levels for subsequent cohorts. Study 5 investigated the impact of the shift to online teaching during the Covid-19 pandemic. Female students valued the online experience, whilst males reported a decrease in perceived learning.

Finally, Study 6 implemented the learning gain model on a university-wide scale across a diverse range of academic programs. The survey, focusing on learning outcomes, revealed varying levels of satisfaction across departments, and highlighted areas for improvement, particularly in addressing sustainability issues.

Conclusion

The learning gain model was applied to a range of educational contexts. Analysis of the data gathered from students successfully uncovered variations in reported learning levels across different topic areas. These variations were influenced by several factors, including the nature of the teaching, the delivery mechanism, the gender of the learners, and the assessment method employed. To gain a comprehensive understanding, students were questioned about both their distance and journey travelled. This approach, beyond summative assessment, aimed to delve into their personal struggles, and reveal areas where they perceived growth in their knowledge and abilities. Without adopting this model, which we delivered with a co-creation approach, and our listening to the students' voices to comprehend their learning journeys, the valuable insights uncovered would not have been attainable.

Consequently, targeted interventions were designed and implemented in areas with lower learning outcomes. Comparing the original data collected by the model, with new data from the subsequent cohort, indicated the impact of these interventions on student learning. In general, there was a noticeable improvement in responses from students in subsequent cohorts for the specific areas where interventions were applied. This improvement was supported by an increase in students self-reporting what they perceived as exceptional improvements in their learning.

Acknowledging potential influencing factors, such as differences in the quality of accepted students across cohorts, is essential. Nevertheless, the study underscores the potential effectiveness of the learning gain model in identifying areas of education that can be enhanced. With the contemporary emphasis being on universities improving their national survey standings, like NSS, PTES, and PRES, any mechanism facilitating recognition of each student's learning experiences is beneficial. Using the learning gain model clearly contributes positively to our understanding in this regard. Simultaneously, the ability to take constructive and demonstrable action based on student feedback ensures that the student body recognises

that their voice has been heard and listened to. Importantly, the self-reflective survey approach adopted by the model integrates the voices of previously unheard students alongside responses from their peers, empowering students to take responsibility for their own learning, aligning them more closely with the educational process, and strengthening the learning relationship between academics and students. In Chap. 8, Teh and Chong also discuss how co-creation can improve inclusivity because it can motivate students to participate more fully.

Limitations of the Research

This research study has considered responses from students at a single UK university. Expanding the study to consider other UK universities, and universities from other countries, would establish the wider implications of this research for supporting educational development, and would enable the inclusion of a wider range of discipline areas.

Potential Long-Term Impacts

The long-term impacts of this work are numerous. Firstly, using this approach to co-creation with students, has helped us to identify variations in learning between the different levels of study that we were previously unaware of. With this new knowledge, we can now explore further to understand the scope and range of these issues, and we can put in place coping mechanisms to mitigate the effects.

The use of this co-creation approach, and involving students in the process, allowed for a deeper understanding of their own personal learning journeys. Gathering information on the students' distance travelled, and journey travelled, and their personal struggles along the way, has provided insights that took us far beyond the limitations of traditional summative assessments.

This new understanding gained from the analysis has enabled the informed design and delivery of targeted interventions in areas of our teaching that exhibited lower learning outcomes in the perception of the students. In the later studies, the impact of interventions was assessed by comparing original data to subsequent cohorts, revealing improvements in many of the specific areas targeted. This has enabled us to respond in practical terms to the student feedback, making pedagogical changes that have reinforced student learning. As a result, an uplift in student responses

was reported, especially in those areas where interventions were implemented.

Alongside this understanding, new developments in learning analytics now offer increasingly sophisticated capabilities, and compelling opportunities, for students to enhance their learning through personalised experiences, early identification of at-risk students, and enhanced teaching strategies. Wong and Li (2020) argue that this enables educators to tailor learning to each student's needs, thereby improving engagement and outcomes. Foster and Siddle (2020) highlight the role of analytics in identifying students who are struggling, allowing for timely intervention. Ifenthaler and Yau (2020) emphasise the ability of the technology to provide insights into teaching effectiveness, leading to improved pedagogical approaches. Integrating our learning gain model into such analytics will provide the opportunity for enhancing such support for personalisation even further. Joseph-Richard and Ringrose also consider the need for taking a personalised and individual approach within Chap. 7.

In the medium term, taking a student-centric and co-creative approach to education that recognises how students perceive their own learning experience, and then by taking action based on such feedback, will together contribute to an improvement in our metric standings. In a similar way to Shakir and Siddiquee's reflections upon the need to dismantle the power dynamic between staff and students in Chap. 9, from our study, this can be achieved based upon a genuine desire to empower students, and integrate their views within our own educational processes, ensuring the relevance and currency of learning outcomes achieved, and providing students with an engaging educational experience that they value and appreciate.

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CHAPTER 5

Co-creation for Sustainable Well-being: A Value-Driven Initiative in Bangladeshi Higher Education

Md Mahbubul Islam, Mohammad Aminul Islam, Masud Ur Rashid, Md Imamul Islam, Ahmed Al Mansur, and Mohammad Golam Mohiuddin

Introduction

The chapter presents three value-driven initiatives from the field where staff and students at higher education institutes (hereinafter HEIs) co-created values for the well-being of the stakeholders at the community level. They applied disciplinary knowledge and expertise to resolve real-world problems in the context of Bangladesh. By doing this, they enhanced the quality of the course curricula in those HEIs by linking some sustainable development goals (hereinafter SDGs) with each other.

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Staff-student co-creation enabled those academic institutions to actively involve students in the process of designing and delivering their courses which co-produced a mutually beneficial learning experience for creating values for society (Franco & McCowan, 2020). Thus, HEIs can increase the perceived quality of their education and institutional image by fostering student co-creation behaviours (Pinna et al., 2023). Student engagement has served here as a mediator and impacted both the university's reputation and students' perceptions of quality (Kahle et al., 2018). Co-creation has the potential to increase service quality and university image; hence, it should be considered as part of HEIs' image-building and quality policy-enhancing scheme (Perry & Atherton, 2017). Therefore, Bangladeshi HEIs in the current innovation ecosystem are operating to address societal concerns, promote sustainability, and produce sustainable solutions through co-creation with students as partners.

Staff-student co-creation in higher education literature has received much attention in recent years, and the relevant pedagogical practices are now much more informed by research than ever before (Lubicz-Nawrocka & Bovill, 2023; Doyle et al., 2021; Pee, 2020; Shohel et al., 2024). Having synergies with other similar teaching and learning strategies such as collaboration (Bovill et al., 2016), co-production (Dollinger et al., 2018), partnership (Bovill, 2019; Lubicz-Nawrocka & Simoni, 2018), and participatory pedagogical approaches (Shohel et al., 2024), staff-student co-creation in higher education could also be conceptualised as co-generation of values by various concerned stakeholders (Paunescu & Cantaragiu, 2013; Khatami et al., 2023). According to Kaminskiene et al. (2020), co-creation is a process where learners can add value, raise their voices to reach collective goals through transformative interactions between teacher(s) and learners to explore ideas, open new possibilities, and construct learning experiences. To propose a meaningful collaboration between students and staff, Bovill et al. (2016) conceptualised co-creation as one way to occupy the space between student engagement and partnership. Students in co-creation schemes become more active where the traditional 'narrative of constraint' could be transformed into a

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value-driven 'narrative of growth' (Bovill et al., 2016, p. 205). Recent studies in higher education literature demonstrate that the roles of universities have been extended beyond teaching and research to socio-economic problem solving, where universities are expected to contribute actively to the leverage of local communities through social innovation and collaboration (Kumari et al., 2019; Cai et al., 2020; Longoria et al., 2021). Bangladesh, a developing nation in South Asia, has been facing challenges in various sectors, such as education, health and housing which are among the basic needs of human beings. These challenges are further aggravated due to the deterioration of social, economic, and environmental conditions which are typical of many Third World countries of the world. In this context, this study adopts a bottom-up approach (Kumari et al., 2019) to present cases from the HEIs demonstrating how staff-student co-creation in academia could be utilised for value creation for stakeholders to ensure inclusivity, sustainability of the solutions and well-being of the concerned local community.

Higher Education Institutes and their Transformative Roles

The year 2015 was a milestone in the history of the world since it saw the accomplishment of several major global development initiatives, including the eight United Nations Millennium Development Goals (MDGs), which were introduced in 2001 and carried out through 2015 (Nhamo & Mjimba, 2020). The SDGs were created in the post-2015 era as a new global set of objectives and metrics to eradicate poverty in all its manifestations and integrate social, economic and environmental development (UN, 2015). Since the SDG agenda encompasses a wide range of interconnected social, economic, and environmental issues worldwide, different players, including the HEIs, must undertake long-term initiatives to effect changes (UN SDSN, 2015; Kioupi & Voulvoulis, 2019). Additionally, HEIs hold distinct, impartial, and reliable roles in society and are acknowledged for their ability to implement the SDGs by fostering dialogue and establishing environments (Vilalta et al., 2018) that encourage co-creation of values among stakeholders. In this context, the Times Higher Education (THE) began rating HEIs in 2019 to recognise respective social impacts based on their outreach, research, and stewardship in achieving the UN SDGs through their Impact Rankings where some Bangladeshi HEIs were placed among others.

Developing learners' socio-ethical skills is one of the key objectives of HEIs so that they can implement their knowledge for societal impact (López, 2022). Responding to the global call for action, HEIs are committed to preparing students for social good (McLennan, 2021) to solve issues that impact the 'security of people and the planet' (Griggs et al., 2013, p. 305). The 17 SDGs pose new challenges to HEIs (Muftahu, 2020) as enablers of social innovation and entrepreneurship (Unceta et al., 2021). This implies that to be a socially responsible institution, the HEIs should transform themselves from entrepreneurial universities (Cai & Liu, 2020) to sustainable entrepreneurial universities (Cai & Ahmad, 2023). A sustainable entrepreneurial university integrates social responsibility, holistic innovation, and an entrepreneurial spirit with a focus on societal well-being. Through the promotion of co-innovation, trust, and sustainable practices in innovation ecosystems, it actively crafts a better future (Cai & Ahmad, 2023). On the other hand, a socially responsible university maintains some principles such as purpose, values, methods, research, partnership, and dialogue with stakeholders (López, 2022, p. 3). This reveals a close link with the principles of co-creation in higher education, such as co-generative dialogue, engagement, learners' agency, collaboration, learners' recognition, increased ownership, and participatory and negotiated decision-making by various stakeholders of HEIs from different backgrounds who co-create innovative solutions for their mutual benefits (Kaminskiene et al., 2020; Nelson, 2020).

Co-creation within the social sphere entails engaging citizens and civil society in shaping and executing societal processes for creating values for the community. To understand the process of co-creation of values in the context of social innovation, Young Foundation principles and processes (Nagore & Bynon, 2018) could be used as an analytical framework. These include four steps of co-creation:

Step 1: Prepare—understand challenges and problems and provide time to think about all possible solutions, team building, and capacity building;
Step 2: Co-define—define the challenges, engagement of new stakeholders, co-defining the process;
Step 3: Co-create—connect with similar challenges, resources for pilot work, a collective creation of solutions;
Step 4: Implement—apply and test the solution.

Collective initiatives of stakeholders within a context of social innovation (Chin et al., 2019; Voorberg et al., 2013) demonstrate these four steps or strategies to co-construct solutions to any social challenge could be categorised as value-driven co-creation enterprises. These collective efforts impact the well-being of the current and future generations of people in general (Millard, 2018). Hence, in line with their changed roles as learning organisations, HEIs should provide their primary stakeholders with sufficient co-creative spaces for the sustainable well-being of society.

Connection of Sustainability, Well-being, and Co-creation with Higher Education Pedagogy

In the last few decades progress or positive changes in higher education have been reported by various international organisations including the United Nations (UN), UNESCO, the European Commission, and the Council of Europe (Khatami et al., 2023). At the present time, HEIs cannot confine themselves to their traditional roles of teaching and research. Instead they have to move towards their new roles and functions of community engagement, which is also termed by scholars as the third mission of universities (Etzkowitz, 1983, 2013). During this transition to adapt to the changed environment, HEIs need to reimagine their transformative roles and adjust pedagogical strategies to enable students to survive in the changed ecosystem of society. Referring to Freire, Morales mentioned the introduction of critical thinking, collaboration and co-creation schemes in higher education curricula to address social changes (Morales, 2021). Scharmer, as mentioned in Kaminskiene et al. (2020), identified four different sources of attention at the personal level where social action can emerge: 'The I-in-me' emphasises monologue and frontal teaching, 'The I-in-it' upholds general discussion, critical scrutiny of the problems and situations, 'The I-in-you' endorses active listening, reflective inquiry, and 'The I-in-now' promotes generative dialogue (Scharmer, 2007). Hence, co-creation can be a strong tool that espouses 'I' both in the minds of teachers and learners to promote constructivism, metacognition, and problem-based learning, and can be a catalyst for maintaining value-driven social approaches through academic interventions (Andersson & Clausen, 2022).

Students' engagement (e.g., cognitive, metacognitive, affective, social, task-related and communicative) has a positive correlation with academic

achievement and resilience (Christenson et al., 2012). Educators and administrators in HEIs need to maintain social justice to support students' needs (Shakir & Siddiquee, 2024; Amerstorfer & von Münster-Kistner, 2021). Highlighting the connection between social justice and sustainable well-being, Summers and Smith (2014) reiterate the need for social equity and intergenerational equity for human well-being that demands space, fair treatment, impartiality, justness and collaborative decision-making along with equality for justified sharing and exact division among stakeholders. In fact, sustainable well-being voices equity and justice for a sustainable future (Summers & Smith, 2014). As for sustainability, while we prioritise space, it is important for educators to focus on addressing locally relevant well-being indicators through co-generative pedagogical approaches so that learners can build a sense of belongingness, resilience and a strong adaptive culture (King et al., 2014). Unfortunately, in the local context, addressing well-being and creating adaptive spaces for adding value have not generally been prioritised (Tay, 2021).

Morales coined two phrases, '(Un)knowing Runway' and 'Knitting Knots', to exemplify two pedagogical approaches that can flip traditional classrooms into collaborative space that opens for free discussion, building new connections and bonds (Morales, 2021, p. 218). It is pertinent to say that a co-creation approach, here, thus brings the togetherness for a sustainable bond where the stakeholders share their thoughts which adds value and is beneficial in line with their interests. Here, these bonds can be created among the peer groups and between academics, administrators, and students. These bonds reflect the pedagogical perspectives of co-creative schemes in higher education for creating socially responsive agencies for the common good. As for the roles of teachers and learners in co-creation, teachers in co-creation processes can be co-learners with three roles: 'sage on the stage, guide on the side and meddler in the middle' (Kaminskiene et al., 2020, p. 341). On the other hand, learners can contribute as change agents, active partners, producers, and co-creators (Bovill et al., 2016). These roles from both the teachers and the students can be developed with those (Un)knowing Runway' and 'Knitting Knots' as mentioned by Morales (2021).

Bovill and her colleagues (2016), as mentioned by Kaminskiene et al. (2020), also identify learners' roles as consultants for teaching, co-researchers, co-designers of pedagogy and curriculum, and representatives as stakeholders of the teaching-learning process in HEIs. In this connection, we can see the metaphorical three pillars of sustainable development

goals of the UN—planet, prosperity, and people. This is mentioned in the UNESCO (2016) report which emphasises togetherness and bonding among people for sustainable development that supports both well-being and people. On a micro-scale, inside the class or in the academic institutions, this representation can be observed as students' different roles as learners, consultants, co-designers, decision-makers, investigators, or analysts provided that the co-creative spaces such as peer interactions and faculty interactions are given to them for those 'Knitting Knots'. Students are employed to work in partnership with staff to co-create learning resources and changes to the curriculum across selected projects. Therefore, students' participation should not be limited to only engagement or development of employability skills; rather, students must be aware of the actualisation of the learning for their personal and professional growth and carrying the gained knowledge and skills for different value-driven initiatives for the society (Kumari et al., 2019; Cavallone et al., 2021). It can be helpful to rethink the curriculum and pedagogy as well as approaches to enhancing learning experiences of students.

Gap in Staff-Student Co-creation in Higher Education Research

Although in higher education literature, staff-student co-creation (see Lubicz-Nawrocka & Bovill, 2023; Doyle et al., 2021; Pee, 2020) and sustainability for well-being (see Tay, 2021; Copeland et al., 2021; King et al., 2014; Egan et al., 2022) have received increased attention and scholarly appreciation in recent years, the processes of co-creation for sustainable well-being remained under-researched and the approaches to building networks, collaboration and negotiation are not very clear (Kaminskiene et al., 2020). Even though established networks like academics, educational institutes, and organisations are the important stakeholders for co-creating high-quality educational services and value generation in HEIs; very few studies investigated the roles, engagement and contributions of the stakeholders of co-creation in HEIs (Cavallone et al., 2021). Added to that, they also illustrated that the concept of 'value' is to some extent blurred and has not been well-defined in higher educational contexts. Moreover, academics sometimes resist co-creating curricula with students and are reluctant to accommodate students' experiences as an asset. For that, gaps between academics and students are seen as

barriers that pose a threat to having an inclusive co-creation practice (Bovill et al., 2016). Many studies demand institutional ethos and a strong collaboration between stakeholders to make a balanced partnership. However, developing this nexus and partnership can be a major challenge (Bovill et al., 2016). On a different note, the role of institutes cannot be ignored and thus the concept of co-creation needs a concerted effort of staff and students with cognizance of institutions with clear goals to achieve. Therefore, further research has been demanded to bridge any gaps between disciplines, research agendas and the implications of co-creation in global dimensions (Fuchs, 2018). To close this gap in the literature, this study examines educational strategies that support sustainable well-being in Bangladeshi higher education. The goal is to present cases from the field where staff and students co-created values for the well-being of the respective community and implemented disciplinary knowledge and skills to solve problems linked to sustainability.

Methodology

In our exploration, we took a case-study approach which makes it easier to build theories based on empirical data and to provide a comprehensive description of phenomena utilising a variety of data sources (Crowe et al., 2011; Yin, 2009). Three cases were selected from three universities in Bangladesh. To select these cases, we used convenience sampling, considering some inclusion and exclusion criteria. The common criteria were that the projects were designed and implemented to incorporate at least one of the 17 SDGs set by the UN and had the agenda to solve a local real-world problem to impact the well-being of the stakeholders (including respective local community) of the chosen context (see Table 5.1).

Case 1: Developing Midwives Project

Developing Midwives Project is an example of an inter-departmental co-creation scheme for designing and developing an English for Specific Purposes (ESP) course for the diploma programme for midwives at BRAC University in Bangladesh. The project was initiated in 2014 at BRAC University's James P. Grant School of Public Health (JPGSPH). The aim of this project was to design a course curriculum and develop all supporting materials to enhance English language skills of midwifery students so that they become successful, both in their current academic and future

Table 5.1 Evidence of value-driven initiatives in Bangladeshi higher education institutions

Project Names	*Field*	*Main goal*	*Service/product*	*SDG impact*
Developing Midwives Project	Midwifery education	Design and development of an ESP course curricula and supporting materials for diploma in midwifery students to ensure academic and occupational success	ESP course curricula and six modules for the three-year diploma programme	SDG 3 SDG 4
Resettlement Project	Displaced people	Design affordable housing solutions for the resettlement of the displaced population related to the Padma Multipurpose Bridge mega-project	Sustainable housing models	SDG 9 SDG10 SDG11
Simulation of Floating Solar Photovoltaic	Clean energy	Analyse the feasibility of clean energy generation from the Floating Solar Photovoltaic simulation	Sustainable clean energy solution	SDG 7

occupational settings. Under this project, six English language modules were created for the students of the Diploma in Midwifery programme. BRAC Institute of Languages (BIL) of BRAC University was approached by JPGSPH to seek specialised services in curriculum design and materials development, making this project a unique example of inter-departmental trainer-trainee curriculum co-creation.

Initially, a team of English language teaching (ELT) experts from BIL having experience in language curriculum design and learning materials development was selected. In the beginning, when members of the curriculum team started planning, they were to some extent unprepared. Being experts in ELT, they did not know precisely what midwifery is. Neither had they any previous experience in preparing modules for midwifery, nor did they teach such content before. They had previous experience in preparing ESP courses for diverse learners, such as for administrative staff, primary school teachers, and female drivers. However, this time, the target learners were exceptional—the midwives who would work in rural Bangladesh at the community level. Finally, the curriculum and six-course modules for the students of the Diploma in Midwifery were prepared through the co-creation of trainers (faculty members of BIL) and trainees

(midwifery instructors of JPGSPH) at BRAC University. The student population in the programme comes from the mainstream Bangla medium educational background. They traditionally achieve poor or very limited communication skills in English due to inappropriate teaching-learning and assessment practices in their secondary education. They naturally struggle in the academic atmosphere of a university where the medium of instruction is English. Therefore, universities in Bangladesh offer some remedial foundation courses in English along with regular discipline-specific subjects. As part of this remedial initiative, an intervention was planned in the form of an ESP course to support the midwifery students.

After necessary homework with JPGSPH authorities, BIL arranged a four-week long capacity and materials development workshop for the midwifery instructors. These instructors teach diploma midwifery students and have a BSc degree in nursing. They taught not only the midwifery courses but also the English language modules to the same students over six semesters. From the needs analysis survey, the project authority identified that the modules must address various linguistic needs of a midwife, including the use of job-specific vocabulary, sentences, dialogues, videos, and different texts related to the midwifery profession. For example, explaining symptoms, filling out different forms, writing case studies, reports and reflective journals, and managing logs are a few functional aspects of the modules. This created a unique scenario or scope of co-creation. In this training context, the trainers were experts in ELT, but laypersons in midwifery subjects. Conversely, the trainees were qualified Nursing graduates who were experts in nursing and midwifery, but they did not have expertise in ELT. Thus, interdependence between the trainers and trainees necessitated co-creation among the counterparts in this project.

First of all, 12 trainee instructors were invited to a training centre in Dhaka. The centre had residential facilities. The duration of the training was four weeks. In the first two weeks, the BIL trainers provided hands on training on how to teach the four skills of English and various teaching-learning strategies and classroom techniques. It was also considered that the first two weeks of training would also facilitate their personal development and proficiency in English. The remaining two weeks were dedicated to practising teaching and materials development. At this stage, the trainees were divided into six pairs. They were then guided by the BIL trainers in developing the course outlines of the English language modules. The trainers and trainees together, through consultation with each other,

selected content for each module. During microteaching, the trainee instructors created their own materials for practice teaching and received mentoring support and feedback from the BIL trainers. These materials were tested and further improved through peer feedback and trainer feedback. Finally, the materials were accepted for individual modules. Thus, six modules of English for midwifery students were co-created by the midwifery instructors of JPGSPH and faculty members of BIL at BRAC University. Here, the trainees helped identify the specific language, skills and genre necessary for a midwife in her specialist discourse, while the BIL trainers utilised their expertise in curriculum design and materials development to co-create the ESP courses.

Case 2: Resettlement Project

The resettlement project presents evidence of affordable housing solutions in Bangladesh. The aim of this project was to co-create an architectural design for housing for the displaced people associated with the land acquisition for the Padma Multipurpose Bridge, one of the largest mega projects in Bangladesh implemented between 2009 and 2022. Seventeen undergraduate students and academic staff of the architecture department at Southeast University initiated this design studio exercise in one of their design courses in 2022. In the innovative pedagogical scheme, the students actively participated in the design process, created models, and faced a jury board. The exercise focused on exploring alternative solutions with an emphasis on value-driven community-focused housing solutions for displaced people. Here, students were encouraged to address not only the socioeconomic needs of the stakeholders but also the environmental challenges associated with the resettlement schemes.

In the project, students applied a multi-criteria decision analysis (MCDA) methodology for decision-making that made them analyse, compare, and choose the best options considering various perspectives. Students were divided into four teams. Three groups consisted of four members each, while one group included five members. These four groups started a three-phase design exercise under their course instructor. In the first phase, each team surveyed relevant literature and had an onsite visit to understand the ground reality of the resettlement context where they would implement the design exercise. Upon successful completion of the first phase, the four groups presented their findings before the peer groups and the faculty members in the department where they received critical

comments and feedback. In the next phase, the four groups conducted a comprehensive case analysis of local and international resettlement events under the supervision of their instructor which expanded their comprehension of the diverse approaches, methods and procedures implemented in myriad situations. While selecting the cases, the students and instructor had access to an online data log which ensured access and inclusion of the stakeholders in the case selection and analysis process, and thus co-construction of understanding of the studied phenomena. In the final stage, the groups had to choose an effective design solution, generate three-dimensional models and exhibit resolved projects to a jury board of expert architects. While choosing a design solution, students had to negotiate with peers and the instructor to justify the grounds behind their decisions. After critical argumentation with peers and the instructor, each group generated a three-dimensional model of their proposed design which is a co-creation of a design solution for the target community. In the last step, these designs and models were presented before a jury board. In this defence, all the groups had an opportunity to demonstrate their design perspectives and concepts and negotiate with senior architects in the field. The defence also created a unique opportunity to get critical feedback and comments from experts on their design which is a co-creative space for checking flaws and refining their design solutions.

The final outcomes of this design studio exercise were four distinct solutions for the resettlement projects of the Padma Multipurpose Bridge to foster inclusivity, resilience, and well-being of the displaced people of the project area. The solutions exhibited the transformative power of architecture and its ability to solve complex societal challenges. By marrying sustainability with community-centric design, the project set a precedent for future research in community architecture, illustrating the significant role that an interdisciplinary, iterative approach plays in urban planning and design. The insights and methodologies developed through this project offer a valuable contribution to the discourse on sustainable and inclusive community development, marking a path for similar initiatives to follow in various global contexts.

Case 3: Simulation of Floating Solar Photovoltaic

Bangladesh is a densely populated country of approximately 171 million people with a land area of only 147,570 square kilometres. In recent years, it has experienced rapid economic growth resulting in increased

urbanisation, industrialisation and technological development in different sectors. This has increased the demand for energy generation exponentially augmenting the risk of high carbon emissions and environmental degradation. According to the Bangladesh Bureau of Statistics (BBS), the energy demand in Bangladesh will reach a magnitude of 50,000 MW by the year 2041. In this situation, undergraduate students and academic staff of the electrical and electronic engineering (EEE) department at the Green University of Bangladesh undertook a project to co-create a renewable energy solution. The aim of this project was to reduce the cost of power generation significantly and ensure environmental protection. Under this project, the students and staff set up a floating solar photovoltaic (FSPV) in the Hatirjheel Lake in Dhaka. They did this feasibility study using a PVsyst simulation to estimate plant and design costs as well as the scope of environmental protection.

The co-creative efforts of the undergraduate students and faculty members included a range of activities, including identification of the problem, exploring possible solutions, multiple in-person inspections of the sites, design and development of the plant and estimation of the cost. First, a core team of students and faculty members was formed based on their expertise in engineering renewable energy and their interest in environmental sustainability. Initially, the team members got involved in a group discussion to conceptualise the problem through informal dialogues. This helped them identify the problem with relevant grounds. After that, the team was divided into two small groups to share ideas to offer alternative solutions to the problem. After discussing within the small groups and internal negotiation, the finalised ideas were presented to the core team for further feedback and comments from peers of the other group. Thus, the ideation was co-created within the team through a critical review of the ideas. Next, faculty members and students of the team paid multiple in-person visits to a few potential sites in Dhaka to identify a suitable water-body to establish the floating solar photovoltaic (FSPV) plant. In these visits, the core team members collaborated with each other to measure certain parameters of the topography, geology, hydrology, roads and networks of the sites, which are crucial considerations when choosing a location for this kind of plant.

The next phase of this co-creative project was to design and develop the plant. The team of staff and students brainstormed and finalised the design of the FSPV plant and programmed the PVsysts software through two workshops. Before establishing the plant in the selected site, the team

thoroughly examined the validity and functionality of the plant in the university labs. Here, they fine-tuned the components of the FSPV to get the expected outcomes. In this process, the core team invited an external team of experts on renewable energy who provided them with expert opinions. Finally, the 12 MWp FSPV plant was set up successfully in the Hatirjheel Lake in Dhaka.

In summary, this renewable energy solution which was co-created by university faculty members and their students at Green University exemplifies an effective strategy for addressing the energy crisis in Bangladesh. By 2041, the government of Bangladesh aims to attain 40% clean energy production in the overall energy-generating mix by assuring energy sustainability and reducing carbon emissions. The FSPV plant will meet a portion of the increasing energy demand while simultaneously positively impacting the environment by mitigating carbon emissions in Bangladesh.

Analysis of the Cases and their Interpretation

The previous section presents three cases of co-creation in Bangladeshi higher education for the sustainable well-being of the community through close engagements between the staff and students at three universities. Now, in this section, the patterns of these value-driven initiatives in the context of social innovation (Chin et al., 2019; Voorberg et al., 2013) will be discussed. In a social innovation context, addressing complex socioeconomic or environmental issues necessitates combined efforts and knowledge sharing of the stakeholders. Also, investment in human and non-human resources is inevitable in this situation which triggers co-creation among different actors of innovation (Kumari et al., 2019).

In these cases, academic staff and students co-created values for the well-being of the community and implemented their experience, academic expertise and skills to solve real-world problems. Applying the Young Foundation principles (Nagore & Bynon, 2018), the cases can be analysed through the lens of co-creative principles.

Preparation

Co-creation of value-driven initiatives involves adequate preparation among stakeholders. It is an important first step which requires an understanding of the emerging challenges and the nature of the problems that impact community life. Here team and capacity building of the partners of

co-creative schemes is a key ethos (Cook-Sather & Matthews, 2021). All the cases presented in the study demonstrate some form of co-construction of values for society. For example, the Developing Midwives Project documented the co-creation of a curriculum by trainers and trainees for midwifery education in a Bangladeshi HEI. One of the core objectives of this curriculum co-creation was to ensure teacher capacity development. The entire process was implemented by building effective teams of trainers and trainees from two departments of the same university. Not only that, in this training, an international funding agency (UKAID) engaged with the local actors to ensure quality education (SDG 4) for midwifery students to have a positive impact on the health and well-being of the local community (SDG 3). Similarly, in the remaining two cases, applications of co-creation initiatives between academic staff and students are also evident. For instance, undergraduate students of architecture in the resettlement project worked together with the expert teachers of their department to offer affordable housing solutions for the displaced people of the Padma Multipurpose Bridge area which impacted SDGs 9, 10 and 11 (Rashid et al., 2023). In the same way, the EEE students and teachers in the FSPV simulation project analysed the feasibility of clean energy generation, which impacted SDG 7. Thus, the value-driven co-creation schemes selected from Bangladeshi HEIs, in this study, are expected to contribute to the well-being of the local community by introducing critical thinking, teamwork and co-constructing new learning experiences for university curriculum (Kaminskiene et al., 2020; Nelson, 2020). The success of any co-creation event depends on the preparation of the stakeholders, particularly to identify any challenges and decide approaches to addressing them in a collaborative manner.

Co-definition

The next prominent step that characterises value-driven co-creation stories is co-defining challenges by the stakeholders. By analysing the intervention scenarios, it is apparent that in all the cases, the stakeholders were put into different teams, and they accumulated all their resources and capacities in defining the challenges associated with the given context. When they initiated co-defining the processes related to the solutions, the engagements of the members in teams and groups played a critical role in the co-creation of values for the local community. This stakeholder engagement facilitated expected outputs through visiting and revisiting diverse

perspectives of individuals, small groups and large groups as co-creators of problem statements. The common definitions of the challenges helped the stakeholders to become informed and cooperate with each other to achieve a common goal. For example, in the resettlement project, the undergraduate architecture students initially did an extensive survey of literature and went on a few field visits with their group members to define challenges in the context of resettlement. They also presented their findings to other peer groups and to their supervisor to define the problems together. In the same vein, the EEE students and teachers in the FSPV simulation project co-defined the challenges of setting up PVsysts in a suitable location. The core team of the project was divided into small groups for ideation and site visits to identify potential plant locations. The group members measured various parameters of the environmental factors to select a suitable location for their plant. Keeping in mind the need for clean energy generation at the backdrop, the rise of energy consumption in Bangladesh and the negative impacts of the COVID-19 pandemic on the world economy followed by the Russia-Ukraine war (Zhou et al., 2023) led them to co-define their intervention process in the current energy market of Bangladesh. Finally, in developing the midwives project, the co-construction of the ESP curriculum for midwifery students was not an exception. This value-driven initiative was implemented in the context of the absence of locally produced resources for English language skills development of Bangladeshi midwifery students whose first language is Bangla and who demonstrate a lack of adequate proficiency in English to continue midwifery education in English medium (Islam & Mohiuddin, 2015). In addition, if we observe the training context, the trainers (BIL faculty members) did not have the content knowledge of midwifery while the trainees (the midwifery instructors of English) had a deficiency in pedagogical knowledge of English language teaching. Therefore, together, these two stakeholders co-defined the challenges of curriculum design and supported materials development which promoted a society-driven approach through academic intervention (Andersson & Clausen, 2022). Without co-defining the problems and engagement among the partners of these initiatives, it was not easy for them to solve the problems and have an impact on the well-being of the local community.

Co-creation

Co-creation refers to the collective creation of solutions through connecting existing challenges with similar challenges in other contexts. In this stage of co-creative practices, the stakeholders need to allocate both human and non-human resources for pilot work before implementing the final solutions. In any co-creation scheme in the HEIs, ideation holds an important place in the process (Morales, 2021). It involves critical thinking, communication, cooperation, and creativity of the learning partners while collectively creating a solution and paves the way for students to shape skills for their future work situations (Cavallone et al., 2021). For instance, in the Developing Midwives Project, the co-creation of a solution took place in the training context. The BIL faculty members explored the Bangladeshi healthcare sector i.e., the medical colleges, nursing institutes and health institutes to check their English language courses. However, they did not find any suitable ESP course for the would-be health professionals. At this stage, they collected commercially published foreign coursebooks from the market. These coursebooks were culturally alien and, in many cases, inappropriate for Bangladeshi learners. After a thorough curriculum and materials evaluation, they created a new ESP curriculum and learning resources for Bangladeshi learners of midwifery. The pilot work of curriculum design and materials development occurred in the second phase of the training. The midwifery instructors (trainees) provided ideas regarding the content of the ESP curriculum and course materials about which the BIL faculty had little knowledge. The trainees created the first set of materials for their microteaching with the mentorship of the BIL faculty members. The materials were piloted during peer teaching and were refined through peer feedback and trainer feedback through class observations. Thus, the ESP for midwives was co-created by the stakeholders by connecting the existing challenges with similar challenges in another context. The partners of this co-creative project utilised available resources at their disposal for piloting the materials. The final outcomes, that is, the ESP modules for midwives were co-created by the trainees with the mentoring support of the trainers. In the same manner, the architecture students in the resettlement project had extensive literature searches, case analyses and site visits as strategies for connecting the resettlement challenges of the Padma Multipurpose Bridge project with similar resettlement challenges of other contexts. This exploration of similar resettlement issues helped the groups of learners propose

culturally and environmentally sustainable housing solutions for the displaced people. The student groups also faced a jury board and justified their design exercises as pilot work before finalising the housing solutions. This co-creative initiative was a concerted effort of the staff and students to provide housing solutions to a displaced community. Not only that, scrutinising the third case, we observed profiles connecting the local challenges with similar challenges in another context. The students conducted a literature search for ideation of the current challenges of energy generation in other third world countries. They also did pilot work of designing and programming for the PVsysts utilising available resources in their labs. Thus, the team members were able to offer an economically and environmentally convenient solution for clean energy generation at a low cost. Hence, in all these cases, we can identify a common pattern of co-creation of solutions by the stakeholders collectively through connecting with similar challenges and utilising available resources for pilot work.

Implementation

Value-driven co-creative initiatives in any social innovation context reach the expected culmination through the implementation of solutions. Beginning with preparation, followed by co-definition of challenges and co-creation of solutions, the co-creation schemes finally reach the stage of implementation of those solutions. Implementation is a sensitive and critical aspect of value co-creation. Without the application of solutions in target settings, no initiative can add any value to the community. Through analysing all the cases in this study, we perceive that the co-creative initiatives end up in implementing solutions. However, this requires collective decision-making by various stakeholders. Unless the validity of the solutions is tested and the solutions are applied in real scenarios, the co-designers of the solutions cannot claim their effectiveness. All three cases under this study demonstrated the implementation of co-created solutions. For instance, the ESP curriculum for the midwifery students in the Developing Midwives Project involved the implementation of six English language modules in the six semesters of the three-year diploma programme in midwifery at BRAC University. Similar step-by-step methods were also applied in the other cases. In the floating solar photovoltaic (FSPV) simulation project, implementation of the feasibility analysis of clean energy generation involved a few steps, such as location selection,

design studies, simulation, results analysis, economic assessment, and environmental assessment. All these steps were applied to demonstrate a sustainable clean energy generation procedure. The case of affordable housing solutions also maintained similar steps to accomplish the project: extensive literature search, site visit, engaging with local and international case studies, distilling best practices and contextual nuances for informed design, creating 3D models, and presenting ideas to expert panels to get feedback. All these steps led to the culmination of the co-creation scheme of producing sustainable housing solutions. In general, the implementation of the schemes involved higher-order skills, such as analysis, evaluation, and creation irrespective of academic disciplines (Cavallone et al., 2021; Morales, 2021).

Lessons Learned

From the above cases, we learned the following four key lessons.

Co-creation as an Inclusive Tactic

Staff and student co-creation can be an inclusive tactic for effective teaching and learning in higher education. It facilitates a sense of belonging among the stakeholders. The cases of curriculum design, affordable housing solutions, and clean energy generation are such projects where the partners of co-creation demonstrated a sense of belonging in the teaching and learning ecosystem. Also, the co-creative designs promoted and facilitated ownership and mutual respect among the stakeholders. Consequently, the outcomes of these schemes received serious attention before, during and after the co-construction of the products or services. For instance, the ESP curriculum was created by the English language and nursing experts of BRAC University as mutually dependent partners of co-creation who otherwise were laymen in the discipline of their counterparts. Together they produced the curriculum and materials, and this mutual dependence induced inclusivity and ownership of the course in both parties. Likewise, the design features of the housing solutions emphasised not only affordability but also social inclusion, community life and sustained well-being. Finally, FSPV simulation which is a clean and renewable energy generation initiative, estimated not only the economic and environmental benefits of energy generation, but also demonstrated the enthusiasm of the partners

for an equitable and better world for future generation. Therefore, these value-driven co-creation initiatives in Bangladesh exemplify an inclusive tactic for the diverse stakeholders of higher education.

Build Awareness among Learners as Active Well-being Agents

Co-creation in higher education builds an awareness among the learners as well-being agents. Staff-student co-creation practices allow HEIs to actively engage students in the process of designing and developing their own courses which offers a mutually beneficial learning experience (Franco & McCowan, 2020). When students as partners (Cook-Sather & Matthews, 2021) prepare themselves to undertake problem-solving activities and co-define challenges in the context, they naturally grow a sense of responsibility towards the society. When they further get involved in the problem-solving roles and co-create solutions for the community, they represent the well-being agency. For instance, the creation of an ESP curriculum and materials by the trainees in the Developing Midwives Project demonstrated active participation of trainees. These active agents of the training scenario impacted the creation of the English modules and impacted the well-being of the community people in the long run. Similar patterns of active student-agency for well-being of the community were also noticed in the resettlement project and the FSPV simulation for generating solar energy. Students were selected for these projects based on their interest and willingness to participate and co-generate solutions through team-work, dialogue and active engagement with the team members. They demonstrated leadership and commitment to leverage the challenges which were threatening the well-being of the local community. Without active agency and membership of the local community, these students would feel detached from the socio-economic and environmental challenges they solved.

Co-creation of Curriculum Endorses SDGs

The cases highlighted in this study are snapshots from the interdisciplinary fields offering solutions to real life problems. When each of the projects were designed, they were initiated by the academic staff and students as the two most important partners of collaborative projects identifying specific expected outcomes (Bovill et al., 2016). For example, the curriculum design of an ESP course for midwifery students was initiated to produce

skilled midwives considering their academic and professional needs (SDG 4) so that they could serve the local community and ensure 'healthy lives and promote well-being' (SDG 3). The other two projects also produced specific outcomes. The case of the affordable housing solutions co-created design solutions to not only to relocate the displaced population of the project area, but also to include them in the mainstream of the society for ensuring equality and well-being (SDGs 9, 10, 11). Similarly, the case of FSPV Simulation brought forth a sustainable energy solution which is not only economically viable and cost-effective, but also will reduce carbon emission significantly (SDG 7). Hence, it could be assumed from the analysis of the three cases that the outcomes of co-creation schemes in HEIs can ensure sustainable well-being of the diverse stakeholders (Agbedahin, 2019).

Ensure Cognitive and Metacognitive Development of Learners

In staff-student co-creation in HEIs, students are more exposed to higher order skills, such as evaluation and analysis of problems, designing solutions to problems and negotiating with other members of the group to make decisions (Cavallone et al., 2021; Morales, 2021). All these practices improve the metacognitive skills of the learners. When students are put into teams or learning groups, they get an opportunity to look into each other's perspectives on the same issue. Not only that, it also creates a unique opportunity where their ideas are challenged by their peers. Thus, challenging each other's thoughts broadens their cognition of the given phenomena during the co-creation of solutions. As a result, knowledge is co-constructed in a social setting facilitating real-world learning (Morley & Jamil, 2021).

Conclusion

The cases analysed in this chapter emphasise the value-driven approach to teaching and learning in Bangladeshi higher education. Based on the applications of co-creative processes and by stressing the significance of co-creative spaces, the cases provide evidence of how to address societal demands and public welfare. This kind of collective work promotes teamwork, strengthens students' ability to negotiate disparate perspectives in an intellectual manner. Here, the interaction between staff and students can be viewed as an effective medium for inclusive learning. Staff-student

co-creation in higher education also raises students' awareness as active agents of their own well-being and of others. The educational strategies adopted in the cases support multiple Sustainable Development Goals (SDGs) and their cumulative positive impacts on the people, environment and society in general.

The lessons learned from the case studies have implications for the educators, administrators, and policymakers in the higher education sector. As staff-student co-creation exposes the students to achieve higher order skills, a significant component of the curriculum could facilitate co-creative activities and relevant assessments. In addition, through incorporating co-creative teaching and learning strategies, higher education institutions can include multiple stakeholders including teachers, students, local community, businesses, and government agencies as partners of educational activities. Not only that, through well-planned co-creation schemes, HEIs can influence policy formation and suggest solutions for challenges in the wider context of society to facilitate sustainability and well-being for current and future generations.

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CHAPTER 6

Doing Critical Psychology! The Challenges and Unexpected Rewards of Co-creating Module Structure, Content, and Resources

Alison Torn and Candice Whitaker

Introduction

Before outlining the chapter, as reflexive qualitative researchers, we wish to state our position both as researchers and authors, rejecting the objective distancing of the authorial voice by the use of the third person. Instead, we acknowledge and embrace our subjective positioning within this process by the use of the first person and, in places, we refer to ourselves by our initials (AT or CW) to make clear where there was specific responsibility for certain tasks.

This chapter outlines how we attempted to co-create a new final-year undergraduate optional module using a participatory action-based framework to engage key stakeholders (namely students, and particularly students who may decide to undertake the module the following academic year) in the entire module development. The chapter details the process from our

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initial ideas, through to the final development of the module as it was advertised to students within their final-year optional module catalogue. In doing so, we highlight the challenges and rewards for both of us as academics and our student co-researchers. In addition, we reflect on the questions we are left with following the culmination of this project and how these have informed our plans for future co-creation work with our students. Drawing on a participatory action research iterative process, where reflexivity is central to the evolving cycle of research, we discuss how the co-creation process gave students opportunities to shape a Psychology module, gain insights into applied research methods and the process of constructing module content and teaching methods, thereby contributing to their university experience. We also discuss unintentional additional outcomes that went on to feed into the wider university strategy on student engagement.

Who We Are: The Context

We are two chartered psychologists (teaching/research) within the School of Psychology at Leeds Trinity University, whose research interests centre on the use of critical approaches to psychological investigation and application. The School of Psychology has recently experienced significant growth, with student numbers and staff numbers more than doubling over a period of seven years. Our cohorts represent the largest in the university and typically reflect the demographic profile of a Leeds Trinity University student, whereby 45% are first generation students, 50% come from areas of high deprivation, 25% identify as being part of the global majority, 25% are classified as mature students, and 20% have an identified disability, most often related to learning needs. Teaching large and diverse cohorts of students brings challenges around engagement and sense of belonging; considered crucial to enhancing student motivation and enjoyment (Pedler et al., 2022).

In relation to our curriculum, historically there has been limited student interest and involvement in contributing to the planning and design of programmes, with one or two student representatives feeding back in a one-directional process. However, we were keen to develop more student-led, personalised learning experiences to promote active engagement in the learning process (Kaminskiene & Khetsuriani, 2019), and sensitive to the possibilities of embedding co-creation within teaching and learning experiences to enhance student belonging (Bovill, 2020). An institutional funding call for co-creation projects was an ideal opportunity to pilot designing a brand-new optional module for the following academic year in partnership

with our students. Guided by the recommendations for successful co-creation projects stipulated by Cabral et al. (2023) to offer collaborative opportunities with tangible, targeted impacts, we aimed to adopt a bottom-up approach to module development, with the creation of both content and adoption of particular learning methods being driven by our students.

Why We Did What We Did: The Rationale

Against a national backdrop of augmented student engagement related barriers following the societal disruptions resulting from COVID-19 (see Jones & Bell, 2024), implementing methods to enhance student engagement underpinned our initial proposal for a small internal grant to support institutional co-creation projects. We considered the initial project to be relatively simple; our aim was to engage student partners in the co-construction of a new Level 6 Critical Psychology module for delivery in the following academic year. Critical Psychology challenges the approaches and research which largely underpin the discipline (Parker, 2007), so understanding the issues students would be interested in studying was considered paramount for student engagement and success of the module. The design would be centred around the three areas within the SPaM teaching and learning model (Thomson, 2022), subject content, modality, and pedagogical design, resulting in a co-produced curriculum which (we hoped) would align with future participant learning preferences. Therefore, we looked to identify *what* students were keen to develop their knowledge about in relation to critical psychology, and *how* this should be accomplished for maximum student uptake and engagement.

The initial two phased project design included working with paid student co-researchers to develop an anonymous qualitative survey and collect data to identify what students want from a new Critical Psychology module. Although we acknowledged the benefits of experience that students would gain from collaborating on this project and the potential it had to enhance their graduate attributes, remuneration for their time was considered essential. Furthermore, in line with the recommendations by Pratt (2019) to ensure that 'benefits exceed burdens' (p. 812) for all those engaging in the co-creation of knowledge, it is our University's approach to employ our co-researchers as Research Associates to adequately reflect their collaborative involvement in the project, as well as affording demonstrable research related work experience, widely valued by graduate employers and post-graduate education admissions teams recruiters (Helyer & Lee, 2014). From this, our plan was to develop and pilot

learning resources and activities around the knowledge areas considered desirable by students to explore from a critical psychological perspective, gathering feedback through student focus groups. Subsequently, we set out to recruit two final-year undergraduate students to the project, who, having undertaken research methods training over the previous two years, would be competent in leading on phase one of the project—designing and collecting data using an anonymous online qualitative survey.

Reflecting on the interview process, it was evident that applicants were extremely interested in the concept of co-creation and working with us towards the common goal of creating a new module and a (potentially) novel approach to its delivery. However, while the two Research Associates successful at interview had self-identified the personal benefits of joining the team (e.g., research skill development, working as part of a team), we began to wonder about the extent to which our initial plan truly captured the essence of, and potential teacher/learner partnership opportunities that co-creation is understood to afford (Bovill, 2020). A key question arose as part of this process, requiring us to examine the individual, shared and wider social context that had inspired the development of this research project: to what extent did our initial plan enable collaboration and who would this benefit? Key to this was the acknowledgement that the project was underpinned by 'our' plan, and thus, staff led. Therefore, we questioned if we could be certain that *our* plan for the project was the *best* plan in the interest of the students and their learning, or if there might be some way that we could further embrace the possibilities of co-creation. In other words, we questioned who would benefit most from this project in its current form and if we could somehow augment its collaborative approach.

Discussing the meanings, importance, and potential issues with adapting the research project at this point between us, we were congruent in our position that amplifying the voices of students about what they are interested in studying and how they feel they study best underpinned our desire to undertake this project. In addition, we both identified the importance of bringing knowledge gained 'to action' in relation to developing a module informed by students' interests and constructions of effective pedagogic design. As we disentangled the justification developed for this aspect of the project design, we became aware that this was perhaps the most important to us. However, this realisation was also somewhat problematic and incompatible with wider social discourses of teaching and learning which position our role as facilitating student learning through

informed pedagogical design. Indeed, we did not want to tell students how we 'know' they learn best through our own teaching experience and engagement with the pedagogical literature, we wanted to ask students what they thought and then 'try it out'! We wondered how that would be perceived by students and to what extent (if any) wider social understanding of the role of the lecturer - which arguably relies heavily on the idea that students pay for a service to be delivered by us (Page, 2020) - would influence this. Would students buy in to the process, or would they perhaps question our experience and capacity as teaching staff? As we reflected on our personal and professional reasons for developing this project in the first place, we recounted numerous instances of anecdotal evidence of student disengagement across UK HE institutions. In particular, we considered the pictures of virtually empty lecture halls posted to social media that we had increasingly witnessed. It appeared to us that a widespread student malaise was somewhat evident, yet while students appeared to be 'voting with their feet', their voices remained marginal. This, we identified was a key motivating factor for developing the project, hoping to advance our understanding of what students felt they needed to justify attendance and enthusiastic engagement with their learning, and working collaboratively with students to see what this could look like in practice.

While collaboration was central to our original plan to work with the two student Research Associates, these final-year students would not have the opportunity to observe, participate in, or evaluate the consequential module resulting from the co-creation project. Therefore, while there was no doubt that their partnership in this project and the retrospective knowledge and experiences of their learning journeys was valuable, we concluded that the project required additional voices. Namely, it required the inclusion of students who could potentially benefit from the knowledge construction and application of the project.

A Participatory Action-Based Approach

Central to participatory action research (PAR) is the aim to produce and use knowledge constructed through collaboration with those directly affected by an issue (Pain et al., 2011). In the case of this project, we perceived the 'issue' as a current deficit in student constructed discourses surrounding what it is that inspires and facilitates their engagement in learning, to guide the development of a new optional final-year Critical Psychology module. More specifically and informed by a growing body of

evidence surrounding the challenges and opportunities of the rapid adaptation of learning and teaching during the numerous COVID-19-related disruptions to HE (see Stephenson & Torn, 2023) and life more generally, the 'issue' was understood as a deficit in student constructed discourse in relation to favourable teaching and learning experiences in contemporary (post-COVID) HE. Thus, in order to develop a module that was seen as attractive to prospective students, as well as providing a favourable learning experience for students who choose to participate in this class, knowledge surrounding the learning preferences in relation to content and delivery style was required.

We acknowledged that our students may not share our views that this was a shared 'issue'. However, we recognise the importance of understanding the needs of our students to facilitate their learning, and are also keen to find ways to raise the profile of student voices in relation to their learning through collaborative projects. In addition, we are aware that the importance of these factors may not be understood by our students, particularly if their understanding of education is underpinned by a teacher-led approach, where the role of the lecturer is to transmit knowledge. Therefore, we wanted to explain to students the importance of this project to us, as well as our understanding of the potential benefits for them. Bovill (2020) looked at frameworks for co-creation used in learning and teaching and noted how the focus of projects tends to be on small, privileged or already engaged groups. She advocates a whole-class approach, while also noting that offering this does not necessarily result in whole class participation. Taken together with the previously discussed desire to collaborate with students who would have the opportunity to take part in the co-created module, the Level 5 cohort of Psychology students were identified as ideal potential partners for the project. Bovill (2020) stresses the importance of creating a genuinely open opportunity to participate, with clear methods, and a project designed to appeal to a diversity of students, with the potential for different ways of being involved. These principles underpinned the design of the project and became a key reference point throughout the process.

Developing proficiency in research methods is essential to the psychology curricular and professional accreditation. However, student interest in empirical work is often low (Holmes & Beins, 2009). A 'learning by doing research' approach has been suggested to improve psychology student's perceptions of the subject and enhance their learning experience (Ball & Pelco, 2006), and supported by systematic review research on student

engagement whereby 'Active participation and involvement in learning and university life' was identified as the most frequent definition aligned with student engagement (Bond et al., 2020, p. 12). Acknowledging the complex, dynamic nature of the individual, relational and structural factors of engagement, Bond et al. also emphasise the symbiotic feedback loop whereby:

> The more students are engaged and empowered within their learning community, the more likely they are to channel that energy back into their learning, leading to a range of short and long term outcomes, that can likewise further fuel engagement. (Bond et al., 2020, p. 3)

Thus, responding to Bovill's call for meaningful whole cohort co-creation, we purposefully situated phase one of the project (survey design, data collection and analysis) within a Level 5 Psychology research methods module so that co-creation was embedded as an active part of students' learning. By involving students in the design, development, participation and analysis of an online survey, we hoped to gather data around preferred learning styles and critical psychology content. We also hoped to provide a personally consequential active-learning experience, identified as a useful method to enhance knowledge and confidence in research methods (Allen & Baughman, 2016).

To begin, students were introduced to PAR as a collaborative approach to research, and its potential 'to result in some action, change or improvement on the issue being researched' (Pain et al., 2011, p. 2). On the micro level, action was noted as the collaborative acquisition of knowledge surrounding the teaching content and learning preferences of students and co-creation of a module as a result. Attending to the requirement for PAR to be participant-led (Pain et al., 2011), the potential for students to both co-create and undertake this module the following year was highlighted. However, given that it was unlikely that a critical psychology module (regardless of content or delivery mode) would appeal to all students within the cohort, the project was designed so that all students undertaking the research methods module would benefit; creating their own research question to be explored and using the resulting real-world (and personally relevant) dataset to complete their end of module assessment. Furthermore, while the originally developed (staff-led) project aims were disclosed, in introducing the project to students, the broader aim of exploring student learning preferences and experiences was adopted.

Therefore, while students were tasked with creating a survey which attended to the more specific aims of the original project, the opportunity to attend to a diversity of student interests surrounding the topic of student experience was facilitated. Therefore, in line with Bovill's (2020) call for creating a genuinely open opportunity to engage in the project, the option to design a survey collecting additional data surrounding issues they felt were both of interest to them for their individual projects, as well as important for us (as their lecturers) to know about beyond the original scope of the project was facilitated. Furthermore, students had the opportunity to engage (or not) in the project in a number of ways, from full participation in the co-creation of the survey, data collection and providing analytic insights, to purely accessing and utilising the data set for their individual assessments. As will be discussed shortly, the benefits of engaging students in co-creating a module went beyond the anticipated output.

How We Did It: The Method

Our project was underpinned by two research questions:

(1) What knowledge areas do students perceive to be central to critical psychology?
(2) How do students perceive effective pedagogical design for critical thinking modules?

Phase 1 of the research involved working with the second-year psychology students within their research-methods module on the design and data collection of an online survey which enabled exploration of the research questions above. Phase 2 of the project was to conduct student focus groups to develop and discuss the content and learning design of the critical psychology module based upon themes constructed from the Phase 1 survey data.

Phase 1: The Survey

Following university ethical approval, 164 second year psychology students were invited to collaborate on a qualitative online anonymous survey design through workshop activities, where they discussed survey design ideas and potential ethical and methodological issues, prompted by the question 'what do we need to know to understand what students want

from this new module?' Forty-four students subsequently submitted their ideas via an online survey link. CW thematised the student contributions and presented these within the next teaching session. All students then had the opportunity to collaborate in discussion of the themes, refining these into operational open-ended survey questions, for which an anonymous online discussion board was employed to ensure students could contribute anonymously if they wished. As a result of this process, ten open-ended survey questions were agreed upon within the teaching session, which were then scrutinised by CW and AT to ensure questions were not likely to cause any upset or otherwise conflict with the ethical and moral principles of the research. The survey was launched for a 10-day period, during which 85 student participants from within the cohort submitted responses, forming a qualitative dataset that (a) the students analysed for their qualitative research report assessment and (b) the authors and two paid Level 6 student researchers analysed for the purposes of constructing the module content and learning design. However, while initial analyses were undertaken in this way, in line with the reflexive thematic analysis (Braun & Clarke, 2019) method adopted, it is important to note that discussion with student partners from the research methods cohort surrounding their own individual analyses of the dataset also informed the final analysis discussed below.

Phase 1: The Findings

In relation to the two research questions (knowledge areas students perceive to be central to critical psychology, and their perception of effective pedagogical design for critical thinking modules), students had a clear vision of topic areas that were of both of relevance and interest to them in relation to critical psychology, as well as how they wanted to engage with their learning on the module. Key paradigms included Marxism, feminism, and post-structuralism, intersecting around social, political, class, economic, race, cultural and queer theories. It seemed apparent that the students' interests here were guided by their own positioning in relation to the reasons for becoming a student of psychology (e.g., to help people), as well as relating interests to their own personal backgrounds. Student rationale for their desire to explore these topics from a critical perspective were understood to be largely underpinned by interests in the emancipatory possibilities of psychology. Furthermore, students appeared to have a keen understanding of the problematic history of the discipline in relation

to its overreliance on Western, educated, industrialised, rich, and democratic (WEIRD) samples (Henrich et al., 2010), and the broad claims that have been made as a result of these unrepresentative studies. As two critical scholars within the department, it is perhaps of little surprise that we were elated with the clear importance that students placed upon these issues. However, as will be discussed shortly, this did require us to reflect on the possibility that students may have highlighted these areas and the issues which underpin them precisely because we were the staff involved in this collaboration; each of us having previously delivered modules to these students in which critical approaches to Psychology provide the foundations.

In relation to how they learnt (effective pedagogical design), the reflexive thematic analysis conducted by the research team resulted in three themes which are encapsulated under the overarching theme of 'I'm not a name nor a number, I'm a whole person' (see Fig. 6.1). Whilst not a quote from the data, the naming of this overarching theme was developed from discussions around the analysis of the data, both between us and the Research Associates, as well as in the workshop sessions with the Level 5 cohort during their analyses of the data for their assessment. The title draws from the unique selling point of the university (I'm a name, not a number), to reflect that behind the name, is an individual who has particular needs, stressors, and circumstances, all of which impact on their ability to engage with their learning. For the purposes of this chapter, we focus

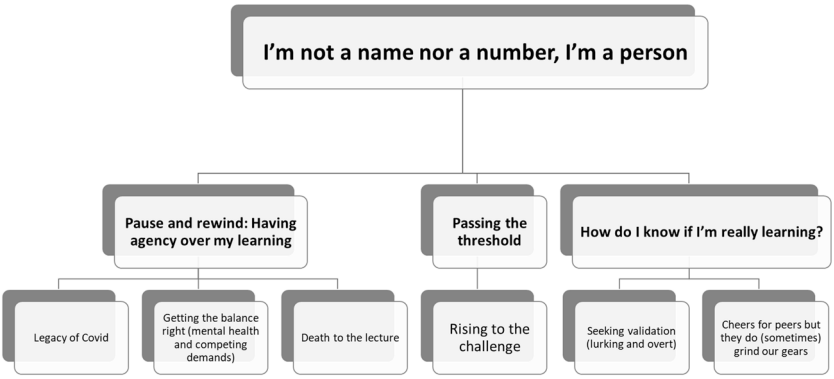

Fig. 6.1 Thematic map of Phase 1 survey data

on two of these themes: *Pause and rewind (having agency over my learning)* and *How do I know if I'm really learning?*

Pause and Rewind reflects students' desire to practically and psychologically pause and rewind, enabling them to have agency over their learning. Practically, participants valued being able to pause and rewind their learning, through (for example) having access to content recordings. However, equally important to participants was the need to psychologically pause and rewind, whereby engagement with learning was constantly balanced with personal commitments and protecting their mental health. In relation to both aspects of *pause and rewind*, students stressed the importance of being able to access and self-pace their learning within online learning spaces, enabling them to flexibly engage and adjust their learning around their lives and other commitments. Hews et al. (2022) suggest that students who are intrinsically motivated and have previous experience in balancing personal and learning commitments feel increased autonomy and control within the online learning space, as it offers them the flexibility to engage and adjust their learning around their lives.

Some students suggested removal of the lecture in relation to the traditional 'sage on the stage' (King, 1993), which we refer to as *death to the lecture,* with the emphasis on the active word 'to'. Death of the lecture would have implied a gradual slipping away, whereas students were clear that lectures in their traditional format were (mostly) unwanted in the present day, and as such needed rethinking. However, what occurred in the lecture space (i.e., flipped learning, interactive and dialogical) was valued, even when framed as a 'lecture'. Indeed, sessions where the tutor could be perceived as actively engaged and promoting discussion, debate and interaction were positively valued. Ike (2022) argues that students who disengage from traditional forms of learning such as the lecture, positively gain from interactive action-oriented learning (IAOL) and teaching, which facilitates deeper engagement in subject content and improves graded academic performance and sense of belonging (Spencer et al., 2020 as cited in Suriagiri et al., 2022). Added to interactive in-person teaching is the perceived enjoyment students gain from attending in-person. Studies suggest that sessions where tutors are perceived by students as being enthusiastic and enjoying their teaching, positively impact on students' own interest and enjoyment, increasing engagement, satisfaction, and retention (Frenzel et al., 2018; Hews et al., 2022).

In relation to *How do I know if I'm really learning?* there were counter-narratives within individual student responses on the value of peer

learning. Interacting and engaging with peers led to a range of outcomes including building a sense of belonging, information exchange, but also, particularly in relation to group assessment, unbalanced workloads, and anxiety. Students engaged in peer learning through covert means, for example, listening to others in class discussions and 'lurking' on online forums to gain knowledge and understanding, citing anxiety, worries about judgement and 'imposter syndrome' as inhibitors to active participation. Recent studies have similar findings which suggest that students can learn through peers, even when they are not actively engaging themselves (Bozkurt et al., 2020; Smith et al., 2020). Furthermore, Archbell and Coplan (2022) suggest that anonymous online learning platforms increased student engagement and performance, especially if students were socially anxious. Whilst working in smaller groups helped to reduce the anxiety felt about talking in front of large groups, this did not transfer to assessed group work, which students felt increased stress and anxiety, had a potentially negative impact on peer relationships, led to decreased agency and a slowing of progress, resulting in a potentially detrimental impact on overall academic outcomes.

Bayne et al. (2022, p. 6) describe the 'divide and conquer' approach often taken by students within group assessments, whereby each student addresses a different component of the assessment brief, as having a negative impact on relationships and learning outcomes. Bayne et al., suggest that in-class group assessment may restrict the fragmentation of cohesive engagement to support favourable outcomes. Both these ideas were clearly reflected within our students' accounts. However, while our students indicated that facilitated (in-class) group work was generally desired and acknowledged as beneficial for individual knowledge development, any form of group assessment was considered unattractive at best, and unjust for many.

Phase 2: The Focus Groups

Following analysis of the survey data, the second phase of this project was to develop and pilot learning resources and activities around inequalities and social justice, gathering feedback through student focus groups. The original plan was to train the Level 6 Student Associates to co-facilitate a series of iterative focus groups with the authors. This was envisaged to be a skills development opportunity for the student researchers, as well as providing pivotal student insights into the planning and piloting of

module resources and incorporating their reflections from the focus group discussions. However, whilst the authors had attempted to anticipate and accommodate the 'pinch points' in terms of Level 6 academic workloads and the deliverables of the project, conducting the focus groups during teaching weeks (i.e., when most students were on campus and available), meant not only timetable clashes with the student researchers recruited to the project, but also competing demands with work due in, university responsibilities the student researchers had outside of their programmes (e.g., student ambassador work, Student Union work) as well as applications for postgraduate posts. Pragmatic decisions had to be made around this phase of the research. To recruit students into the focus group before the end of the academic year, the research team agreed that the authors should conduct one focus group, in which we would present different online structures and activities for the module, gain feedback and discuss resource sets with the participants.

Nine students (five Level 4 and four Level 5) participated in the focus group. Whilst the topic areas for the module (e.g., classism, misogyny, sexualities, intersectionality) were aligned with understanding and preferences for critical psychology, students discussed at length what 'freedom of speech' meant within university settings, and the ground rules for challenging individual opinions. Students agreed that lived experience, voicing opinions as an outsider to lived experiences, and having skilled facilitation of sensitive topics were important considerations when planning and conducting a critical psychology module. Central to this was the co-construction of ground rules for this module, which students suggested should be the main activity of the first session, and one that needed to be completed with each cohort.

In relation to the structure and resources of the module, students' preferences were for a range of academic and non-academic resources. For example, having a news article or blog as a provocation to read, reflect and state thoughts on a cohort space before the workshop (e.g., through Padlet), with a workshop oriented around discussion of the piece and the academic literature around the topic, rather than a lecture. However, their preference for flipped learning was conditional on purposeful scaffolding of learning, and boundaries around choice. For example, students liked the idea of 'choice' (e.g., negotiating the topic areas or assessment), but too much choice was overwhelming. So, whilst the authors may have wanted the module to be structured around more innovative and creative pedagogies, the students were not comfortable challenging the

pedagogical norms of their learning experiences. Related to the survey the theme '*How do I know if I'm really learning?*', implicit within their discourse was the need to know if they were 'on the right lines' or if things were 'relevant' throughout, with a need to understand the 'rules' of pedagogical engagement and learning.

Finally, the authors presented an assessment structure, whereby engagement would be an assessed component with four out of eight student-led discussion sessions (pass/fail), with other summative assessments being a reflexivity report / poster conference. In relation to assessing engagement, active participation in class learning could be through a variety of ways, for example contribution to a group presentation, asking questions, facilitating class discussion, or providing peer feedback. Focus group students were unanimous in their support of assessing engagement, acknowledging that a module that centres around critical discussion of the core content requires a commitment to participation and collaboration in the knowledge production process. Given the aforementioned findings that small group work was understood as a facilitator to learning, while assessed group work was perceived unfavourably due to unbalanced workloads, the inclusion of a pass/fail engagement component may offer a favourable compromise, which attends to this paradox. Indeed, assessing engagement would place a collective requirement and responsibility for generating discussions on everyone in the room (students and tutors), rather than over-reliance on the more vocal or confident individuals. As a result, positive outcomes of collaborative learning such as knowledge sharing and peer support (Meijer et al., 2020) may be enhanced, while the likelihood of misaligned student behaviour such as 'free riding' (p. 1224) would be reduced.

The Rewards

There were unquestionable rewards related to the co-creation research described above. First, widening out the research to co-create a qualitative survey from the ground up with the whole Level 5 cohort, gave students insider experiential experience as researchers on a topic that had core relevance to them. This resulted in a deeper understanding around design, analysis, and the importance of reflexivity in relation to the research, evidenced both within discussions with the students themselves throughout the process, as well as reported within their end of module assessments. In addition, students had the opportunity to be involved in dissemination

activities within the university (presentations to senior leadership team) which have added to key discussions surrounding the barriers and facilitators to student learning and student experience, as well as presenting at national and international conferences, and co-authoring of publications. This had clear benefits for the students, both in terms of enhancing their confidence, skills, and experiences as researchers, and raising the profile of student voices within our institution and beyond.

Further, co-creating research enabled a dismantling of the power and hierarchy implicit within student/lecturer dynamics, giving space for more collegiate egalitarian working relationships. This research has acted as a springboard for further co-creation work within modules, with more colleagues working alongside students in module design, delivery, and assessment. More anecdotally, students reported that they found analysing the dataset a positive process, which enabled them to have a better insight into the experiences of their peers. This was suggested to be particularly beneficial in relation to developing an awareness of shared interests, motivations, issues and personal barriers and facilitators to learning, promoting feelings of belonging within the cohort.

The Challenges

Although a strong advocate of a whole-class approach to co-creation, Bovill (2020) points out that the realities of co-creating with an entire class is not without potential challenges. This certainly reflects our experience, where even though the project facilitated the building of positive student-staff relationships and enhanced inclusion, the time constraints of the whole-class phase of the project, as well as the size of the class engaged in this presented specific challenges. Indeed, from a module coordinator perspective, designing the module content around the development of a student-led project, and identifying potential issues that may arise was not without its difficulties. For example, as students used the dataset for their end of module assessment, had students decided not to participate in the co-creation process, a back-up plan was required. Additionally, ensuring equal opportunity for all students to engage in the process (for example) by simultaneously facilitating the negotiation of survey themes with students in-person, as well as via anonymous online tools was somewhat challenging. These challenges were augmented by the class size, where the teaching approach included both lectures and multiple small group workshops that were designed by CW but facilitated by a team of academics.

Further, given that data was collected from the cohort who would be analysing it and the potential for identification was thus, more acute, data anonymisation took a considerable amount of time and thought. Relatedly, the project was particularly time sensitive, with some aspects (like data processing and anonymisation) requiring substantial labour in a short space of time. This meant that identification of these stress points and exceptional time management was paramount to ensuring that the project succeeded, and students were able to progress with their assessment.

Lingering Questions and Future Directions

Within this chapter we have presented a case study of a successful venture into co-creation embedded in the curriculum, including unexpected positive outcomes that have helped shape future co-created curricula activities. However, we have not included any evaluation measure related to the module constructed through the co-creation process. The reason for this is that due to low sign-up for this optional module, it was unable to run. Given that the initial project centred on co-creating this module with a view for maximum student uptake, we were initially disappointed. Even so, in keeping with the iterative, non-linear and open-ended characteristics of the PAR framework (Cornish et al., 2023) underpinning the project, inability to run the module in the 23/24 academic year was not considered a problematic conclusion to the project, but evidence of requirement for further work. More specifically, we identified that collaborative analysis of this outcome, reflection on the process to date and action in relation to our findings were necessary. Thus, we began this process with the following pertinent question:

> Why, if the module content, modality, and pedagogical design of the critical psychology module had been informed by co-creation with students who had the opportunity to undertake it, was the module not seen as an attractive option?

In an effort to collaboratively analyse this question, we considered asking the cohort directly why they thought the module received low uptake. Cornish et al. (2023) highlight the ethical requirement to think carefully about the purposes of knowledge produced within PAR, as well as continued consideration of the potential consequences of power relations throughout the process. While we have already discussed the ways we

attempted to reduce power imbalances by emphasising the value of student voice and collaboration throughout the project, it was essential once again to reflect on our positionality and the implications this may have on the continued research process. As such, in reflecting on our own positions as the lecturers who would be teaching this module, we did not feel it appropriate to ask students who may not have opted to undertake the module why this was the case; hypothesising that the request for information may be perceived as confrontational. That is, given that students had been part of the co-creation process and were aware of the desired outcome to provide an attractive module, they may have deduced that our probing was from a position of disappointment towards the cohort. Nonetheless, once information about the module options became available, several students autonomously shared their thoughts about this with us.

For students who had opted to undertake the module they helped co-create, it was evident that there was some frustration that they would not be able to participate. Nonetheless, in discussing this and potential alternatives, it became apparent that the motivation to undertake the module was largely the opportunity to develop their skills in deconstructing psychological issues, enhancing their critical engagement with psychological investigation and the perceived flexibility to tailor module learning to their specific topical interests. Thus, it seemed that those who chose the module may have been particularly confident, autonomous learners who welcomed the complexity and challenging nature of critical psychology. However, given that findings from the focus groups highlighted the importance of boundaries around choice, with survey findings indicating preferences for anonymous engagement and systematic confirmation of knowledge, we considered that these students may not reflect the cohort majority. Therefore, the module's strong emphasis on active engagement, as well as the requirement to challenge prior learning of mainstream psychological assumptions (pinpointed within the focus group as favourable), may not have been congruent with most students' learning preferences. As a result, we reflected on our position within the focus groups, the inherent power relations within this environment and the possible influence that this may have had in the construction of module design.

At this point it became necessary to critically evaluate the authenticity of student accounts within the focus group and the possibility that because of our positions and the active role undertaken within the session, a tendency for students to desire positive student-staff interaction and mutual

appreciation of (for example) ideas (Hassel & Ridout, 2018) may have influenced student narratives. In other words, we wondered if students within the focus groups said what they thought we wanted to hear, rather than what they actually wanted from their learning and teaching experiences. This line of reasoning resonates with our reflexive accounts in relation to the survey findings surrounding group work, where it was evident that although student accounts highlighted the merits of group work, a disinclination to engage in this practice is often palpable in practice. Reflecting on this, when group work is integrated within our teaching, we readily highlight the value of this approach to students and therefore, favourable accounts may have been a product of *our* validation of group work and not authentic personal endorsement. In relation to this project, we had highlighted the importance of educational co-creation and relatedly, student-led learning. Therefore, disinclination to participate in the module may have resulted from incongruency in students' context-dependent construction of favourable teaching and learning upon which module development was underpinned, and their genuine preferences. Consequently, it will be important to address these points in future module co-creation, perhaps returning to our original plan to have student-led focus groups, as well as making enhanced efforts to validate student experiences and related preferences for learning. Such efforts to develop our understanding of authentic student learning needs and preferences will be fundamental going forward, particularly in a post-COVID environment in which higher education is becoming increasingly characterised by the requirement for enhanced integration of digital technology and the related considerations of equity and access and associated ethical implications that this brings (Imran et al., 2023).

Notwithstanding these considerations, accounts from students who had not opted to participate in the module indicated that their choices had been informed solely based on their future career prospects and perceived relevance of critical psychology in relation to these. In other words, these students did not feel that studying critical approaches to psychology would enhance their career potential. Reflecting on this revelation, we noted that the brief provided to the students centred on designing a study to understand what students wanted from a new module entitled 'Critical Psychology'. As a result, one of the co-created survey questions developed by students centred around the topics that students would be interested in studying from a critical perspective. Although this question resulted in a

wealth of data highlighting thematic areas of curiosity, it must be acknowledged that this cannot be mistaken for individual interest in undertaking the module. Rather, findings appear to reflect what students would be interested in studying if they were to undertake a critical psychology module.

Taking this forward, while the approaches and methodologies used within critical psychology afford development of the intellectual curiosity and innovative perspectives welcomed by future employers (British Psychological Society, 2021), the practical utility of critical psychology (compared with mainstream 'scientific' psychology) is largely unaccounted for in academic (Gough et al., 2013) and employability discourses (e.g., Lantz, 2014). Therefore, it could be that despite a suggested interest in the emancipatory possibilities of critical psychology, decisions around module choice are made strategically to align with desired career paths, perceived relevance of skills and knowledge deemed valuable by employers, and dominant discourses of psychology. However, while this approach may be understood as sensible in the context of an increasing graduate workforce to compete with, discounting intrinsic motivational factors in study choice may have unintended negative consequences for students' experience, wellbeing, and progression (Howard et al., 2021). Therefore, it may be useful to collaborate with students to further explore key motivators in educational choices, aiding in a better understanding of these factors and their relationship to individual outcomes.

Post Script: The Critical Psychology module is running for academic year 2024–2025. The authors will be co-constructing the module topics and content with students. Weekly workshops will be student led, focussing on developing critical discourse analysis skills.

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CHAPTER 7

Co-creating a Leadership Development Programme for Nuclear Engineers: University-Industry Partnership to Boost Institutional Relevance

Paul Joseph-Richard and Nara Ringrose

Introduction

Critics have questioned the relevance and impact of University Business Schools' contributions to society for some time (Birkinshaw et al., 2016; Paton et al., 2014; Bennis & O'Toole, 2005). Factors such as an excessive focus on academic rigour, and limited emphasis on producing useful and actionable research findings contributed to this 'relevance problem' of the business schools (e.g., Liu & McKinnon, 2019; Tucker et al., 2019; Palmer et al., 2009). It has been argued that a closer engagement with industry to inform business school's teaching and research priorities might address this

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problem (Redgrave et al., 2022), and that this engagement will also help Business Schools create leaders who are better equipped for the challenges of the real world. Since most business schools offer executive leadership development programmes (LDPs) as 'finished products' for industry, we investigated whether co-creating LDPs with industry stakeholders could lead to: (a) more effective programmes for participants, (b) enhanced relevance of business schools' teaching to industry needs, and (c) potentially transformative learning experiences for both participants and faculty.

The Current Status of University-Designed Leadership Development Programmes

The traditional approach of designing and delivering LDPs in university-based Business Schools, without active participation from an organisation's senior managers has proved to be less effective in achieving the desired outcomes (Beer et al., 2016; Williams, 2013). While Day et al. (2014) identified factors influencing LDP success, such as programme type, implementation context, participant characteristics, and evaluation quality, further research is needed to refine our understanding of effective LDP design, development, and implementation. This would ensure programmes meet organisational needs and demonstrate business school relevance. Specifically, when working with highly regulated nuclear industry, scholars (Abdellatif & Hughes, 2016; Gephart & Dirks, 2014) caution that LDPs need to be tailored to its specific needs and challenges, and that a focus on competencies such as safety, risk management, and regulatory compliance is critical. Despite evidence for LDPs' effectiveness in specific areas like safety and productivity (Fatima & Siddique, 2017), a comprehensive understanding of how LDPs can address the unique needs and complexities of the nuclear engineering field remains elusive. This case study sheds light on this gap by describing the impact of a co-created LDP, designed, delivered, and evaluated through a highly collaborative approach tailored to the nuclear industry's specific context.

Value Co-creation Approach

Using value co-creation theoretical lens, an academic and a Head of People and Organisational Development (OD) of a United Kingdom–based, nuclear engineering company, Cyclife Aquilla Nuclear Ltd (hereafter, CAN Ltd), co-created an LDP for its senior managers. This section outlines the distinctive features of the co-creation process of designing,

delivering and evaluating an LDP. In doing so, it not only demonstrates how the co-creation process was instrumental in developing a highly relevant LDP for the industry partner, but also highlights how it enhanced business school relevance to key stakeholders.

Within the broader business and management domain, co-creation, i.e., intentionally involving consumers within the organisation, has been well-established in areas like customer service, brand value enhancement, and transforming marketing services, among other things (Saha et al., 2020, 2022). Organisations have incorporated consumer resources to co-create innovative forms of value, by breaking down the taken-for-granted producer-consumer divide. These organisations built meaningful relationships with their customers, and allowed customer preferences shape products and services they offered (Ramaswamy & Ozcan, 2014).

In designing the LDP for the CAN Ltd, the business school moved away from the traditional producer-consumer model (Vargo & Lusch, 2008), where business schools act as producers delivering value to passive industry consumers. Instead, we embraced a collaborative approach and fostered a participatory environment where the Head of People & OD and her senior managers at the CAN Ltd had active roles in shaping the programme. In line with the applied definition of co-creation, seen in Chap. 1, we co-created an LDP that embodies an inclusive and shared approach. This process involved stakeholders with equal power and responsibilities, fostering communal values among participants by enabling autonomy, facilitating shared experiences, and enhancing relationships, all tailored to meet the unique needs of the nuclear engineering industry. This shared approach created a balanced two-way partnership between stakeholders, ensuring that real-world managerial perspectives could effectively shape and enhance the programme's design and implementation. The initiative evolved beyond a static curriculum, becoming a vibrant ecosystem where every interaction and shared experience served to refine and enhance the leadership learning offered. The Business School positioned the LDP not as a fixed package but as a series of 'value propositions', interacting with managers to co-create bespoke leadership pathways. It encouraged the senior managers to share their opinions, challenges, and aspirations openly, fostering a culture of negotiation and endorsement. Within the CAN too there was a clear strategic intent to assess work-based learning and behavioural transformation, and to integrate executive development with the overall organisational strategy. This opportune context further accelerated the co-creation process.

The co-creation process involved joint-research initiatives, interviews, and collaborative sessions, where the Head of HR & OD and the senior managers voiced their needs, enabling a suite of programme activities that were both relevant and applicable. We conducted a comprehensive industry analysis to identify specific leadership challenges in the nuclear engineering sector. We integrated academic research on shared leadership theories (Xu & Zhao, 2023; Zhu et al., 2018; Pearce et al., 2008) and best practices (Megheirkouni & Mejheirkouni, 2020; Iordanoglou, 2018; Ardichvili et al., 2016; Carter et al., 2012). We gathered case studies relevant to the high-tech context, sourced sophisticated psychometric tests, organised regular coaching sessions to refine contents and relationships, and iteratively modified contents based on our continuous learning. Our internal analysis also revealed that employees had sufficient development opportunities, however, they faced limitations owing to time constraints and their involvement in operational projects. We recognised the need to generating interest from senior management and potential leadership learners to implement an on-the-job LDP centred around succession planning. The annual Employee Satisfaction Survey also revealed the necessity for implementing an LDP and adopting a targeted strategy for developing effective leaders. In this context, the academic partner emphasised the importance of considering programme evaluation from the very beginning. This evaluation-focused programme development approach ensured that evaluation methods and metrics are integrated into the programme's design, allowing for continuous monitoring and improvement. Accordingly, in considering how to evaluate the effectiveness of our LDP, the team decided to employ the CIPP (Context, Input, Process, Product) model of programme evaluation. This model provides a comprehensive framework to assess different aspects of the programme, from its initial design (Context and Input) to its execution (Process) and outcomes (Product), ensuring a holistic understanding of its impact and areas for improvement.

These interactions led to a unique approach to LDP, labelled as a '4D approach to LDP' (see Fig. 7.1). In this approach, we highlight the six ways in which the co-creation transformed the traditional LDP product into a person-focused, industry-informed, customised LDP.

In what follows, we describe the six ways in which the co-creation transformed the traditional LDP product into an industry-specific LDP.

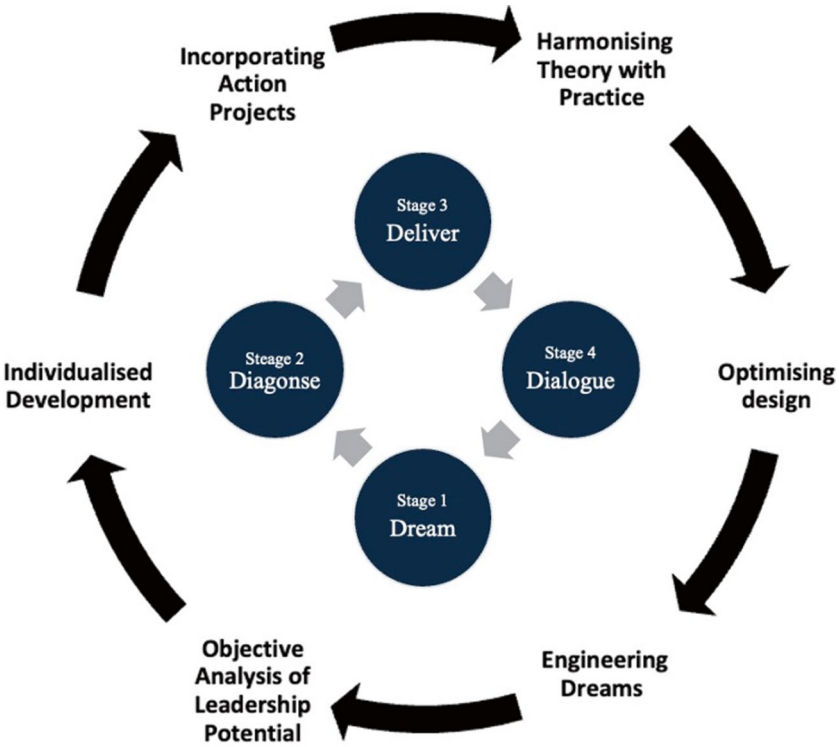


Fig. 7.1 Co-created product: a 4D approach to leadership development programmes

The Co-created Product: An Innovative 'Dream, Diagnose, Dialogue & Deliver' (4D) Approach to LDP

1. *Harmonising theory with practice: Aligning with client's priorities*

Acknowledging the client's emphasis on practical applicability rather than a theory-heavy Leadership Development Programme, the academic tempered his approach to lean more towards applicability. Since the CAN Ltd's implicit leadership developmental assumptions tended to align well with both shared leadership theories, in order to develop a fuller view of leadership processes and outcomes (Day et al., 2004; Pearce & Sims,

2002), the programme co-design team decided to use shared/collaborative models of leadership as the basis for designing, delivering and evaluating the new development intervention. Pearce (2004) defines shared leadership as a simultaneous, ongoing, mutual influence process within a team that is characterised by 'serial emergence' of formal as well as informal leaders (p. 48). In this view, leadership is understood as a team process that is carried out by the team as a whole, rather than solely by a single individual, through collaboration and collective effort. Team members direct one another, recognise each other's contributions, challenge and inspire each other, while supporting and encouraging each other in achieving the business priorities (Ibid). Lyndon et al. (2020) found out that team learning fully mediates the relationship between shared leadership and team creativity, and they recommended promoting shared leadership as a way of enhancing team creativity in organisations. Therefore, the design team believed that an LDP, based on the shared leadership theories might trigger emergence of systemic change through a series of networked conversations, and the emerging narrative could be used as evidence of programme effectiveness (Ray & Goppelt, 2011). The shared leadership theory, which values distributed leadership roles within teams, resonated with the client's pragmatic focus, enabling a blend of actionable insights grounded in a robust theoretical framework. This theory-inspired approach guided the design team to develop a theory-light yet meaning-rich LDP within a heavily regulated sector. The in-company document analysis revealed that there was a need for more strong leadership and management abilities, across all levels in the complex nuclear company, and that there was an increasing desire within the workforce to acquire a set of industry-specific leadership skills. The design team took the responsibility for designing a bespoke LDP for its senior and mid-level leaders.

2. *Optimising design: Assimilating contextual limitations and learning preferences of nuclear engineers*

In designing the LDP, we at the co-creation team took into account several critical insights to enhance the programme's effectiveness and relevance. We acknowledged Abelli and Werder's (2018) emphasis on the need for leadership training to be concise, engaging, and contextualised, noting that the method of delivery is as crucial as the content itself. We also integrated principles from Culpin et al. (2014), ensuring that learning materials were linked to prior knowledge, actively engaging, transferable to work, and provided opportunities for repeated practice. Mindful that development must

occur during workhours without disrupting production, especially in the nuclear (medicinal) sector where participants are key workers, the programme was designed to integrate seamlessly into daily workflows. This approach was supported by the American Management Association's survey, cited by Davis (2018), which reinforced that experiential learning is a powerful method to develop global leaders through active, on-the-job experiences. Importantly, the LDP needed to be integrated into the company's ongoing change management processes, with the view to enhance decision-making, workforce planning, forecasting, and analysis of operational project control, across all levels. Conducting a thorough training needs analysis and individual SWOT analysis became necessary to gather information on effective practices and areas that may be improved. Therefore, using the guidelines provided by Yost and Plunkett (2011) we linked the company's business strategy with relevant *experiences, competencies and relationships* that the individual learners need to acquire. Finally, based on the LDP effectiveness literature (McCauley et al., 2013; Edwards & Turnbull, 2013; Passmore, 2015; Page & de Haan, 2014; De Ciantis, 1995), the team hand-picked a *set of methods (explained next)* and implemented a coherent programme of leader development in individuals and teams.

3. *Engineering dreams: Leveraging visualisation for leadership insight*

Our aim was to enable participants to co-create data, actively engaging with them in this development process. This strategy was designed to leverage their technical skills and creativity in visualisation, enabling them to depict and shape the company's future directly. This participatory method underpins 'Stage 1' of the programme, ensuring that each participant could contribute meaningfully to the collective vision, aligning their individual aspirations with the broader organisational goals.

(a) *Stage 1: Dream (Month 1)*

Unlike the traditional leadership development programme that starts with learning objectives, this LDP started with participants' dreams. We introduced a dreaming exercise, to understand the depth and scope of learners' vision for the company, their perception of the company's potential to flourish, and their interpretation of what it means to live by organisational values. This exercise consisted of a workbook-based task called 'Values and Visualisation'. After an initial introductory meeting with the academic (the coach), learners have been asked to complete the

workbook, which had two parts. In the first part, as suggested by Schyns et al. (2013) an activity, labelled as 'Draw your big idea' was given to all the learners. They were asked to visualise and draw how their company might look in reality if it were to achieve its vision (e.g. the company is totally 'flexible' and its 'cross-functional working' is fully realised). In the second part, they were asked to reflect on the company's values and write down their answers to the following questions in a worksheet. 'If you live by this value at work, how will it look like?', 'If everyone in the CAN Ltd lives by this value at work, how the CAN Ltd will look like?' Learners completed both the exercises and sent to the coach directly.

4. *Objective analysis of leadership potential: Introducing psychometric testing*

The client members of the co-design team were interested in utilising psychometric tests for gauging leadership potential. Psychometric tests offer objective, quantifiable insights into individuals' personality traits, cognitive abilities, and behavioural styles, which are crucial for identifying and nurturing leadership capabilities. These assessments can provide a reliable foundation for development programmes by highlighting areas of strength and potential growth, thereby aligning development efforts with the specific needs and potential of each participant. These tests can be used create a tailored and evidence-based pathway to leadership excellence. The academic coach sourced the tests and administration of the tests formed the basis of Stage 2.

(a) *Stage 2: Diagnose (Month 2)*

On completing the first stage, learners were administered various psychometric tests, based on their role. Since there is evidence to suggest that competencies develop, grow and emerge over time, and that they reveal themselves in different circumstances, in different ways (Hollenbeck et al., 2006; Zaccaro, 2007), we wanted to know how they perceive themselves, and how their direct reports perceive the learners, on the competencies that matter to achieving the business strategy. The following tests were used, because of their high reliability and validity in measuring the emotional, moral and social *competencies* we identified during the first stage.

- The Business-focused Inventory of Personality (BIP—Self-rated & Observer) Tests
- Management and Leadership Development Questionnaire (MLD-Q)

- Occupational Personality Questionnaire (OPQ-32)
- Leadership Judgement Indicator-Standard (LJI-2) Test

The tests were completed online, during workhours. Sufficient time was given to the learners, demonstrating the strategic importance of this measurement. The results were interpreted by the academic coach and were kept ready to be shared with the learners, in the next stage. The test results have also helped the coach to objectively identify individuals' leadership-learning needs.

5. *Individualised development: Effective coaching integration*

The co-design team's belief in the transformative power of coaching shaped our decision to include personalised one-to-one coaching sessions in the LDP. The team believed that one-to-one coaching session could offer bespoke support, tailored to each participant's unique leadership journey. By providing a space for individual exploration, reflection, and targeted skill development, the coaching sessions could unlock the participants' leadership potential, fostering key leadership qualities (Nicolau et al., 2023). The design team concluded that this individualised coaching sessions could ensure that each participant receives the specific guidance needed to navigate their unique challenges and opportunities. Thus, Stage 3 was developed.

(a) *Step 3: Dialogue (Months 3–4)*

The learners were invited to attend a one-to-one executive coaching session held at the University Campus, facilitated by the academics certified in person-centred coaching. During the session, learners were given the opportunity to explain, describe and interpret their Values and Visuals exercise (completed in Stage 1). To explain their ideas further, the coaches asked them during the coaching sessions, to draw how the CAN Ltd appears to them today. By comparing their 'Ideal vision of the CAN Ltd' with the 'perceived current status of the company', they were able to bring out what needs to happen if the CAN Ltd were to achieve its mission (See an example in Appendix 1). The diagnostic questions identified in Lancaster (2019) were also used to surface learning needs. The reflective sharing provided an opportunity for the consultant to explore, expand and if necessary, reject hypotheses arising from the psychometric results (found in Stage 2). The coaches supported the learners by uncovering the multiple layers to get to the nub of things. The session helped them to order

existing self-knowledge and understand the implications of what has been learnt (through the tests) in a manner which facilitated further reflection and action. The coaches focused on what learners have accomplished, and on what obstacles they have overcome, with a view to developing an appreciation not only for the height of the peak they have reached, but how far they have climbed to get there and what kinds of inner strengths they have used in the process. The coaches gave them the necessary tools, and helped them identify what types of *experiences* they should have, what *competencies* they had to develop, and what *relationships* they had to nurture (Yost & Plunkett, 2011), during their career so that they can even more effective, in their roles in their organisation. On receiving a customised report, learners completed a personal learning plan. Finally, development-oriented reports, based on anonymised data were sent to the Head of People & OD to inform system-wide learning plans.

6. *Incorporating action learning projects: Cementing learning through practical leadership*

Recognising the concern that without practical application, the learnings from the LDP might be forgotten or underutilised, the design team decided to incorporate an action project for each participant. This project serves as a crucial bridge between theory and practice, ensuring the programme transcends the risk of becoming just another training exercise. Some members of the team argued that such projects provide a concrete opportunity for participants to apply their leadership skills in a real-life context; and these projects can demonstrate participants' ability to effect change and make a tangible impact, thus solidifying their learning and showcasing their development as leaders. A final Stage 4, thus become the critical element of this LDP.

(a) *Step 4: Deliver (a 90-day challenge) (Months 5–8)*

The learners were sent back to have a session with the Head of People & OD, with their learning and career plans and the psychometric results. By then, the director had already identified *Action Learning* Projects the learners needed to deliver, in transferring the learning at work. As evidenced in McCray et al. (2018) and Lysø et al. (2011), these actional learning projects were critical, developmental experiences that had 'the potential to link individual learning with systemic learning and change' (Marsick & O'Neil, 1999, p. 174). The Head of People & OD had worked with the learners' line managers and collaboratively defined the parameters

of these projects. These experiences are related to 'wicked problems' that were based on real work; they were complex, cross-functional, intended to meaningfully 'stretch' the learners. All projects included some form of external orientation, because Garratt (2011) argues problems that require 'external exchanges' tend 'to be highly effective in personal development' (p. 32). These projects gave the learners the much-needed opportunity for skill utilisation and learning transfer (See sample projects in Box 7.1).

Box 7.1 A Sample of Action Learning Projects

A sample of action learning projects prescribed for participating nuclear engineers

1. Developing and delivering a Ten-Year Vision Presentation for Senior Management.
2. Leading a cross-functional team to identify and implement improvements in nuclear plant safety protocols.
3. Leading a team to integrate advanced robotic technology for maintenance and inspection tasks in nuclear facilities.
4. Overseeing a project to explore and develop new, efficient methods for nuclear energy production.
5. Steering a cross-disciplinary project to develop new vaccine formulations, leveraging nuclear technology.
6. Leading an initiative to improve communication and relations between the nuclear facility and the local community, focusing on environmental and safety concerns.
7. Creating a lab space to foster innovative teamwork strategies, using cutting-edge collaboration tools.
8. Managing a project to streamline the nuclear facility's supply chain, enhancing efficiency and reducing costs.
9. Directing a team to update and improve the emergency response strategies for potential adverse incidents.
10. Directing a project to implement AI technology for optimising nuclear plant operations, enhancing efficiency and safety.

These projects not only provide challenging, real-world issues for leaders to tackle but also align with the evolving technological landscape of the nuclear industry.

The leadership learners are expected to demonstrate strategic thinking, cross-functional collaboration, and an alignment with the developmental goals of the LDP.

In sum, the co-creation process with nuclear engineering professionals was pivotal in shaping the unique structure and contents of the LDP. This collaborative approach resulted in six distinct elements that are closely aligned with the real-world challenges and needs of the sector. These include harmonising theory with practice, optimising the programme to suit the specific learning preferences of nuclear engineers, leveraging visualisation for deeper leadership insights, introducing psychometric testing for objective analysis of leadership potential, integrating effective individual coaching, and incorporating practical action projects. Each of these elements contributes to a comprehensive, practically grounded, and innovative LDP, tailored to develop effective leadership within the demanding and technical field of nuclear engineering.

This case exemplifies a successful university-industry co-creation in developing a unique LDP. Unlike many traditional LDPs, our programme includes diverse, tailored elements due to the unique blend of academic expertise and industry relevance. The university contributed theoretical and research-based knowledge, while industry input guided the application of this expertise in practical contexts. This synthesis fostered an ideal environment for co-creation, resulting in an innovative programme that effectively developed leaders who could meet the challenges in nuclear engineering.

Evaluation

Given that the evaluation of learning programmes is the ultimate phase of the educational process, it is imperative that the evaluation process is not merely an end-of-event occurrence but rather provides a more evidence-based and resilient continuous development plan. In line with what we had agreed in the initial design, we assessed the outcomes of this programme, using the CIPP model of programme evaluation (Stufflebeam, 2003; Zhang et al., 2011). The critical elements of this model are context evaluation ('Was the programme aligned with its clear goals based on assessed learner needs?'), input evaluation ('Were the targeted needs addressed by a sound, responsive plan?'), process evaluation ('Was the programme's plan effectively implemented?') and product evaluation ('Did the programme succeed?'). Our findings are based on the design team's field notes and perceptual evidence collected from the 12 leadership learners. We used the CIPP model evaluation checklist (Stufflebeam, 2015) in producing the findings.

Context Evaluation

As seen in above section, the 4D approach to LDP had been conceived, designed, and delivered only because of the six different ways the co-creation process. We listened to learners' pressures, the company's strategic needs, and the industry priorities. The Head of People & OD affirms that the strength of this programme lies in its alignment, made possible by an inclusive and shared approach to thinking, decision-making, and plan implementation. In this co-creation approach, the learners held equal power and responsibilities to enact any changes, ensuring that everyone had been actively involved in shaping the programme. This approach was seen as critical to the programme's success in meeting the specific needs of the industry and the participants.

Input Evaluation

The design team had been evaluating the inputs on an ongoing basis. First, the team ensured the 4D approach directly addresses identified needs of the key stakeholders, has a sound underlying logic, integrates well with the ongoing change initiatives, and has well-defined plans for staffing, budget, learner involvement, and resources for an ongoing evaluation. The team also checked the detailed action plan submitted by the academic, using tools like SWOT analysis and cost analysis to ensure a realistic timeline and that the academic staff has the necessary qualifications. After every stage of the 4D approach, the learners were invited to discuss their learning with the HR director - to reinforce learning, to question their assumptions, while doing a rapid evaluation of the inputs. Based on their feedback, modifications were made in several input areas including resources provided to learners, the level of coaching support and schedules to accommodate busy nuclear engineers. Specifically, acting on their feedback, learners were given additional time and space for structured self-reflection, and they were explicitly encouraged to reflect on their purpose and values. Overall, the data, found in the design-team's notes, suggest that the inputs meaningfully contributed to positive outcomes to both the learners and the company.

Process Evaluation

The co-design process, while innovative, presented some challenges as evidenced by the field notes. The design team faced difficulties managing the numerous meetings and multiple adaptations required. An excessive focus on practicality and cost-saving sometimes overshadowed the importance of theory and evidence-based decision-making. Balancing the need for flexibility with busy schedules and catering to individual preferences posed additional hurdles. Further complexity arose from ensuring content relevance and managing cultural and linguistic differences between academia and industry. Striking the right balance between personalised learning and a scalable, standardised approach across the company proved challenging. As Shakir and Siddiquee observed (in Chap. 9) this co-creation demanded significant inputs, commitment, and adjustments from all participants involved. Despite these challenges, the design team confirms the co-design process was highly valuable. They emphasise the importance of celebrating the creation of meaningful learning experiences for all leadership learners.

Product Evaluation

Based on the field notes maintained by the academic and the industry partner, we conclude that the co-creation initiative resulted in an LDP that is more relevant to nuclear industry needs, that it used innovative learning techniques such as visualisations that are more engaging for leadership learners, that it broadened the learning transfer options available to learners, that it opened doors to the acquisition of skills that are in demand, and that it encouraged individuals to bring their own authentic selves and perspectives to the workplace and initiate positive change. Most of the learners confirm that the LDP provided opportunities for self-reflection and for re-orienting their self, work, and life, and this in turn helped them find a renewed sense of purpose at work, and beyond. Our participants reported significant enhancements in their leadership behaviours, particularly in complex problem-solving and strategic planning. They also experienced notable increases in self-efficacy and resilience, better equipping them to handle workplace stress and challenges. As a result of the coaching sessions, participants noted that there were substantial improvements in their psychological well-being, which positively influenced their interactions with their teams and fostered a more supportive and motivating work environment. This outcome aligns with the findings of Nicolau et al.

(2023), who observed similar effects of executive coaching on behaviours, attitudes, and personal characteristics in their meta-analytical study. Three of the high achieving engineers moved into more visible leadership positions within the organisation and they confirm that participating in this LDP accelerated their career development. This has led to a ripple effect of positive team benefits, including boosted morale as colleagues see advancement opportunities, enhanced performance due to improved leadership skills, and stronger collaboration as these leaders bridge team and departmental divides.

Both the academic team and the industry partners gained invaluable insights, underlining the effectiveness of this collaborative approach in developing a robust and impactful LDP. The academic observes in his report:

> Having limited prior knowledge of the nuclear industry, the co-design process provided an invaluable opportunity to gain deep insights into the specific challenges and leadership needs of this unique sector. This newfound understanding allowed me to design an LDP that is far more meaningful and relevant for aspiring nuclear industry leaders. In essence, the collaboration expanded my own professional expertise.

Further, the academic also notes that that the constant engagement, and the continuing knowledge-transferring partnership between the business school and the employer allowed the structuring of other leadership development offerings (such as Postgraduate courses and executive learner programmes) as per the industry needs (e.g., the introduction of microlearning sessions instead of three-hour lectures, and lunch-time learning sessions for students who formed special interest groups).

The senior management at the CAN Ltd confirms:

> The robust and well-planned LDP in heavily regulated sectors, such as the nuclear or pharmaceutical industries, prioritises the ability to adjust and thrive within a volatile economic and political landscape that affects all businesses. The efficacy of the 4D approach to LDP lies in the sustained collaboration between an academic institution and a real-world corporate environment. Through this co-creation process, I've come to appreciate the unique value universities can bring to the table. Universities offer a wealth of theoretical knowledge, research expertise, and cutting-edge methodologies that can be applied to real-world industry challenges. They also provide a neutral and objective perspective that can inform strategic decision-making.

> This project has also highlighted the importance of what universities can learn from industry. Exposure to the specific needs and challenges faced by industry partners such as our nuclear engineering company allows universities to tailor their teaching and research to be more relevant and impactful. Ultimately, successful co-creation, like the one we experienced, demonstrates the power of collaboration between academia and industry in creating mutual value.

The evaluation is still ongoing to capture the long-term benefits of this LDP. We pause here to highlight the lessons we learned in this co-creation process.

Discussion

Our evaluation supports the view that the LDP not only enhanced leadership characteristics in individuals but also cultivated a safe environment, promoting a culture that mirrors the collaborative ethos of the value co-creation model itself. More specifically, in this case, value was co-created through interaction, ensuring the LDP was reflective of the managers' real-world contexts and the company's strategic direction. The co-creation process ensured the LDP was not just a training programme but a transformative journey that the managers undertook alongside their academic partner (i.e. the business school), reinforcing the notion that in the modern business landscape, the dichotomy between producer and consumer is replaced by a collaborative partnership, driving innovation and growth. We co-delivered this 6-months long programme, through a series of face-to-face and online sessions, to a group of senior and mid-level leaders so that they can learn about leadership processes on-the-job and be the real-world leaders within their work contexts. This innovative programme, with its unique co-creation elements tailored to specific industry challenges, offers a ***highly adaptable and reproducible solution*** for leadership development across diverse contexts. We have learned at least three important lessons.

Insights Gained from the Co-creation Process

- Co-creation fosters a safe, collaborative learning environment where participants feel ownership. The co-creation process fostered this atmosphere by actively incorporating participants' inputs, leading to

a programme they felt was developed by them, not imposed upon them. This sense of ownership contributed to a more relevant and impactful experience for the learners involved.

- *University-industry collaboration benefits both parties.* This case emphasises the value of collaboration between universities and businesses. Universities gain insights into industry needs and can tailor their learning-products accordingly. Businesses benefit from academic expertise and innovative approaches to leadership learning and development.
- *Co-creation bridges the gap between theory and practice, enhancing business school relevance*. This case demonstrates the power of co-creation in addressing the ongoing challenge of business school relevance. By collaborating with a company in the highly regulated nuclear engineering industry—often underrepresented in leadership development literature—the business school was able to co-create a one-of-a-kind programme that addressed specific industry challenges. To our knowledge, no similar programme exists in nuclear engineering companies, making this LDP a pioneering effort in integrating academic insight with practical, industry-specific needs. The case also highlights co-creation is a valuable tool for business schools to bridge the gap between theoretical knowledge and practical application, ultimately boosting their relevance in the eyes of industry partners and potential students.

Conclusion

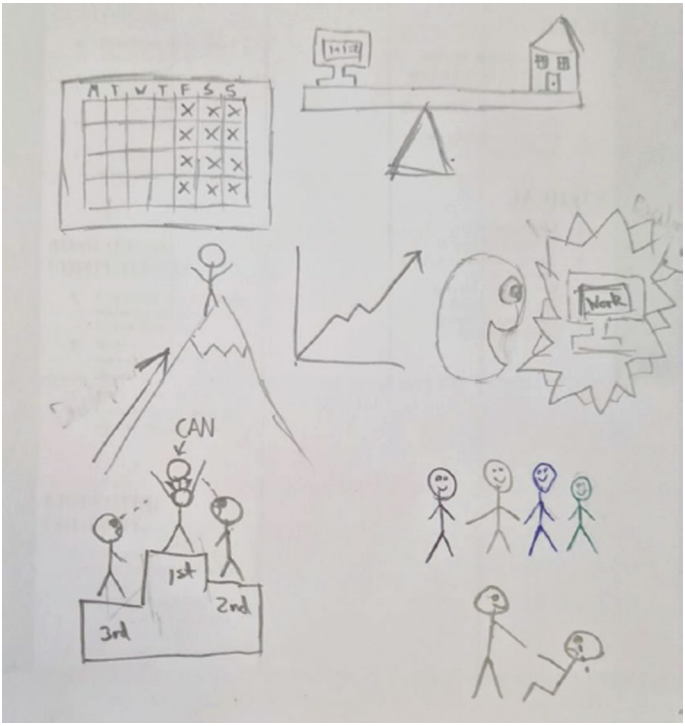
Several companies that operate in highly regulated industries have been reluctant to implement leadership development programmes for several years due to their commitment to operational delivery. On-the-job LDPs, such as the 4D approach to LDP presented here, can impart the necessary skills and approaches to enable individuals to approach challenging leadership obstacles from an entirely new perspective. This case illustrates that university-industry partnerships can lead to learning programmes that are impactful. Our participants experienced enhanced personal growth, a clearer sense of self, increased happiness, and greater meaning and purpose in both life and work. These changes contributed to reduced stress and enabled a real transformation, substantially boosting their mental health and wellbeing. Such an impactful programme was possible only because of the co-creation approach that was adopted. The recognition of these

impactful outcomes has started shifting perspectives among those who previously criticised business schools for not delivering meaningful learning programmes. This shift demonstrates how the co-creation process not only addresses the relevance problem faced by university-based Business Schools but also showcases the potential for real transformation in highly regulated industries. Through this collaborative approach, key stakeholders have begun to see the value and effectiveness of these tailored LDPs. Business schools' relevance is an ongoing issue both for the deans, academics, leadership learners, and employers. This chapter puts forward a case how the co-creation process could address the relevance problem of university-based Business Schools.

Appendix 1: Co-creating a Coaching Conversation in Leader Development Context

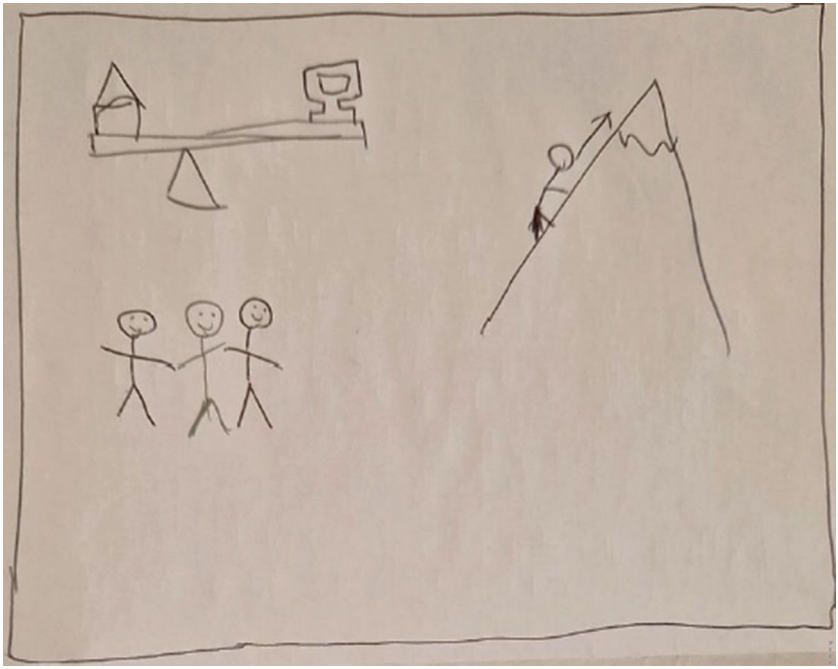
During the coaching session (in Stage 3 Dialogue Stage), the coach and participant reflect on the visualisation exercise. The images sent by candidate SN, from the 'CAN Ltd' were discussed during the session. This extract is taken from an internal report prepared by a programme staff. This appendix explains how the co-creation approach was used during the coaching sessions to engage with learners in leadership conversations, enabling them to think about leader mindsets and organisational contexts. This method facilitated a deeper understanding and application of leadership principles tailored to their specific roles and challenges.

SN had sent the following image titled 'IDEAL CAN'. During the session, SN was asked to explain his image.



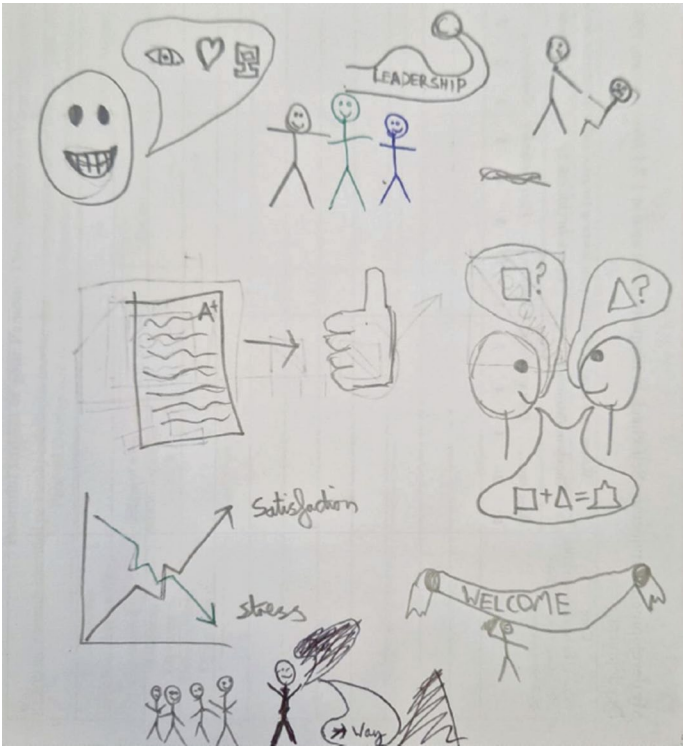
SN noted, pointing to elements from top left-hand corner, 'CAN has implemented a four-day work week which significantly contributes to work-life balance and enables individuals to progress in their careers. This is reflected in the upward trend in the profit chart. Moreover, the innovative work designs are attracting employees, and CAN has received numerous awards, gaining appreciation and admiration from competitors. Employees are not only happy at work but are also supportive of each other, creating a positive and cooperative workplace environment'.

When the coach asked SN to draw 'CAN Today', SN produced the following image for the 'One Minute Image—Challenge'.



In the figure, SN illustrated that CAN helps its workers achieve a healthy balance between work and life, it is in the right direction of achieving its prime position in the nuclear engineering industry and its employees enjoy togetherness at work. Overall, Sam demonstrated a positive outlook on the company. On explaining this image, SN continued to engage in an authentic conversation about how he can nurture and protect this positive self-positioning within himself, and his direct reports.

SN had also sent the following image for the 'IDEAL WORKPLACE'.

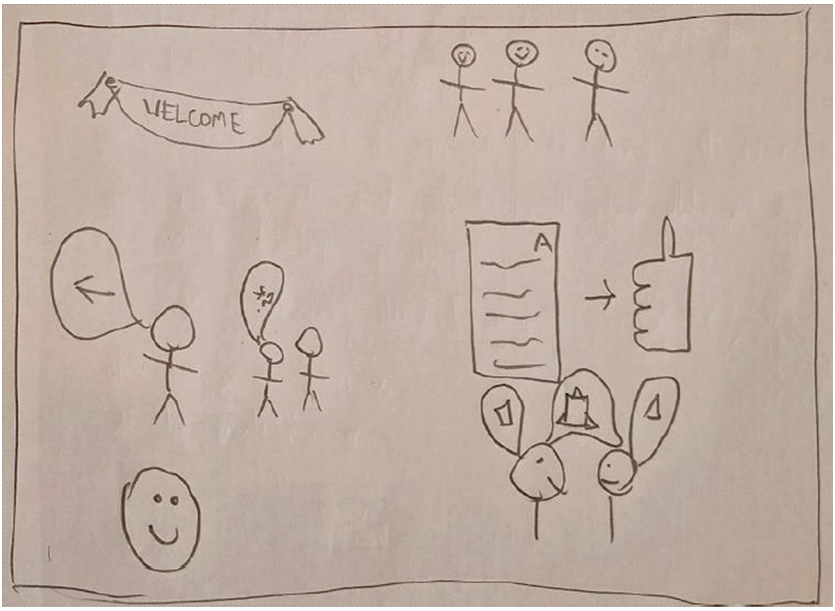


SN explains that his image shows many elements of an ideal workplace:

- Employees exude happiness and a sense of fulfilment.
- Leaders provide a clear vision and a well-defined path for success.
- Tasks are consistently completed to the highest standards, earning A+ ratings.
- Creativity is fostered and encouraged, leading to innovative solutions and ground-breaking ideas.
- Diversity and inclusion are embraced, with squares and triangles seamlessly integrating to form new and inclusive designs.
- Stress levels diminish, giving way to increased satisfaction and overall well-being.

- Newcomers are welcomed with open arms, contributing to a positive and supportive work environment.
- Employee retention rates soar, reflecting the company's commitment to its workforce and the overall satisfaction of its employees.

When SN was forced to take one-minute image challenge on 'CAN—Workplace Today', he thoughtfully produced an interesting image, seen next.



SN described that his image shows a mixed bag of factors that contribute to both positive and negative employee experiences. According to him, CAN is still a welcoming environment, but not all employees are happy and satisfied. CAN has some employees, confused and indecisive, and producing lower-quality work output (earning A ratings). The exclusionary culture suppresses creativity, isolates individuals, makes them remain in silos, and fails to foster teamwork, leading to high employee turnover rates.

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CHAPTER 8

Whole-Class Co-creation Approach in Portfolio Assessment: A Community Knowledge Triangle Model

Yong Yuan Teh and Yit Sean Chong

Introduction

Amidst an increasingly competitive environment in the higher education sector, there are growing concerns over the value of higher education, and how students can be more involved in the mission of the universities (Dollinger & Lodge, 2020). Traditional educational approaches that rely solely on knowledge transmission from academics to students are considered archaic and insufficient due to the passive nature of knowledge transmission, and more so when the teacher's experiences are static and outdated (Scott, 2015). Nevertheless, knowledge transfer from academics is still widely appreciated because scientific knowledge based on

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established theories and methods is a useful way to trigger critical and analytical thinking as well as encourage development of academic writing skills (van Karnenbeek et al., 2022). However, extending beyond knowledge transmissions, recent discourses in pedagogical practices have paid increasing attention towards 'student engagement' through active learning strategies, and 'partnership'. This strategy denotes a collaborative, reciprocal process through which participants (usually involving selected students) contribute equally to pedagogical conceptualisations and design (Cook-Sather et al., 2014). Co-creation emerged from these discourses, emphasising learner empowerment at the centre of flexible pedagogies in higher education, which enhances student agency rather than a passive role in the learning process (Tilbury & Ryan, 2011).

Co-creation narratives can be traced from the business context, referring to interactions between firms and customers for the purposes of creating value in product and service consumption through collaborative processes, knowledge sharing and dialogues (Prahalad & Ramaswamy, 2004). In the higher education context, Bovill (2019, p. 1025) advocates for a 'whole-class' co-creation approach which involves 'inviting a whole group of students (including face-to-face, blended and online settings) to actively collaborate and negotiate with the teacher and each other on the elements of the learning process'. The teacher and students share the responsibilities of learning and teaching jointly when negotiating learning outcomes, objectives, and employ joint approaches which demonstrate a shared responsibility for learning. A whole-class approach allows for sharing among a wider group and a more vibrant exchange among students in the entire class rather than amongst a small segment of selected students (Bovill, 2019).

Whole-Class Co-creation

The outcomes of a whole-class approach to co-creation are observed to be beneficial, leading to students showing improved academic performance delivering higher quality work (Bovill, 2014), developing professional skills (i.e., critical thinking and communication) (Deeley, 2014) and emotional intelligence (Devis-Rozental et al., Chap. 11) as well as the students report feeling appreciated for collaborating with other students and voicing their opinions (Bergmark & Westman, 2016). The positive impact of this approach is experienced not only by students but also the academics. Academics felt inspired and renewed (Bergmark & Westman, 2016); they

improved their negotiation skills (Deeley, 2014), and felt that they had made the course curriculum more relevant (Bovill et al., 2010). Yet, the most important potential benefit—one that has already been suggested—is the relational aspect that this approach is inherently more inclusive because it entails motivating students to participate in knowledge exchange collectively (Moore-Cherry et al., 2016) rather than amongst a small group of 'elite' students who are predominantly self-motivated and highly engaged. This approach will also subsequently enhance the relationships between the teacher and the whole group of students as well as between the individual students in the class (Bovill, 2019).

The Community Knowledge Triangle Model

Beyond the educator-student and peer-to-peer dynamics, co-creation can also involve private, public, and social sector practitioners. External parties enrich the co-creation process by bringing different types of knowledge to the group (Von Schönfeld et al., 2019). Practitioners provide practical knowledge that describe and explain contemporary practical situations, processes, and outcomes. Co-creation involving industry practitioners ensures transfer and exchange of new knowledge of hands-on experiences and real-world issues beyond the academic environment, to better equip students for an ever-changing career landscape (Baldwin & Rosier, 2017). The practitioner holds balanced power and responsibility in the teaching process (Jamil and Howard-Matthews, Chap. 1). van Karnenbeek et al. (2022) provided a conceptual framework called the Community Knowledge Triangle to depict the knowledge exchange in the learning community between academics, students, and practitioners. The framework is useful for understanding the flows of different knowledge types and relationships in the learning community (see Fig. 8.1).

The originators of the framework called the centre of the triangle, 'situation'. A situation is a learning context or platform, such as visits to a site, pitching of business ideas, or stakeholder dialogue engagement. The exchange of knowledge takes place in a particular situation, which refers to the collaborative assessment in this study. Embedding a whole-class approach involving industry practitioners in the assessment co-creation process establishes a Community Knowledge Triangle to empower students to demonstrate collaborative and authentic learning from all three parties.

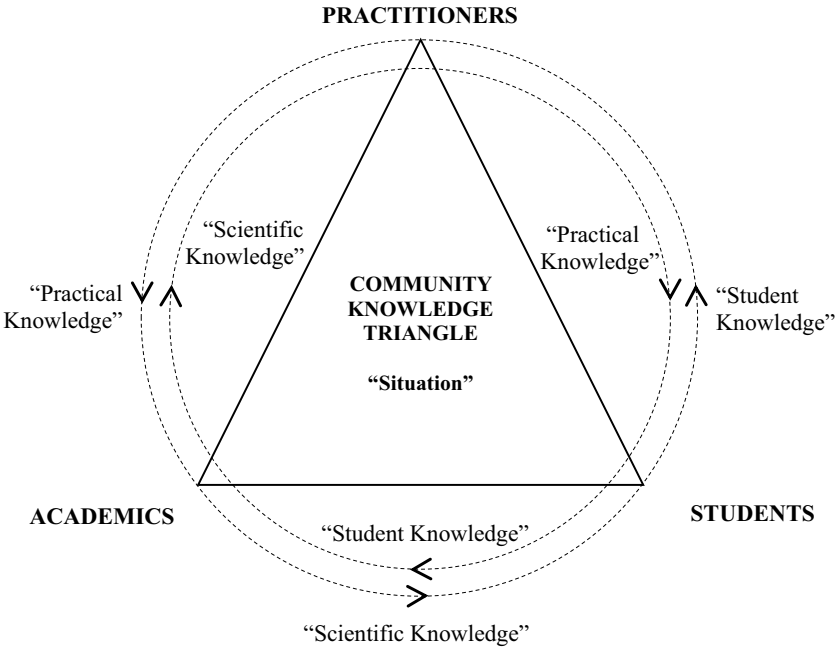

Fig. 8.1 Modified Community Knowledge Triangle by van Karnenbeek et al. (2022)

Assessments

Assessments are a key element of teaching and learning because academics want students to truly engage with relevant course material and understand it deeply, in order to apply the knowledge rather than merely reproducing material without having a solid understanding (Elton & Johnston, 2002). Assessment can be considered the most effective tool that academics have, to determine and direct student attention to engage them in the learning process and measure the learning taking place (Doyle et al., 2018). However, other scholars disagree, as they consider assessment together with its feedback to be the weakest link in learning and teaching (Rust et al., 2005). Reasons for this include the findings that assessments are considered a major source of student dissatisfaction because of the lack of clarity about its requirements and marking criteria, as well as poor or

irrelevant feedback received after the academic returns the assessment (Blair & McGinty, 2013). Doyle et al. (2018) highlighted several challenges in implementing assessment co-creation, such as the lack of guidelines and assistance given, and the quality of knowledge shared by students with their peers. In order for the student to participate effectively in the process, they need to be conversant with not only the academic language of the subject discipline but also the language of the assessment.

Past research on co-creation incorporating practitioners and assessments includes two of Bovill's studies; namely one on students who were also local activists co-creating the content for an environmental justice course (Bovill, 2014), while another example referred to students co-creating essay titles and marking criteria for summative assessments in a public policy course (Deeley & Bovill, 2017). Doyle et al. (2018) reported the positive impact of the co-creation of assignment design on academic performance. In this study, students were empowered to set a multiple-choice question (MCQ) task and to create a video submission-based on randomly assigned topics for a third-year undergraduate module in taxation.

Borrowing Bovill's (2019) definition of the 'whole-class' co-creation approach, the concept 'whole-class' co-creation assessment in this study refers to the assessment-based activities that involve and require students to collaborate with the academic, with peers, and in this case, the practitioners as well. Our study extends these studies by examining a tripartite relationship of knowledge exchange dynamics (academics-students-practitioners) that contributes to students' reflections in the final assessment of a course. While there is strong evidence suggesting the need for and the benefits of the co-creation approaches to learning and teaching, this study aims to identify the barriers and adaptive mechanisms in implementing or undertaking assessments that apply a whole-class co-creation approach.

Contextual Background: Business Leadership Course and Portfolio Assessment

The context of the current study is an undergraduate business leadership course. The course is taught in an offshore campus (in Malaysia) of an Australian university that ranks top fifty in the Times Higher Education World University Rankings. The offshore campus provided a cross-cultural

setting for learning with a good spread of the international student population. Around half of the students in the course of one hundred and fifty individuals, were international students (from outside Malaysia) – mainly from Indonesia, Sri Lanka, China, and various European countries. The course relates to leadership in an Asian context and covers relevant theoretical concepts from classical and contemporary leadership studies relevant to Asian leadership practices. The course also offers avenues for practical learning from the experiences of Asian organisational leaders. The course was delivered face-to-face through lectures and tutorials. The university's online learning platform provided additional learning activities, such as videos, reading resources, quizzes, and reflection questions. The course consists of only in-semester assessments which must be submitted within the twelve teaching weeks of the semester. No assessments were due after the teaching week of the semester, which students usually used for examination preparation.

The focus of this chapter is on the final and summative assessment, namely the portfolio assessment that consisted of two components, a 1,200 word reflective essay (30% weightage) and a podcast (20% weightage). The portfolio assessment was 50% weightage of the overall marks for the course. A portfolio refers to a student's purposeful collection of their own work that is usually based on the student's choice (rather than the teacher's prescribed selection) with their reasoning for selection and evidence of self-reflection that demonstrate the student's efforts, progress, and achievement of learning objectives and outcome of the course (Paulson et al., 1991). For this course, the portfolio submitted was expected to demonstrate theoretical knowledge of leadership in the Asian context, awareness of how individual factors influence leadership practices, and effective communication skills.

The first component of the portfolio assessment—the reflective essay—is expected to incorporate critical analysis of how lessons learnt from lecture recordings, learning materials, activities and earlier assessments throughout the course contributed to students' understanding of self, others and the unit objectives. The course examiner curated a variety of class activities throughout the semester involved practitioners through experiential learning projects, voluntary community engagements, student team interviews with social impact leaders, and guest lectures. One notable experiential learning activity was the workshop by a social enterprise that emphasised the need for empathy in a leader. A student team interview with social impact leaders was an earlier assessment of the course

during the semester. The interviews with the organisational leaders were organised and led by students of the respective assignment groups. Students were also allowed to reflect on their earlier internship experience that took place within three months before the semester began. Other class activities also consisted of self-assessment tools (e.g., personality tests, exploring unconscious bias activities), which were then discussed with peers to exchange their scores in these self-assessments and to share their reflections based on these activities.

The second part of the portfolio assessment was the submission of a podcast audio recording. The content of the podcast was derived from the reflective essay but the script summarised the written reflection verbally into a conversational style for knowledge sharing in an engaging and meaningful manner for a professional audience. A highlight of this assessment was that students with highly engaging podcasts (usually with High Distinction grade) were selected (by the academic and the podcast host) to share their thoughts on a Spotify podcast channel relating to leadership in Asia hosted by a Learning and Development (L&D) industry practitioner based in Singapore. Furthermore, the L&D practitioner and his co-host shared their takeaways from each episode (a co-creation process in itself) with his professional network globally via LinkedIn posts on a fortnightly basis. The podcast series began with the hosts interviewing the academic about this collaboration – how the idea was conceived and what to expect from these student podcasts. This conversation deepened the collegial relationship and reinforced the shared vision for this co-creative endeavour. The students, who were the creators of the podcasts, were tagged in these LinkedIn posts, which allowed new conversations to take place in this platform outside of the classroom.

Research Procedure

This case study relied on semi-structured interviews with academics, practitioners, and students involved in the course described above. The method of data collection is suitable for qualitative thematic analysis that focuses upon data-driven exploration and interpretation (Braun & Clarke, 2006). Thematic analysis is used to understand the barriers and challenges faced by the three different groups as well as their respective adaptive mechanisms concerning the whole-class assessment approach. The names used in this chapter were pseudonyms. Multiple data sources were used for triangulation and complementary purposes. These include interviews, informal

student feedback surveys, and assessment documentation. Collectively, qualitative data from six students, two academics and two practitioners were reported in this study. Interviews were audio-recorded and transcribed verbatim. In order to ensure intercoder reliability, the researchers met to compare thematic patterns after they had analysed the interview transcripts separately beforehand (Yin, 2018).

Findings

The specific situation of the Community Knowledge Triangle in this study is the portfolio assessments, which forms the intersection for academics, practitioners, and students may exchange knowledge with each other during various activities surrounding the assessment. There are three channels of knowledge transfer (i.e., academics-students, academics-practitioners, and practitioners-students). Research participants consisting of students, practitioners, and academics revealed useful findings regarding the barriers and adaptive mechanisms for the whole-class assessment approach. This study identified three themes for barriers and four themes for adaptive mechanisms.

Barriers to Whole-Class Assessment Co-creation

The whole-class assessment co-creation in this study is framed as the mechanism within the Community Knowledge Triangle exchange that facilitated opportunities for practitioners to contribute towards assessment design and transform the assessment outputs into new knowledge that can be shared with the professional community (via podcast and LinkedIn). The group assessment also allowed opportunities for peer learning to continue outside the classroom, as the students discussed and prepared the group assignment outside class time. These are some advantages identified for the whole-class approach. There were, however, key barriers relating to assessments, as shared by the interviewees.

(1) *Students lacked confidence in approaching the assessment*

The portfolio assessment had unique features which required students to be selective in their choice of evidence of their learning (e.g., course materials, tutorial activities, self-assessment tools, earlier assessment tasks, group work, experiential learning workshops, and internships) to align

with the key aspects outlined in the portfolio. This type of assessment can be daunting due to its subjectivity. The assignment structure is vague for students because it requires them to integrate their thoughts independently into a reflective essay on class activities involving academics, peers, and practitioners. To do well, students were required to reflect critically on their own personal experience of participating in the class activities, while demonstrating familiarity in academic discourses in leadership.

Students were also worried about the podcast presentation format, rather than focusing upon developing the student knowledge aspect, which is fundamental to the co-creation process. An audio podcast is less common than the usual video recording, especially during the pandemic. As mentioned by Academic P:

> In this portfolio assessment, students felt unsure with the task expectation as they had never done it before, and some may lack the technical skills for podcast creation. My tutor was not digitally savvy as well, hence unable to support the class.

(2) *Underperforming members in student groups*

Group assessments fit the whole-class co-creation approach, as they serve as a key evidence that students incorporated into the portfolio assessment. In this course, students work in teams to interview a social impact leader in Asia, based on an assigned topic. However, a major issue arises when student attendance is voluntary, especially during tertiary education, as some students may miss class consistently. These students, referred to as 'free riders' are also likely to provide minimal input or choose not to contribute at all to their group's assignment. It is difficult to evaluate the free riders' knowledge of the course accurately. Academic Q pointed out his struggles in handling group conflicts and in assigning marks to the free-rider. These difficulties make some academics reluctant to employ group assessments to evaluate student performance. This meant these academics had one less option for implementing a whole-class co-creation approach. Students also face challenges connected to free-riders and poor-performing members, which inevitably result in negative perceptions towards group assessments. For example, Student A complained,

> I don't like group assignments. I am not sure how I always end up with terrible group members … Either those MIA (missing in action) or I don't know what they are doing (giving poor quality of work).

The other group members would have to put in additional work to make up for the lack of contribution by the missing member. The whole-class approach stresses the active collaboration of all the students, which is compromised in this situation. Substandard work would lead to poor-quality student knowledge that does not add value to the co-creation process.

(3) *Shallow student-practitioner collaboration*

In this course, the academic staff established meaningful connections with practitioners in organising the immersive workshop on leading with empathy and in co-designing the Student Insights series in the form of the podcast creation, which aligns with the course learning objectives. As shared by the L&D industry practitioner (Y):

> I honestly enjoyed listening to all the students, they really summarised the insights so well, especially with your guidance. It wouldn't have been easy if not for the format you gave to them which was really astute of the academic.

While it might seem more feasible for a 'whole-class' approach to be achieved in a smaller cohort, it does become challenging for all students enrolled in this course to engage in a co-creation process with the practitioners. This is because not all students were able to attend the immersive leadership workshop held outside of campus. Furthermore, there were costs involved with workshop fees charged by the social enterprise. To enable the experiential learning workshop to materialise, Practitioner Z sought funding from corporate sponsors to cover the participant fees for the university students. Additionally, only the top 10% of the podcasts were selected to be featured on the Spotify channel and showcased via LinkedIn. This may contradict the 'whole-class' approach. However, Academic P contended that the 'whole-class' approach bears the spirit of inclusiveness where every student has equal opportunities to collaborate and create new knowledge with peers, academics and practitioners. Although it may not be feasible for all students' work to be featured in the podcast channel or to be involved inthe leadership workshops, the students who demonstrated agency in seeking to gain and create knowledge

would have engaged in other experiential learning activities which mattered to them.

Adaptive Mechanism to Overcome Barriers in Whole-Class Assessment Co-creation

Interview participants shared four themes of adaptive mechanisms to tackle the barriers to whole-class assessment co-creation identified earlier. Overcoming these challenges increases knowledge exchange between academics, practitioners, and students (participants of the Community Knowledge Triangle within the specific situation of the assessment) for a more effective co-creation process.

(1) *Extending tangible support to students*

The teaching staff provided academic and technological support for students to complete the assessment more confidently. This includes enlisting technical support staff to prepare a video recording on how to record a podcast using a mobile phone and using free software to improve audio quality. Students were also reminded that they could use generative AI to produce the podcast script, and they could check out ways to create an engaging podcast. Academic P also introduced a visual map to help to explain how the chosen evidence, learning objectives, and leadership philosophy may be woven into an integrated and holistic reflective piece. She chose to be vulnerable and honest as she reflected upon her own leadership experiences as a sample, to showcase a portfolio. She felt that this approach was highly effective in illuminating students' understanding and the one-page visual map she created, became a template for students to map out the key elements in their portfolio. To enable a meaningful co-creation of podcasts that are worthy to be shared with the public, students were asked to explore the Spotify channel podcasts thoroughly. Students can listen to the host's earlier episodes, which benchmark the standard of quality expected for a podcast content and delivery. Many students thought that the scenario presented in the task instruction for the podcast creation was a practical scenario. The authentic assessment involving a real scenario helped students to understand the requirements more easily.

(2) *Allowing students to have autonomy in the assessment*

Besides providing students with the relevant knowledge to approach the assessment, they were given some flexibility to decide on various aspects of the assignment. This empowers them to take ownership of the portfolio assessment, which can be translated into a useful artefact for their future employability. Academic Q explained,

> I think it was very good of the lecturer to allow students to choose from a long list of evidence (activities). It may seem unnecessary to do this, and some students may ask whether other activities can be considered, but it means [that] they are thinking and learning.

This flexibility allowed students to be critical in their leadership development, focusing on aspects that they believed they had the greatest capability and potential for growth. In these circumstances, students give their best knowledge to the co-creation process. Students also liked the reflection essay component of the assignment, because they were able to share their personal thoughts. Student D explained,

> I actually liked this assignment (portfolio assessment) a lot. I know its format is very special allowing me to see the big picture of what the subject actually covered, rather than the smaller topics to answer the assessment tasks. I wrote more about what I thought than what others think about the matter like [in] usual assignments (academic essays).

While this reflective essay prioritises the student's personal opinions, this assessment does not neglect research skills because credible opinions are evidence-based. The student knowledge created is supported by scientific and practical knowledge. In contrast, conventional assignments tend to require students to demonstrate scientific knowledge based upon prescribed topics. This reflection contributes fresh perspectives to the co-creation process, which encourages students to become more reflective and potentially contribute their insights in the industry (through the podcast).

(3) *Allocating marks strategically for group assessment*

Assessments are considered as the single most effective tool that academics have to direct student attention. This is more evident especially when Asian students tend to be concerned about the marks they obtain

from assignments. However, in group assessments, students perceive a loss of control over the outcome because the responsibility to complete the whole assignment is shared with group members who may not be fully engaged in the task. This was a major concern for some high-achieving students, who believed that they were likely to receive lower marks for group assessments, as compared to their individual assignments. As student E claimed,

> It is way less stressful for me when the group assignment marks are not a big component of the course [overall marks] … I do not want my HD (high distinction) to be determined by others that I do not know … So, I always hope that the group assignment is [only] twenty to thirty percent, not more than that.

The implications of group assessments on the student's overall grades are dependent on the weightage assigned for the assignment in the course. Some students prefer a low weightage for group assignment and for the cumulative marks for individual assignments to outweigh group assessments. However, the weightage of the group assessment needs to be aligned to expected learning outcome. If it is too low, some students may not take the assignment task seriously which undermines the quality of student knowledge contributed to the Community Knowledge Triangle.

To respond to this situation, Academic P proposed another adaptive mechanism to ensure that students are responsible to their other group members.

> I usually include a peer review component in group assignments … I like to get students to evaluate the contribution of their other group members based on core competencies agreed in the team at the start of the semester.

In a peer review, the academic entrusts the students with the evaluation of core competencies expected in the group assignment. Since students may not be scientific knowledge experts, they are likely to evaluate their group members based on their efforts in completing the assignment, rather than based on the quality of ideas contributed. This encourages students to realign their peer expectations, and to demonstrate competency-focused behaviours in collaborative assignments. This approach facilitates more productive discussions as there is an exchange of student knowledge for

learning. Essentially, these findings suggest the importance of allocating marks strategically towards addressing the barrier of underperforming students in group assessments.

(4) *Team formation that balances diversity and familiarity.*

The academic introduced a governing rule for team formation, which promotes team diversity while allowing autonomy for students to opt for a familiar acquittance for the group assignment. The assignment was designed to be completed by four students. First, the academic allowed students to form pairs by themselves. Students paired with their friends or acquaintances. Next, the academic then randomly combined two pairs together for a group of four students. This method was a compromise, as the academic goal is to encourage diversity in the group, and students prefer to work with familiar peers in their group project. An interesting observation of this arrangement was that groups consisted of an even number of students, and in this context, conflicts due to differences of opinion could have a two-two deadlock when voting. This meant that members needed to discuss things further to arrive at an agreeable outcome. This could be even more challenging, because a student might need to choose a different idea from their close peer's in the earlier pair. The diversity in the group allowed for a wider range of ideas to be generated, while at the same time, the familiarity of the relationship between the students in the initial pairs gave them more courage to share their different opinions. As a result, the members generated a higher quality of ideas, which facilitated a 'whole-class' co-creation of knowledge.

Scholarship on Long-Term Impacts

The findings of this research presented key barriers and adaptive mechanisms for whole-class co-creation assessment which extend the Community Knowledge Triangle conceptualisation proposed by van Karnenbeek et al. (2022). These mechanisms facilitate meaningful value co-creation by reducing ambiguity in the learning context (the situation) and by increasing authenticity in relationships between academics, practitioners, and students. This contributes towards developing a collaborative learning community which thrives upon dynamic knowledge exchange and sense-making, rather than one-way knowledge transfer.

Reducing Ambiguity in the Learning Context

The specific situation or learning context provides a channel for academics, students, and practitioners to meet and transfer knowledge. It constitutes the structure for the different types of knowledge to be transferred between these various stakeholders. Ambiguity in the learning context or situation makes it more difficult for the groups to build strong relationships with one another. A poor relationship results in miscommunication, mistakes, and missing expectations. Essentially, the academics assume the primary role responsible for establishing the learning context for knowledge transfer to take place dynamically. The module leaders or chief examiners determine the learning goals for the modules, are familiar with the assessment standards required for the course, and they set the tone for others (i.e., students and practitioners) to participate in. Despite the best intentions, the barriers identified in this study from the situation (i.e., the assessment) resulted in some form of ambiguity for the different parties. When students do not have the required capabilities (Theme 1) or lack responsible and contributing teammates (Theme 2), they doubt that they will get the good results that they hoped for. The situation – or in this case the assessment – is ineffective for teaching and learning.

Academics are concerned that students may not understand or misinterpret the assessment task instructions. Students are unsure whether their answers will be well received for high marks. Practitioners are afraid that they might mislead the students and that would negatively influence their answers for the assignment. Hence, some might form the view that assessments are the worst situation for the Community Knowledge Triangle. However, the contrary perspective is that assessments are best suited for this purpose because they are powerful tools to engage students in the learning process. Students learn the most from completing assessments which are meaningfully and constructively designed according to learning goals. By using assessments, student knowledge can be compared with scientific knowledge and practical knowledge. The problem is that the three parties involved are all fearful because of the seriousness of what assessments entail. Therefore, reducing the ambiguity surrounding the situation (i.e., the assessment) through adaptive mechanisms such as allocating marks strategically for group assessment (Theme 6) would increase the appeal for adopting this approach.

A strong academic support (Theme 4) empowers the students and practitioners in the Community Knowledge Triangle to be more prepared to participate in the situation for teaching and learning. Both the involvement of practitioners and the adoption of a whole-class approach provide invaluable benefits to the students. However, the pursuit of these objectives may also introduce ambiguities in the specific situation. In particular, practitioners may not be particularly familiar with academic standards and rigour. Furthermore, a whole-class approach necessitates every student to be on board in the learning process. However, in a university context, where each student is expected to be independent learners, there is a likelihood that someone is 'left behind'. Yet, when key stakeholders are involved in the 'whole class assessment' process, effective transfer of different types of knowledge for co-creation takes place. As mentioned earlier, it is the ultimately the responsibility of the academic team to create this platform and situation.

For effective co-creation to occur among academics, practitioners, and students, it is essential to recognise the differences between their respective knowledge bases. Co-creation thrives when one party possesses valuable insights that complement the shortcomings of others. This symbiotic relationship illustrates how student knowledge, influenced by academic learning and personal experiences, can enhance both scientific understanding and practical application in the workplace. This intentional co-creation process is evident in assessments, where students contribute their perspectives in exchange for feedback from academics and practitioners. Through assessments, students not only showcase their grasp of theoretical concepts but also demonstrate their ability to apply this knowledge in real-world contexts. Therefore, assessments serve as bridges between academic theory and practical application, aligning knowledge gaps and enhancing graduate employability and adaptability in the industry.

Increasing Authenticity in the Relationship between Academics, Practitioners, and Students

This study underscores the role of authenticity that creates a conducive environment for relationships to be built between the academics, practitioners, and students in the group. It forms a strong foundation for genuine interactions and experiences that facilitate the flow of knowledge

exchange among the three parties. Several themes for barriers to whole-class co-creation of assessment associated with the different relationships are connected to the issue of the lack of authenticity. Several themes identified were connected to an individual's failure to present themselves authentically because of their inability to express themselves effectively – and students lacking confidence in approaching the assessment (Theme 1) and shallow student-practitioner collaborations (Theme 3). Authenticity allows individuals to share true opinions and to exchange useful knowledge, as opposed to the various parties taking roles and entertaining each other, and providing popular opinions that fit common assumptions.

Each group in the Community Knowledge Triangle needs to know their designated role in the situation (learning context) and the specific types of knowledge that they respectively specialise (e.g., academics are the masters of scientific knowledge and so forth for practitioners and students). The relevant adaptive mechanism enables students to have a certain degree of autonomy in the assessment (Theme 5) which allows them to contribute their best student knowledge to the co-creation process. However, there are bound to be knowledge gaps between student knowledge and practitioner or scientific knowledge. This is due to the subjectivity in social science knowledge where contradictions and disagreements may exist between different types of knowledge which open doors to new learning opportunities. The main objective here is not to conclude which type of knowledge is superior, which is contrary to the interdependent spirit behind the Community Knowledge Triangle, but for the learning community consisting of students, academics, and practitioners to acquire and share new knowledge arising from genuine authentic relationships established.

Managing team formation to balance diversity and familiarity (Theme 7) promotes authenticity between students for a whole-class approach, at three levels. First, there is authenticity between initial friends that will be shared with another unacquainted pair to form the team. This allows a basic level of knowledge transfer to take place. Having a friend in the team provides an affirmative and conducive start where preliminary ideas may emerge and shared with others. In addition, the diversity in the team encourages sharing of different opinions. This is a second level of authenticity from members balancing the tension between prioritising friendship and having better ideas. The assessment context necessitates students to

evaluate all ideas carefully because assignment marks are at stake. They are also forced to share their ideas in a personal attempt to give their best effort for own benefit, rather than remaining silent in group discussions in normal classroom activities. The earlier two levels of authenticity deal with intra-group relationship. The third level of authenticity arises from inter-group relationships within the larger class (befitting the whole-class approach). The assessment component advocates for some degree of competitiveness between teams and challenging students to increase their confidence in knowledge sharing to wider audience in the classroom. This adaptive mechanism as a moderated whole-class approach helps cultivate greater inclusion of diversity in the class and authenticity in knowledge sharing in the co-creation process surrounding the assessment.

Building a Collaborative Community Knowledge Triangle

The intentional efforts to reduce ambiguity in the learning context and also to increase the authenticity of relationships between academics, practitioners, and students serve as the cornerstones for a collaborative Community Knowledge Triangle to be enacted between the three said parties. The common goal of this community is not to compete to determine whose knowledge type is better but to collaborate with the aim of a vibrant knowledge exchange. This perspective is aligned to the 3C's model for co-creation suggested by McIntosh and May (Chap. 2). The test of whether there is collaboration within the Community Knowledge Triangle is when there is a shift from knowledge transfer to knowledge exchange. Knowledge exchange is an extension of knowledge transfer. Knowledge transfer is one-directional between two parties—teacher and learner. Knowledge exchange is when the positions constantly interchange between the two parties throughout the encounter. At times one party is the teacher and at other times they are the learner. The roles exchange and reverse over and over. Knowledge exchange permits effective co-creation to take place. In the case of the Community Knowledge Triangle which involves practitioners, the highlight is the potential of student knowledge to add value to practical knowledge where students are empowered to shape leadership conversations at the workplace.

Conclusion

This study highlights the barriers and adaptive strategies required to mobilise the Community Knowledge Triangle model in an undergraduate leadership course, through a portfolio assessment that aims to encapsulate a 'whole-class' assessment co-creation approach. The exploratory findings from this study highlight the need to reduce ambiguity throughout the process of the assessment design and implementation, and cultivate authenticity in building relationship and trust between students, lecturers, and practitioners. This process and underlying features are expected to facilitate a dynamic knowledge exchange, which is beyond knowledge transfer, to take place in a collaborative Community Knowledge Triangle. This is pedagogical model lays the foundation for further discourses to emerge in empowering university graduates in the context of Asian learning traditions, often dominated by individual or examination-based assessments. Beyond knowledge exchange, future research could incorporate a more comprehensive analysis of a 'whole-class' approach in the co-creation of student competencies and resilience for workplace readiness.

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CHAPTER 9

The Realities of Racism Through Student Narratives: Learning from a Higher Education Co-creation Project

Syra Shakir and Asiya Siddiquee

Introduction

[In this chapter, we adopt BAME as a commonly used term to ensure consistency with other public bodies and to benchmark against their data. We are aware that the terminology is currently at a discussion within the sector and there are several other terms being utilised although not one unanimously agreed upon.]

The Equality and Human Rights Commission (EHRC) monitors Higher Education (HE) providers including the Office for Students (OfS) and in 2019 published a report 'Tackling racial harassment: universities challenged'. In summary, this report highlighted that racial harassment is a common experience for a wide range of students and staff at universities across England, Scotland, and Wales.

It could be suggested that racism may not appear to directly impact nor affect so many because the vast majority of students in HE in the United

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Kingdom are white. According to HESA data, 72.6% of people starting undergraduate study in the 2019 to 2020 academic year were white and 12.2% were Asian, 8.7% were Black, 4.5% had Mixed ethnicity, and 2.0% were from the Other ethnic group (HESA, 2019). According to Universities UK (UUK), In 2019–20, there were 409,055 staff at UUK member institutions and of these 14.4% were Black, Asian and Minority Ethnic (BAME) staff (UUK, 2020). Therefore, it could be suggested that prioritising the needs of those with who one cannot necessarily relate or even empathise (Ryde, 2019) may not always happen.

Racial harassment has long lasting detrimental impacts on an individual's mental health, educational outcomes, and career. Racial harassment can contribute to isolation, low self-esteem, serious harm to mental health (EHRC, 2019), poor sense of belonging and not feeling part of the community (Bhopal, 2018). Students who experienced racial harassment said they were left feeling angry, upset, depressed, anxious, and vulnerable; 8% said they had felt suicidal. The report also found that students disengaged from university activities to preserve their safety, confidence levels and well-being. However, this meant a detrimental impact on their programme of study and outcomes. The report overall found that around 1 in 20 students explained that racial harassment caused them to leave their programme of study.

These findings present significant concerns for universities in terms of ensuring that students from minority backgrounds feel safe to engage with their university community. This report further highlights the importance of the current research explored in this article, which focusses on implementing effective interventions to improve belonging and feeling part of a community for students of minority backgrounds. There is evidence to suggest here that institutional and structural racism exists within the HE environment and that universities are not taking appropriate action to address this through meaningful reporting mechanisms and maintain a culture that dismisses complaints (EHRC, 2019). Changing the culture of an institution involves evaluating how we can dismantle structures that perpetuate racism (Sian, 2019). Much of this work, however, involves changing individual mindsets and perspectives; as it is people who make up a system and people who drive plans and actions (Shakir & Barker, 2019). The co-creation project outlined in this article, set about to facilitate safe spaces (Holley & Steiner, 2005) for students to share significant experiences of racial discrimination, to define key terms used in the field of

race equality and to develop recommendations to motivate the university community into taking actions.

Institutional Context

This project took place in a post-92 institution, located in the North of England. As part of this journey, the authors acknowledge that within university structures there continues to be an inequality for both our students and staff from minoritised backgrounds and the awarding gap remains. The Race Equality Charter (REC) is an Advance HE assessment process which involves continuous review and action to address racial inequalities by gathering feedback from university communities about their experiences (Advance HE, 2022). Prior to this co-creation project, the university's 2019 REC survey highlighted concerns that some of our students and staff from minority backgrounds had experienced racial discrimination on campus and also felt a lack of confidence in the institution taking appropriate action. With this at the forefront of a transparent and accountable approach, the university community was compelled to act.

The co-creation project was in alignment with the strategic priorities of the university including: the Race Equality Charter (REC) action plan, confronting racial inequalities, exploring the differential outcomes gap, Equality Diversity and Inclusion (EDI) action plan, our first-year race equality curriculum (recognised as the winner of the Whatuni 2021 award), informing learning and teaching strategy as well as inclusivity and innovative approaches to teaching, learning and assessment. By embedding our work within these strategic approaches, we demonstrate the strong value we place on the relationship with students as co-creators in their learning and teaching. This approach to teaching and learning at our university is underpinned by how we value and trust our students to be co-creators of their knowledge and understanding and how they can in turn then share their knowledge with their peers to bring about cultural systematic changes and changes in mindsets and perspectives (Romano, 2010 cited in Bovill, 2020). This mission sets out to support our students to graduate and go into the workplace as holistic members of the community, embodying and permeating equity and social justice which are at the heart of a successful society.

Understanding Co-creation

Co-creation is so much more than enabling students to be creative with their own ideas (Dingyloudi et al., 2019). It is about empowering students to lead on designing their learning and have a say in what is important to them personally (Cook-Sather et al., 2014). It is about students sharing knowledge with their peers and staff, to build their confidence and self-esteem and be ambassadors of their own wisdom. It also involves absolute dedication, compassion and care from staff to nurture relationships and build rapport with students of all different backgrounds with different personalities and diverse needs (Bovill, 2020). At the same time, there needs to be energy, enthusiasm and drive embodied by the staff involved which in turn will be instilled in students.

It is the authors' view that the university community consists of students and staff together as one body. We may occupy different roles and have differing responsibilities but the power dynamics between staff and students need to be constantly evaluated and dismantled to establish a 'relational pedagogic' approach (Bovill, 2020).

Rapport building needs to begin very early for co-creation projects and built gradually over a period of time to ensure there is trust, respect and common understanding of the aims amongst the group (Gómez & Suárez, 2021). When this is done successfully, the students involved are more likely to feel very personally invested in the project and its success, which in turn means their involvement and dedication to writing up outcomes remains positive and sustained.

Genuine student-staff co-creation projects are built and developed over time through mutual trust and respect. In addition to 'teaching with love' (Hooks, 2003) which is fundamental in our experience to building students' self-esteem and confidence whilst establishing long lasting connections.

The Role of Co-creation as a Tool for Decolonial Pedagogy and Curriculum

The authors would argue that a complete overhaul of how and what we teach at university is required to establish a decolonised curriculum which divorces itself from our current Eurocentric white academy (Leonardo, 2016). It appears that our current higher education system omits significant aspects of our shared connected history (Connell, 1997; Bhambra,

2014, 2016) and it is suggested that this is symptomatic of entrenched institutional racism which still permeates higher education and society at large (Dei et al., 2004; Shilliam, 2015).

University pedagogy and curriculum, dominated by white European canons contributes to the overall experience for BAME students in relation to engagement, belonging and marginalisation (Ahmed, 2012; Nwadeyi, 2016). Recent research indicates that BAME students are rarely provided with opportunities to negotiate, challenge, co-create, nor decolonise these white canons of knowledge permeating higher education (Bhopal & Maylor, 2014; Andrews, 2019; Rollock, 2016; Arday, 2019). The possibility of co-creation as a means to address racism in HE through a decolonised approach was the premise for this project and was developed to include student collaboration from across all undergraduate levels of study and alumni from various subject areas across the university. The project set out to co-create a safe space to collate personal stories from staff and students around racism, racial discrimination and the many forms it can take. These varied from microaggressions and ostracisation, to actual assaults experienced themselves or those they knew.

Students contributed in various ways including sharing personal experiences and re-enacting stories they had collated on behalf of other students and staff. All of the stories were compiled into a 'no frills' documentary video resource, highlighting the lived experiences of racism and microaggressions, including explanations and definitions of key terminology used in this field.

The video resource was used alongside an interactive talking workshop to initiate discussion about racism, to empower students to share experiences and narratives in a safe space and to motivate students to take individual and collective action in tackling racism. The call to action in instilling more confidence in students to challenge racial discrimination was pertinent if painful stories were to be shared. The video resource and the workshop were designed and delivered by students, for students.

The project was multi-faceted in that it not only generated findings, outputs and a supportive research environment, but was also used to complete credit bearing module requirements for students' professional work placements (second-year undergraduate module) and final-year (undergraduate module) research projects.

Methodology Embedded in the Co-creation Process

The completed co-creation project can be roughly divided into two stages – the first involving the development of the video resource around shared experiences of race and racism; secondly the empirical task to evaluate and explore the impact of the video resource from a student perspective, and in particular questioning its impact and call to action. The creation of the video resource was an organic and creative process providing insight into students' shared narratives around racism and racist experiences. This first stage did not necessarily have any research questions attached; the focus was on creating a safe space in which students could share their experiences, collate these narratives and create an artistic output (which in this case was a video resource). The second stage, consisting of the empirical aspect of the project, focussed on presenting the video to students and answering the following research questions:

- After viewing the video resource, what is student understanding of microaggressions/ racism/ racial discrimination and how has this impacted on students personally?
- How can students get involved in the call to action to challenge racial discrimination?

The value of co-creation was at the forefront of the project and underpinned all decisions regarding the project's actualisation. Co-creation requires significant input and commitment by not only students but also staff (Nkana, 2020). Managing large numbers of students across different levels, from different disciplines, with different module assessments is an extensive task. Scaffolding the design (McDowell et al., 2011) requires regular 'bite size' input by staff involved with ongoing easy communication approaches in between. For this project, the majority of the co-creation designing, planning and delivery took place within the online environment, due to the impact of Covid and managing the varying nature of student calendars (Hofer et al., 2021). This teaching and learning approach was agreed within the group from the outset. Communication occurred mostly through a shared space on Microsoft Teams. This helped significantly as all members were able to see 'FAQ's', keep up to date with developments, share stories and feedback, feel included, see how each other was contributing by growing and learning together as a community (Ali, 2017). This platform also enabled easier access to materials,

documents, resources for both community group sharing, editing, contributing and viewing. Indeed, one could argue that this emerged as a community of practice (Farnsworth et al., 2016).

Method of the Co-creation Research Process

Face-to-face meetings took place in autumn 2020 with the final-year students, alumni and staff involved. Once the plan for the project was developed, ethical approval for the project was granted by the university's Faculty Ethics Committee in February 2021. All the remaining project work including the resource creation, the empirical research undertaken, and the peer-to-peer teaching were carried out through online platforms due to full national lockdown from January 2021.

The first stage of the project was the creation of the video resource, and the final-year students, alumni and some first-year students were involved in collating narratives either from their own lived experiences or those of friends and family. Once the narratives had been gathered, the co-creation researchers (this term will be used henceforth to refer to the students, alumni and HE staff participating in the project) decided which ones would be re-enacted and filmed and which ones would be narrated. There was one on campus day of filming in 2020 (with no rehearsals) and none of the students were trained in acting. A lot of free styling and improvisation was used based on the narratives shared. It could be suggested that the nature of the stories were so moving that it somehow directed the students into assuming roles in the scenarios very naturally. The media staff member filming, commented on the students' exceptional abilities to perform in front of the camera despite them having never received any acting training nor any previous rehearsals having taken place. The final video resource featured all of the collated stories both re-enacted scenes and verbal narratives and was compiled by two Level 5 students who worked together from media and TV production as part of their professional work placement module. This video resource (which is approximately one hour long) is currently being shared on YouTube - Race Equality Project: The lived experiences of racism and microaggressions, an LTU student project - YouTube (see link in the reference list).

Once the video resource was created, the empirical stage of the co-creation project could be completed. This involved an interactive talking workshop as a student-led teaching tool delivered to first-year undergraduate students as a way of empowering them to become anti-racist and

challenge racism. An initial pilot was planned to a smaller cohort of first-year students in March 2021 followed by the official delivery in May 2021 as part of employability compulsory sessions preparing students for work placements in industry (from June to July 2021).

The co-creation researchers delivered the teaching workshop along with screening the video resource during three sessions to teach all registered first-year students (approximately 700 in total) from across the university. It was a co-created team teach approach with the final-year students and a staff member teaching online through Microsoft Teams to large cohorts of first-year students from all different subject backgrounds. The sessions were very well received, and students were actively engaged in discussing and sharing their ideas and difficult personal experiences.

Prior to delivery of the video resource and teaching workshop, student participants were informed of the research project and student teaching approach planned within their curriculum. This took place by the final-year students visiting first-year students within their online lectures with a staff member over a three-week period to promote the project and recruit participants for the focus group. Following this promotion activity, a number of students provided consent to participate in the focus group. During the focus group, semi-structured interview questions were asked to prompt discussion around the research objectives.

Furthermore, after the video and teaching workshop were delivered, student participants were issued with an online survey which asked questions about the teaching resource, including impact and action research objectives. Additionally, students who had provided written consent participated in focus groups to discuss in more detail the impact of the video, the call to action and ways in which the resource could be evaluated.

Participants

Focus groups took place during the initial pilot of the video resource to gather detailed feedback on its impact and call to action before it would be officially delivered to the rest of the registered first-year students from across the university. During this pilot, the video resource was delivered as part of a teaching session with around 60 first-year students across four undergraduate degree programmes within the Children, Young People and Families department. From this cohort, ten students provided consent to further participate in the focus group. The age range within the group was mixed, from 18 to 45, and there were nine females and one

male participant. The ethnicities were recorded as six white British, one white Northern Irish, one British-Pakistani, one Mixed white/British-Pakistani, and one Mixed white/ British-Black Caribbean/Chinese. The ethnicities and ages of the participants are representative of the ethnic diversity spread of the full student population at the university, whilst the gender proportion of participants was more females than males. The current student population at our university is approximately 22% of students who identify as Black, Asian and Minority Ethnic (BAME).

The focus group lasted approximately 1 hour and 15 minutes and was delivered on Microsoft teams. It was also consensually recorded, and transcription was auto generated but checked for accuracy.

The survey was issued once the video resource was delivered to all first-year students in attendance during the university's compulsory work placement period (around six weeks after the initial pilot). Approximately 450 students across the university from a variety of programmes attended the video resource session and 300 students responded to the survey. The demographic data of the survey participants was diverse, including students from all protected characteristics as defined within the Equality Act 2010.

Analysis of Empirical Data

Empirical data (in the form of focus group and survey data) was analysed to explore and evaluate the impact of the video resource. Qualitative data from the focus group was thematically analysed (Ayre & McCaffery, 2022) and the transcript was approached with the lens of grounded theory (Strauss & Corbin, 1990) applied in a non-prescriptive manner (Bolam & Sixsmith, 2002). The transcript was read repeatedly to develop coded themes based on ideas raised by participants, and this was then cross-checked across the data to gradually build momentum. In this manner, themes naturally emerged with the analysis being grounded in the experience of the participants. This qualitative analysis provided rich insight into the ways in which the video resource created an impact and its potential as a call for action. In contrast, the quantitative data was used to complement and supplement qualitative methods to provide a broad overview student perception of the video. As Tashakkori and Teddlie (2003) note, mixed methods allows the combination of exploratory qualitative methods with confirmatory quantitative methods. In this respect, the quantitative data provided another dimension with data breadth of exploration whilst qualitative data provided depth. Survey data was descriptively analysed to

provide percentages of agreement with statements, and these were embedded within the thematic analysis to provide support for the findings. Indeed, in terms of validity and reliability, it is recognised that mixed methods provide strength when approaching complex educational phenomenon within the educational sector (Ponce & Pagon-Maldonado, 2015).

Reflexivity: A Note on Safe Spaces and Sharing Narratives

We are women of colour working as academics in a HE institution in the North of England. We are very conscious of our own lived experiences and those of students and staff who have courageously shared their stories, which in turn have become *our* stories. Throughout our academic careers, we have been privy to numerous conversations with students and staff across HE and have felt and shared their pain together with our own. However, at the same time, we have felt frustrated that we have not been able to change things for the better in a way that was clearly measurable, obvious, or even timely. This scenario is described by Nicola Rollock (cited in Arday & Mirza, 2018) who documents the countless narratives people of colour hear from minoritised groups (including experiences of micro-aggressions, lack of progression, feeling isolated and not being part of the community) which results in the listener carrying a heavy burden of trauma. This can be exhausting for those involved and can even lead to burnout (Arday & Mirza, 2018). Hearing the narratives involved a mixture of emotions and responses. Some of the students and alumni shared first-hand accounts having been through such experiences as a regular occurrence which did not always come as a shock to the group, testament to our unfortunate reality. Several students and alumni demonstrated fluent empathy having heard such narratives previously. However, some of the particularly overt experiences of racism were difficult to hear and as a collective the group were deeply saddened. This brought the co-creation group closer together through connectedness of empathy and frustration at the same time but also a genuine motivation to bring about change.

We acknowledge that our positionality as academics in HE provides us with privilege (Hearn, 2012) which can be used to take meaningful action. We are acutely aware of the power within our positions and the moral obligation and duty to use our privilege for social justice work. A further aim of this co-creation project was to empower students and alumni to share their stories and the accounts of others; and to be part of creating a safe space and sharing expert knowledge of lived experiences as part of

their inculcation within a university striving to become anti-racist. This was an empowering experience for the student researchers and student engagement with the project was strong throughout. It is important to note here that all of the students received high 2:1's, firsts and exceptional firsts for their research project submissions, which could be indicative of their commitment to the cause.

Empirical Data: Summary of Key Findings

The focus group data provided insight into the way in which students had been impacted by the video. This section presents the key areas which emerged from the thematic analysis using supporting quotes and including relevant survey data.

One of the prominent aspects students discussed, was the knowledge gained by hearing about experiences and concepts of racism. In particular, by learning about some of the terms and definitions used frequently within the field of race and racism and the ways in which these are actualised and experienced. For example, for a white student, understanding and exploring the concept of 'white privilege' enabled her to consider her own positionality and to question the power dynamics which she previously took for granted:

> I know like for myself this has been a massive learning curve and like I've learnt a lot of things that I didn't know before. In particular about white privilege. And like the privileges that I hold as a white person. So I feel like learning about it has made me want to be more confident in questioning other people's views and opinions that are racist and like I'd like to use my white privilege as a positive thing and be able to have a voice for those who might feel more uncomfortable to say something in you know, like fear of being vilified…

Other key concepts and examples of experiences which students valued learning about included microaggressions and unconscious bias. This was support by the quantitative data, whereby 95% of students reported having a better understanding of the different forms of racism (including microaggressions) as a consequence of watching the video resource.

Another impact of the video resource was in terms of the emotions which is stirred within the students. During the focus group, the word 'shock' was most commonly used to describe how students felt about

some of the incidences divulged in the video resource. One of the strengths of the video was described in terms of allowing the viewer to understand and empathise with the lived experience of racism and its emotional impact. Students explained that whilst popular media and legal cases focussed on severe and concrete consequences of overt racism (for example financial or physical harm), the video presented valuable narratives which explored psychological and emotional dimensions of the pain and anguish caused by racism in its variety of forms. In support of this, 94% of survey respondents said this video resource made them think about their own understanding and feelings about racism and racial discrimination.

In terms of the evaluation of the 'call to action' brought about by the co-creation project, the focus group and survey data presented a positive picture. One student explored how she was now more aware of issues around race and would consider her own behaviour and that of others:

> I feel like it's definitely opened my eyes more to when she was talking about the unconscious bias. Yeah, and thinking about more so how society has allowed things certain things to become normal and I can't really give you an example, but I definitely feel like from the video I'm more aware to make sure that I as a white person, fully think about what I say and then also think and process what people are saying around me.

Another key aspect related to this 'call to action' was the description of 'confidence' the students now felt after having watched the video resource. This confidence was in terms of feeling able to confront racist behaviours or attitudes; and as one student summarised:

> I think after watching the video, I wouldn't mind if somebody said something offensive I think I would be more confident in saying, look you said something wrong…

Survey data also mirrored this, and 84% of students who viewed the video resource stated that they now felt more prepared and willing to call out or challenge racism/racial discrimination.

Overall the empirical data formed one part of an understanding around the impact of the co-creation project. A testament to the positive impact was that 98% of the students completing the survey stated that they felt the video resource and ensuring discussion was worthwhile. However, whilst the empirical data provides a discrete understanding around the

impact of the video resource, the impact of co-creation as a process in its entirety is much broader and will now be discussed.

Discussion

Considering the co-creation project holistically, we would argue that the project has been a success. The empirical data findings presented in this article, are a testament to the ability of the project to transform opinions and to evoke a desire to enact change in those students who viewed the video resource. However, this aspect is only one part of the impact of the co-creation project, and we must explore other unintended outcomes which have not been discussed thus far. This includes impact, outcomes and the added value from engagement in the process of co-creation and the links to achieving strategic institutional change.

Impact on the Co-creation Student Researchers

Co-creation student researchers were all very personally invested in the project's ethos as it spoke to them directly. The fact that it was tied to a credit weighted module, evidenced to the students how seriously the university values co-created student social justice activist work that also involves student to student teaching and knowledge exchange. A testament to this is the fact that the final-year students involved in the project received exceptional firsts, firsts and two high 2:1's. All projects were double marked and by a supervisor who was not involved in the co-creation project (as per protocol). It could be suggested that the high-quality submissions were because the student researchers co created the whole project from start to finish.

Following the progress of these students, nearly all of the final-year student researchers soon after graduation secured graduate level employment or places on postgraduate programmes of study. One of our alumni involved in the co-created project currently works as a staff member at our institution! Continued communication has been maintained with many of the student researchers which is testament to the rapport and relationships developed between students and the university when such value is afforded to student co-creation. One alumni is now collaborating researching with us in relation to young people from BAME communities accessing mental health services. Additionally, some of the graduates have since shared how they spoke about the project during job interviews as a real-life case

example of sharing knowledge and actioning change for social justice and equity. All of the graduates are in the field of community and social care/work.

This co-creation project was tied to a final-year research module (40 credit weighting) for the lead student researchers at level 6 and for the students at level 5, this project was tied to the credit bearing module entitled 'Professional Work Placement'. Co-creation student led projects which are credit bearing and have social justice at their core, can demonstrate institutional commitment to student voice, engagement, and call to action.

Impact on Student Participants

Several of the then first-year students who are now completing their second-year (i.e. Level 5) of undergraduate study have been genuinely inspired by this project and some have been involved in the subsequent co-creation project which is entitled 'Our Community Building and Belonging'; this co-creation project has been developed and advances the findings of the current co-creation project along with further student feedback and including NSS data and further focus groups undertaken as part of our REC action plan work. Furthermore, some of the same students signed up to following academic year's co-creation project! This illustrates how a full life cycle of all three years of an undergraduate degree experience can involve co-creation and social justice activist work from the outset all the way through to student graduation.

Impact on University Culture, Strategy and Practice

Student voice has been incorporated into the development of this strategy as our co-creation work has taught our institution just how much wisdom our student body brings to our HE community and the wealth of knowledge staff can learn from students. It also evidences how we properly action student voice and feedback and what they tell us genuinely matters. We are committed to accountability, transparency and action and this can only be implemented through genuinely co-creating policy and strategy with students.

One of the impacts of the co-creation project is that our new Learning, Teaching and Student Experience Strategy includes conversations about racism in a safe student-led way. It is housed on our university-wide race

equality in the curriculum VLE page, which is a shared interface for both students and staff. Our first-year race equality curriculum, which includes our work in creating safe spaces for our students, won the Whatuni award in 2021.

Since the co-creation project's completion, the video resource has been used for staff development as a race equality training tool in addition to inducting new staff to roles within our Students' Union. Furthermore, the resource has been shared within the sector through national learning and teaching conferences as a good practice teaching tool. It is also highlighted within our REC action plan which will be reviewed by Advance HE in January 2024 as we prepare for application to the silver award, which currently no university holds.

Why Student Co-creation for Social Justice and Equity?

There is much significance placed upon high attainment levels being reflected in league tables and university rankings (Atkins & Duckworth, 2019) rather than nurturing students to become socially just members of our community. This approach can lead to universities that under-valuing students' holistic learning needs such as an experience in HE which can support finding one's sense of self (Curren, 2007). Meaning practice focuses time on only preparing students for assessment (Bryan & Clegg, 2019) and missing out on key aspects of university experiences which can contribute to improving sense of belonging and feeling part of a community.

The value of an educational experience at university which leads to improved life opportunities through higher level employment (Curren, 2007) and not at the expense of harm to its community (all staff and all students) is of equal importance. Just as much as the graduation of a holistically rounded individual who strives for equity and social justice and feels that both they and their peers (students and staff) are all important and belong to one community where care, compassion and respect is afforded regardless of the role or position individuals occupy within the institution (Bhopal & Pitkin, 2020).

Unfortunately, this is not always the focus of university practices as outcomes are all targets driven in relation to degree awards and graduate outcomes, both of which continue to be poor for students of minority

backgrounds (Bhopal & Pitkin, 2020). This means that we need *all* students of any background to benefit from an educational experience which values not only a good degree but also the embodying of equity and social justice principles into practice. Building a community at university which values each member regardless of their background and where all students feel a sense of belonging. This would mean graduates leaving university with socially and morally just thinking and behaviours which they can put into practice into the workplace which could lead to changes in culture in wider society (Shakir & Barker, 2019).

Follow on Student Co-creation Projects

As aforementioned, the recent academic year's 'Our Community Building and Belonging' (Shakir & Siddiquee, 2023) project has built on the data and findings from this project and the co-creation projects planned for the new academic year 2022–2023, are built on student data and findings from the community project and so will continue moving forward. This approach to student co-creation puts students' creativity, voice, wisdom, contributions, research and their time at its heart through empowerment to affect positive change and improvement in HE for the student community.

A further aspect to note here, alongside this work, are the student and staff collaborations through the project 'Re:Tension, using film and the aftermath debate to tackle racism in higher education' (Shakir & Barker, 2019). This has involved co-creation on a number of levels through student and staff co-creation within our institution and nationally with staff and students from institutions up and down the country working together in creating safe spaces to share narratives and difficult experiences with commitment to implement specific actions within their respective universities. This involves follow-up review by our institution with individual universities and continued conversation and support, as we all remain on a journey together of eradicating racial inequalities and discrimination in HE. Our follow-up draws on the power of student co-creation to affecting change amongst other practical approaches using creativity and innovation in learning and teaching practice.

The co-creation projects that will be implemented in our new academic year (2022–2023) based on our student wisdom and expertise include the following strands under the banner of 'our community building and

belonging'; Specialist student guides, a socially just curriculum, decolonisation in schools, sharing insights and preparing for university, building belonging for first-year undergraduates and challenging inequality.

Concluding Reflections

There is still resistance and denial by many within HE who do not perceive racism and racial inequalities to exist and other protected characteristics such as disability are pushed to the forefront, side-lining the extensive inequalities that exist for our ethnic minority students (Gabriel & Tate, 2017).

This is a perpetuating ongoing challenge that cannot be necessarily documented within an institutional strategy action plan. To change the actions and behaviours of those who resist can only begin to take place through the organisation's leadership and drive (Shakir & Barker, 2019). This 'top-down' approach can bring about systematic changes but may not necessarily lead to changes in individual's mindsets. To effect change in this area, there requires ongoing, 'drip feeding' conversations, organisational data evidence continuously being presented and reviewed, making the work a key priority on everyone's agenda and accountability and review of any action plans robust and consistent (Brunsma et al., 2013; Shakir & Barker, 2019).

Within the current co-creation project, we moved away from the typical form of teaching structures adopted in HE to shifting the power dynamics of the 'educator and the student' and creating a genuine, authentic knowledge exchange which focuses on peer-to-peer communication. It was encouraging and motivating to see our students empowered to be ambassadors of their own wisdom.

In this manner, student-led and designed co-creation projects which can bring about systematic changes to benefit the student community are fundamental to empowering students. It is these kinds of co-creation projects which can add value to the sense of belonging and community-building for students in HE as students are empowered as agents within a community of practice for cultural and institutional change. Indeed, the future is not only bright, but also one which is co-created.

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CHAPTER 10

Co-creation in Higher Education amid Times of War: Exploring the Role of Student Representatives at the Faculty of Law at the University of Khartoum

Khadeija Elsheikh Mahgoub, El-Tayeb Murkaz, Mashair Idris, Mazin Hassan, and Saria Aman

Contextual Background

Established in 1902, the University of Khartoum (UofK) has a unique and prestigious position in Sudanese public life. However, this has not come without a price. Over the years, the university's students have had to adapt to the unsettled political life in Sudan and its ramifications for the institution's academic and non-academic activities.

Dedicated to our beloved homeland Sudan and its pride, the University of Khartoum.

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Co-creation is a form of student engagement in matters of importance to their academic and university lives. Defined as 'a process by which students collaborate with teachers in designing their own learning experience' (Katz, 2021), it involves stakeholders having balanced powers and responsibility, as explained by Jamil and Howard-Mathews in Chap. 1:

> Co-creation is an inclusive and shared approach to thinking, decision making, and implementation of plans in which the stakeholders hold power and responsibilities to enact any projected developments or changes.

Student representatives (SRs) have been identified as a form of student co-creation in higher education (Bovill, 2020). While the regular day-to-day role of an SR is quite clearly defined, it could be argued that their role in teaching, learning and institutional governance during times of war and political and public unrest needs further exploration.

Since the eruption of the 2018 Sudanese revolution, academic activities have been disrupted by several turbulent events: the Covid-19 pandemic, staff strikes, and student demonstrations. Sadly, the difficult period reached a crux with the breakout of the ongoing war in Sudan. All these events have taken their toll on the students' academic life. Details of the general impacts of war on Sudanese higher education can be found in the section of this chapter that contains the personal narratives of the co-authors.

This case study examines the context, nature and scope of the co-creation role played by SRs of the Faculty of Law (FL) at the UofK during the turbulent conflict period, which began in April 2023 and is ongoing at the time of writing. It investigates whether the role was extended to encompass both pedagogical and political aspects, as per the following description:

> [S]tudent engagement work (which encompasses much partnership and co-creation work) divides into two main areas of focus: the pedagogical and the political, with the former focused on learning and teaching and the latter focused on university governance. (Bovill, 2020, p. 1025)

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Significance of the Study

Occupying a strategic geographic position, Sudan has felt the negative impacts of various geopolitical factors. Over the years, it has experienced numerous periods of unrest and civil war.

This study spans the period from July to September 2023 and was driven by the following two research questions:

1. What co-creation roles do the SRs play in teaching and learning in times of war and public unrest?
2. How can there be a quality utilisation of the SR structure for co-creation purposes, in times of stability as well as non-stability?

With the ongoing war in Sudan, it is important to research how the conflict is affecting the co-creation role of SRs in the higher education sector. This study was co-created by staff and students of the FL. The two undergraduate students involved in this research were an official SR, and an ad hoc SR appointed by students due to the circumstances of war.

Institutional co-creation with students in research is an area that needs further investigation. There are various forms of co-creation in research, one being research with a selected group of students, such as class representatives (Bovill, 2020), and another being subject-based research and inquiry engaging undergraduates. This is the most common way in which students experience co-inquiry. Unfortunately, there are fewer examples of undergraduate research and inquiry being embedded across whole institutions (Healey et al., 2016). In this respect, this study is significant, as it features research between staff and students in relation to institutional governance issues during times of war.

Historical Background of Student Representation in Sudan

Luescher-Mamashela (2013) identified four cases that provide different rationales for student representation in higher education institutions. Arguably, all four take the form of a governing relationship between a higher and lower authority. Firstly, there is the politically realist case, where student representation in university decision-making is an issue of realpolitik, promising a more peaceful and orderly academic life. Here, students are internal stakeholders with a politically significant constituency

and should be involved in governing the university. Secondly, there is the consumerist case, where students have a role as both clients and consumers of higher education. Thirdly, with the communitarian case, the role and status of students is that of members, who are collectively engaged in the educational process and in university decision-making. Fourthly, there is the democratic and consequentialist case, where public universities may be considered 'sites of democratic citizenship', and student representation is a means for instilling democratic values and exercising democratic practice (Luescher-Mamashela, 2013).

Against this background, it can be argued that the origins of the student representation movement in Sudan are akin to the politically realist and communitarian cases. However, there are strong traces of the democratic and consequentialist case as well. The history of the Sudanese student movement goes back before the 1950s, with engagement in politics related to the independence movement in Sudan during the first half of the twentieth century, and extending to concerns over regional affairs such as the Lumumba case in the Democratic Republic of Congo and the Tripartite Aggression over Egypt in 1956.

Currently, both Article 24(J) of UofK Act 1995 (University of Khartoum Act, 1995) and Chap. 2 of the constitution of the Faculty of Law Students' Steering Association (FLSSA) speak about the role of SRs. Elements of co-creation can be traced in the latter, which states that the role of an SR is about embedding the values of democracy and raising the spirit of patriotism among students; working to reform the college environment and solve students' academic, social and administrative problems in cooperation with the competent authorities; developing and encouraging student activity in all its academic, social, cultural, sporting and creative forms, and consolidating the social fabric among the college's students, administration, professors, and employees; ensuring that students are free to exercise their constitutional right to expression; developing their intellectual, methodological, academic and legal capabilities and skills; working with all other components of the university towards the return of the UofK Students' Union; contributing to the development of the university's external community, with a focus on legal awareness; and consolidating relations with external academic institutions and organising student exchange programmes (Steering Association of the Faculty of Law Students, 2021).

Personal Narratives and Reflections of the Co-authors regarding Co-creation during the Ongoing War

In conformity with the co-creation spirit of this research, the following sections are self-reflections and narratives of the five co-authors of this chapter. Each reflection covers the individual co-creation role played by the co-author during the period following the outbreak of the war.

The Dean

None of the UofK's employees could have imagined that the war that broke out on 15 April 2023, between the Sudanese Armed Forces and the Rapid Support Forces, would have such catastrophic effects on the state's health and educational infrastructure and facilities, including universities in Khartoum State, where studies have been suspended since the eruption of the war.

The conflict made it impossible to undertake formal studies in higher education institutions in Khartoum State for a while, as well as in other states of Sudan that were also affected. Some facilities have become a haven for war-displaced people from Khartoum State and states that have witnessed tragic events, including other parts of Sudan.

As a result of this, the university administration made an effort to preserve the teaching and learning process and take into account the future of students. This coincided with some students expressing their willingness to continue their studies through electronic/online media. The university administration, represented by its Council of Deans and the Secretariat of Scientific Affairs, decided to adopt this method and circulate it to colleges and schools for consultation, taking into account the flexibility needed to enable the majority of students to study regularly online, given that the war had and continues to have a serious impact on the availability of internet provisions.

Based on the above, we at the FL decided to take the necessary measures to implement e-learning at different levels of study. These measures included the formation of an E-Learning Committee (ELC) entrusted with preparing a comprehensive study on the possibility of implementing e-learning at the college, in terms of providing the necessary aids for professors and students (communication network, devices, and other aids), in addition to determining the location of all students following the eruption of the war.

The ELC submitted a comprehensive final report, which was conducted after receiving the vital information from the FLSSA, and effectively implemented all requirements until the approval of the proposal by the Faculty Board.

I would argue that the motto of their work was cooperation and trust in the role of SRs and coordinators.

The Vice Dean

The ongoing war, with the fighting concentrated in the capital city of Khartoum, has had serious repercussions for the higher education sector.

Accordingly, the FL students, through their official association, communicated with the FL regarding the possibility of online learning. Meanwhile, the university leadership also started communications on the same subject and stressed the importance of studying the situations of the academic staff and students living in conflict zones and non-conflict zones as well.

Being appointed as the Head of the ELC, my strategy drove me to continue cooperation with students through the FLSSA to achieve our task of establishing an online teaching and learning system during such trying times. The report submitted by the FLSSA proved to be vital, as it provided important missing information regarding the situation of students after the war erupted.

Despite the complex situation and challenges facing the work of the ELC, this situation helped me find light when it was dark. Through co-creation with students (the internal stakeholders and democratic representatives), we supported each other. Together, we brought to life the already existing regulations within the university regarding the role of student representation.

Moreover, this challenge taught me, as Vice Dean, that through co-creation with students, on the one hand, we can deliver the educational goals of the university to the areas affected by the war, while, on the other, students become co-creators in their own education and are engaged in decisions as both stakeholders and democratic representatives, as well as becoming equipped with important skills of creativity, collaboration, adaptability, self-direction, etc.

The Secretary to the ELC

The war created an atmosphere of great shock. No one expected it at all. It took a good four months until I started receiving communications from what I term ad hoc SRs inquiring about the possibility of online learning. Meanwhile, the university leadership also started communicating with staff on the same matter. The formation of the ELC within the FL resulted in my appointment as the Committee's Secretary with powers to directly communicate with students for cooperation and co-creation purposes.

Due to the war, important data about students, their safety, and online access to teaching and learning platforms was all missing. Formal and ad hoc SRs, at the request of the ELC and on their own initiative, provided this valuable information to the FL through the committee, which in turn finalised all preparations for the initiation of online learning.

The true spirit of co-creation with SRs was manifested in the amount and the type of information provided by the SRs. Despite all efforts on the side of the faculty, it would not have been possible to establish online learning without this valuable information.

The ELC, SRs, the report by the FLSSA and the report of the ELC were the cornerstones for the establishment of online learning. SRs gained the trust of the faculty and other students. This trust enabled healthy co-creation between the faculty and the FLSSA regarding the formation of the online learning process during the ongoing war.

President of the FLSSA

Initially, after the war broke out, the FLSSA was in constant contact with the faculty administration, seeking the transition to online teaching and learning. Later, the nature of our contact changed due to the university's Deans' Council issuing a decision on the transition to remote learning. This time, we were seeking to know the practical steps following the Council's decision, and discussing the role students could play. We were inquiring about the merits of the decision and how to turn it into reality. We clarified our full readiness to cooperate to preserve the academic interests of students, as one of the main tasks stipulated in the constitution of the association.

The administration welcomed and stressed the need for cooperation and co-creation in this matter. I believe that this cooperation came about for two reasons: firstly, the existence of a democratically elected student

body; and, secondly, the seriousness of the critical circumstances that the state was going through. In the following paragraphs, I will detail this argument.

Significance of the Existence of a Democratically Elected Student Body

The existence of a democratically elected student body is the first guarantor of students' rights, because of its ability to represent students fairly and express their interests and concerns. This is supported by the fact that it's an elected body from among all students and has a structure (legislative and executive levels) and regulations that govern and organise its work (Steering Association of the Faculty of Law Students, 2021).

This encourages the administration to cooperate and co-create with students and facilitate communication with them, and this is certainly better than students being dispersed and not united.

The Seriousness of the Critical Circumstances that the State is Going Through

Overall, calamities which descend on peoples and countries can encourage collective and cooperative action to alleviate the impact of circumstances and survive them through the integration of roles.

The ongoing war has pushed us to work together in various aspects of our lives. In the field of higher education, students, professors, administrators and everyone else involved in the academic process need cooperation and joint work in order to resume studies in a way that preserves the rights of students and professors at the same time and takes into account the different circumstances to which they are exposed.

Based on such a strong need for co-creation and cooperation to establish online teaching and learning, the faculty administration requested the FLSSA to provide a detailed report on the missing information regarding the current conditions of students following the eruption of the war, if possible.

This met the association's desire to know the conditions of its students in order to preserve their academic rights and ensure that they would not be affected by the process of resuming studies. The FLSSA issued a decision in accordance with the provisions of its constitution to form a committee to study the conditions of students in this regard.

The decision specified the committee's authorities and its student members. The committee was formed of six qualified undergraduates with a wide diversity—some of them are part of the various structures of the

association, and some of them are from the General Assembly, which includes every undergraduate student of the faculty (Steering Association of the Faculty of Law Students, 2021).

I always wondered what would it be like if the students were not organised? I think that to a large extent, we would not have been able to achieve what we have achieved, because it is not easy to carry out work such as forming a committee with specific powers, making a questionnaire and distributing it to college students, communicating with students via the internet, phone calls and even text messages to make sure that they fill out the questionnaire, and then analysing the data and issuing a comprehensive report with the results of the questionnaire; rather, such work requires a degree of organisation and institutionalisation, especially when considering the ongoing war situation and students' minimal expertise.

Public and political unrest in Sudan had taken its toll on the existence of university student bodies. Despite their unique and long history, there had not been a students' association since 2010. As the President of the FLSSA and a student in my final year, I had experienced many difficulties due to public unrest in my academic years, and it was clear beyond any doubt that a body representing students had to be created.

In conclusion, the co-creation and cooperation of stakeholders and representatives in the development of plans and policies is a model situation that all institutions should aspire to, because the contribution of both parties from their different positions reflects divergent views and contributes to the effectiveness of any solution or any plan. No one is better able than the stakeholder and representative to express their interest and point of view. Therefore, I refer here to the importance of organisation and institutional co-work and co-creation as a guarantor of rights and effective contribution.

Ad Hoc Student Representative

During Sudan's armed conflict, the impact on the educational system has been profound, leaving students, including myself, uncertain about our future. However, this hardship sparked a resilient spirit within me and my fellow students at the UofK. We recognised the need to collaborate and find solutions amid the chaos.

Our initial challenge was to implement online studies, a task we approached methodically using the 'why' method. First, we questioned why online studies hadn't commenced, pinpointing a possible lack of

initiative as the core issue. Second, we explored why we hadn't taken the initiative ourselves, discovering that we were accustomed to traditional study methods and tended to wait for the administration's instructions and initiatives. Third, we delved into why we relied solely on instructions without presenting alternative options to the administration. This inquiry revealed that we lacked a central focal point, amongst students, to manage communication and logistics effectively. Fourth, we examined why no focal point existed, finding that no one had been selected for this crucial role. Lastly, we questioned why a focal point had not been appointed yet, uncovering that the students' association had not been formally informed.

One characteristic our esteemed university is renowned for is the strong bonds students form with each other and the influential student associations that thrive within its campus. To address this, led by the spirit of resilience, I took the initiative to contact the FLSSA's president, seeking support and cooperation. With encouragement from the FLSSA, I volunteered to be the focal point and coordinated efforts with the administration. The second step involved reaching out to the administration, which proved to be a seamless and highly supportive process. We received valuable guidance and encouragement to proceed and were provided with the necessary focal points to establish contact, facilitating our efforts to move forward effectively.

Accordingly, to tackle the complexities, we broke down the process into manageable steps. We started by communicating with some professors to gain their input and advice through every step, and then we conducted a comprehensive survey to understand students' needs. This information was also requested by the FL. The FLSSA formed a committee, comprising of six elected and non-elected members, to ensure inclusivity and equal opportunities in gathering survey responses.

The committee divided tasks into subgroups: one focused on survey design and communication, another on data analysis and the third on compiling an official report.

The trust of the students and staff was built over time, as every selected committee member was carefully chosen for their hard work and integrity. Collaboratively, we thoroughly studied the survey requirements regarding both the short- and long-term aspects, analysed the gathered data and prepared a detailed report.

This report, reflecting the collective voice of the students, was approved by the president of the FLSSA and shared with the administration at their request so that they could take data-driven decisions that would enable the implementation of the online learning system.

Through unwavering determination, co-creation and a structured approach, we have been empowered as students and the administration to navigate the challenges posed by the armed conflict in Sudan and establish a successful online learning system tailored to the needs of both parties: students and professors. By proactively seeking solutions and working together, we are paving the way for a brighter future, ensuring that even amid the challenges posed by the effects of war, the education system thrives.

Environments of War and Co-creation

Following the outbreak of the war, we were faced with a challenging situation, as it interfered with the overall process of teaching and learning. War has interfered with the 'how' of reinstating ourselves. How should we conduct ourselves as the parties involved in this? This question is not only about the nature of the assistance that our faculty needed from the FLSSA, as this could differ from one institution to another. The fact is that we have all been negatively affected by the war, and we needed the students to co-create with the FL the teaching and learning requirements for this time. Torn and Whitaker (Chap. 6) discuss the benefits of co-creation for all the parties involved, and, in this vein, we wanted to have true co-creation that would be beneficial for all parties, including the institution (the FL).

Let us recognise the following three components of co-creation: namely, its context, the parties to it and its scope. So, co-creation in our instance was about the choices we made regarding how we would conduct our teaching and learning. The challenge has been that the ongoing war environment interfered with these choices and had a direct impact on them. It interfered with all components of co-creation.

Areas of Focus

In retrospect, we say that innovation was essential to our co-creation, which happened during very challenging circumstances. The following summarises the three components of this co-creation: its context, parties and scope.

Context The context of our co-creation was a calamitous and destructive war (SUNA—Sudan News Agency, وكالة السودان للأنباء, 2023). The co-creation was happening in an unprecedented situation for us. Co-creation

was inevitable, which proves its importance in higher education institutions. Within a war context, such faculty-wide co-creation (Bovill, 2019; Steering Association of the Faculty of Law Students, 2021), if sensibly achieved, can help enable the maximum use of available resources, which answers the question about why co-creation is needed for both students and the institution.

Parties The ELC worked and co-created with the FLSSA and members of its committee regarding institutional restoration during a time of war (Bovill, 2019). Several arguments could be raised about students lacking relevant experience. In this respect, trust and confidence in the FLSSA were of vital importance.

Scope and Focus There was an innovative approach to institutional governance during the ongoing war—in particular, the FLSSA co-created and contributed to the governance and management of the teaching and learning process (Healey et al., 2016). It was not a hierarchical process (Arm, Chap. 3) but rather a collaboration on balanced levels (Chap. 1).

Methodology

After obtaining ethical clearance from the university's research ethics body, we conducted a descriptive case study to authenticate the arguments in this chapter, as it is a 'research method used to describe the existing phenomena as accurately as possible' (Atmowardoyo, 2018). The research utilised an electronic questionnaire distributed among relevant FL students through various channels. It included 19 questions exploring the nature of the role played by SRs during the period following the outbreak of the war. The questions addressed both the positive and negative sides of things and what students expected to see from SRs during such challenging times.

To guarantee that the participants fully understood the questionnaire, we provided Arabic language copies. To guarantee anonymity, no identifying information was collected, and participants were free to choose whether to participate.

All participants were undergraduate students of the FL during the research period. We measured their overall interaction with the FLSSA regarding the teaching and learning process during the period studied. The war situation and lack of internet access limited the number of respondents to 41 undergraduate students. A pair of questions at the start of the questionnaire confirmed that the respondent belonged to the FL student community and requested their level of study. The additional 19 questions concerned the type of communication and support students had received from the FLSSA, and their trust in it (Advance HE, 2024). All items were rated on a five-point Likert scale.

Statistical Analytical Processes

We used SPSS version 25 to analyse the questionnaire data (Clark et al., 2019). We calculated the means and standard deviations of the responses and rated them as follows:

Strongly disagree: (1–1.80)
Disagree: (1.81–2.60)
Neutral: (2.61–3.40)
Agree: (3.41–4.20)
Strongly agree: (4.21–5.00)

The range for the Likert scale values (5 − 1 = 4) was determined. The range was divided by the number of columns in the scale (4 ÷ 5 = 0.8) to determine the real length of each response range, which was equal to 0.8. This was added to the number for the first response, 1, to obtain the high value of the first response range—that is, 1 + 0.8 = 1.8. If the mean of the responses for a question was located in this range (1–1.8), then the overall response was 'strongly disagree'. The second range of responses started at 1.81 and finished at 2.60 (1.8 + 0.8 = 2.6). If the mean was more than 1.80 and less than or equal to 2.60, then the overall response was 'disagree'. By adding 0.8 to the value 2.60, we calculated the third range (2.61–3.40), 'neutral'. A mean in the range 3.41–4.20 corresponded to 'agree', while a mean that was in the last range (4.21–5) referred to an overall response of 'strongly agree'.

Validity and Reliability

Reliability is the degree to which test measures are free from error and therefore yield consistent results over time and across situations. Reliability can be assessed on two dimensions: repeatability and internal consistency. Reliability scores are expressed numerically as a coefficient. A coefficient score will be 1.00 if a test is perfectly reliable. A high coefficient of at least 0.70 is required to indicate an acceptable degree of reliability. Generally, a minimum alpha of 0.60 suffices for early stages of research. The reliability of the scales was established by utilising Cronbach's alpha: this was 0.725, which is considered acceptable for this type of research.

Validity of Internal Consistency

After ensuring the validity of the study tool, the Pearson correlation coefficient was calculated to confirm the questionnaire's reliability. This is the most widely used method for analysing relationships between variables and is quoted as the *r* coefficient. The Pearson *r* describes linear/straight-line or direct/inverse relationships (Table 10.1).

The Pearson correlation indicates a strong consensus within the questionnaires completed by the respondents. Therefore, the results demonstrate a strong positive correlation between the statements and the overall questionnaire, confirming the high reliability of the Pearson correlation for practical application in the field.

Table 10.1 Pearson correlation coefficients for the questionnaire

Sec1		*Sec2*		*Sec3*		*Sec4*	
1	0.624**	6	0.741**	11	0.624**	16	0.748**
2	0.629**	7	0.514**	12	0.629**	17	0.957**
3	0.517**	8	0.684**	13	0.517**	18	0.517**
4	0.523**	9	0.743**	14	0.523**	19	0.369**
5	0.201**	10	0.695**	15	0.201**		

*significant at 0.05 level

** significant at 0.01 and 0.05 level

Respondents' Characteristics

Out of the target population, there were 39 participants in this study, as two questionnaires were rejected because the respondents failed to confirm that they were undergraduate students at the FL during the studied period. This information and students' year of undergraduate study supported better understanding of the respondents prior to proceeding to the advanced statistics. There were 9 first-year students (23.1%), 8 second-year students (20.5%), 5 third-year students (12.8%) and 17 fourth-year students (43.6%).

The above result shows that the largest proportion of participants were in their fourth year of undergraduate study. This probably coincides with the FL prioritising provision of teaching and learning for finals.

Findings

Inspired by Bovill's typology on co-creation (Bovill, 2019), we categorised the results into three key themes: firstly, co-creation regarding the negative effects of war; secondly, co-creation with regard to communication and support which the FLSSA provided for other students; and, thirdly, co-creation with regard to expanding trust and confidence in the SR system. All themes were concerned with answering the two research questions on SRs' co-creational roles during wartime. Importantly, all themes were also of relevance to the expected role of the FL during war.

Discussion and Analysis

Negative Effects of War on Students

This theme focused on the ongoing war as the context of the faculty-wide co-creation (Bovill, 2019). The results showed that most of the study sample strongly agreed that the war, which severely disrupted academic and university life, had negative effects on the teaching and learning. Many had to flee Khartoum. Students and staff were dispersed to non-conflict zones. The FL had to reposition itself under the general auspices of the university. Each faculty was instructed to pursue possible opportunities for online teaching and learning. Within this horrific context, the idea of co-creation with students developed. Students themselves were mostly organised through the FLSSA, which already had its institutional responsibility towards students and mainly communicated under its umbrella, as per the narrative of the ad hoc SR co-author.

The results reflect the disruption to academic pursuits and the broader emotional and psychological toll on students. Arguably, this disruption is seen in the delayed learning process, increased stress, and sense of uncertainty about the future (Kurapov et al., 2023). A high number of students also felt that their rights were violated. During such difficulties, the leadership of SRs—who were themselves going through intense difficulties—was greatly needed. Arguably, in this context, co-creation with the FL, rather than any other form of partnership, was the ideal choice for many institutional and educational issues, as it placed responsibility on all the stakeholders, which, as Jamil and Howard-Matthews (Chap. 1) argue, ensures equality. SRs were also able to share their own experiences, which enhanced the effectiveness of co-creation. As stated by Katz, co-creation has 'an emphasis on student perspectives, it is based on constructivist learning theory, which says learners construct knowledge and meaning from lived experiences rather than from passively taking in information' (Katz, 2021).

Over the years, the students' movement in the UofK has frequently been involved with issues of governance, engaging and co-creating in the interests of students as citizens (Bron Jeroen, 2022). As argued above, it is a movement of a unique nature. This is supported by the above statement of the President of the FLSSA. He emphasised the significance of the existence of a democratically elected student body, with structures being the first guarantor of students' rights (Steering Association of the Faculty of Law Students, 2021). He argued that this provides a strong base for co-creation between the faculty and the SR: 'This would encourage the administration to cooperate with students and facilitate communication with them, and this is certainly better than students being dispersed and not united.' All this benefits democratisation, as well (Bovill, 2019).

Initially, the faculty needed vital information so as not to put the teaching and learning process on hold. For example, the faculty needed to know how many of its students were in insecure conflict zones. The FLSSA therefore conducted investigation activities to gather this information. The scope of SRs' co-creation extended to include provision of information required by the FL to communicate with its students, and ensure they were safe and had access to the internet. Indeed, it was a shared co-creation initiative, engaging all stakeholders at all phases of the process (Ansell & Torfing, 2021).

The data they collected proved to be greatly useful and supported institutional governance-related decisions. Students went on and collected information beyond that requested by the faculty, adding a quality aspect to their co-creation, and conveying the trust they received from their peers. This indicates that the co-creation relationship, despite coming into existence due to the war, was healthy and involved proactiveness and autonomy on the part of the SRs.

Communication and Support

These are vital in times of war and crisis (Mahgoub, 2022; Gerada, 2021). This is true in several professional contexts, including academia (Fernandez & Shaw, 2020). Communication is not only the transmission of messages, but 'involves a complex arrangement of verbal and nonverbal, intentional and unintentional, and planned and unplanned messages' (Ruben & Gigliotti, 2016).

Table 10.2 below presents some results for the statements relating to meaningful communication and support, which are relevant to the research question, 'What co-creation roles do the SRs play in teaching and learning in times of war and public unrest?'

The results indicate that students needed to communicate with someone and convey the fact that they had utilised the SR system. Communication was also required from the FL; therefore, the faculty-wide co-creation with the FLSSA was an important tool in such difficult times (Bovill, 2019).

Table 10.2 Means and standard deviations for some statements on communication, support, availability and outreach

Statement	*Mean*	*Std. D.*
4. I tried to contact the college to resolve difficulties related to the continuation of the educational process during the war.	4.05	0.943
6. I tried to communicate with the student coordinators and representatives to solve the difficulties related to the continuation of the educational process.	4.30	0.887
7. I tried to contact the FLSSA to solve the difficulties related to the continuation of the educational process.	2.10	0.981

Communication by SRs during the war environment entailed, by necessity, an element of support. SRs' role had therefore evolved from mere academic liaison to vital support system. The high scores for some statements in Table 10.2 suggest that students tried to find solace and receive practical assistance from their peer-elected bodies. However, this required the SRs to possess skills in crisis management and psychological support, beyond those needed for traditional academic liaison. The President of the FLSSA emphasised that the amount and quality of work needed from the SRs required a degree of organisation, especially when considering the ongoing war situation and the minimal expertise of students. It is important to emphasise here that the FL was playing a similar role; therefore, SRs performed an extensive and visible co-creational role. The SRs made their presence felt by being available and reaching out to students and staff.

Possibly, the results also show that students were aware that the FLSSA had formed a committee related to resolving some of the difficulties related to the continuation of the educational process during the war. Arguably, while fewer students contacted the FLSSA as such, the results show that some did and that the FLSSA was an avenue for support during this difficult time.

Expanding Trust and Confidence in, and Reliance on, the FLSSA

The second research question asked: how can there be a quality utilisation of the SR structure in times of stability as well as non-stability (Table 10.3)? The significant feature of these results is that there was confidence in the

Table 10.3 Statistical analysis of the response to questions on expanding trust and confidence in the FLSSA

Statement	*Mean*	*Std. D.*
8. I had great confidence that the FLSSA would solve some of the difficulties and problems related to the continuation of the educational process during the war.	4.12	1.116
9. FLSSA efforts and support in resolving the difficulties were well known to other students.	4.28	1.317
10. I had confidence that the FLSSA committee would resolve some of the difficulties and problems related to the continuation of the educational process during the war.	3.07	1.432

Table 10.4 Means and standard deviations for some survey statements on trust and confidence in, and reliance on, the FLSSA

Statement	*Mean*	*Std. D.*
16. I trust the elected and unelected representatives to solve problems related to the continuation of teaching and learning during the war.	4.21	0.811
17. I trust the FLSSA more than I trust FL to help with these problems.	4.01	0.926
18. I trust the FLSSA more than I trust the FL to help with problems related to my life and university rights during the war.	4.49	0.780

SRs. This means that they were capable, available and providing much-needed support. Certainly, the student representation system earned the trust and confidence of other students of the FL (Table 10.4).

While the results showed the expanded confidence in SRs, one notable finding is that some preliminary results suggested that, in this catastrophic and chaotic war situation, some students might have developed greater confidence and trust in the FLSSA's ability to solve some problems and difficulties related to their life and university rights during the time of war. Indeed, the FLSSA had its own independent initiatives, which is an aspect of the concept of co-creation. However, this is not to suggest that the FL did not have such initiatives as well.

In this respect, it is important for the FL to understand why some students had expanding confidence in the role and nature of the support and services that the FLSSA was providing. Certainly, the FL was working extremely hard to fulfil its expected role and to co-create with the SRs in many of its initiatives; therefore, it is important to understand why such preliminary results emerged. It is likely that the students were not aware of the ongoing co-creation between the two parties, especially as the FLSSA had its own initiatives at the beginning. If so, this might suggest that during such a difficult situation, the co-creation role of the SRs overshadowed that of the institution. It is also possible that peer trust played a role in this outcome—stemming both from their social ties and from the democratic process of electing SRs, students may have felt that the SRs' authority was legitimised as a result. Subsequently, a sense of accountability between the students and the SRs was nurtured and a preference may have developed for a student chosen form of university governance. This investigatory step is important before jumping to any conclusion that a potential preference for an SR system over university authorities during

such difficult times reflects either a lack of alignment with student needs during crises, or a broader trend of distrust in traditional institutions. It is important to understand how the war environment affected the perception of co-creation among the students who were not aware of its existence or involved in it.

Key Takeaways

Student representatives (SRs) play an important co-creation role in teaching and learning and in overcoming obstacles that threaten its continuation in crisis and non-crisis situations. One crucial challenge the universities face during wartime is to maintain the teaching and learning process and reach out to all the students who have been dispersed, and SRs play a vital co-creation role in achieving this. They fulfil much-needed communication roles during times of war and calamity. Results indicated that, in such situations, SR bodies can effectively utilise their strong communication channels with their peers. They can reach out to and locate their dispersed colleagues, where institutions may sometimes fail.

The takeaways of this research are that a keen and meticulously managed co-creation approach between the university and student bodies, during wartime, maximises available human resources and contributes to the preservation of the institution's purposes. Generally, co-creation with students, whether during times of war or peace, indicates that institutions are maximising their use of their resources.

Times of war are mostly times of chaos. It is important, however, to remember that war is not a consistent environment; it can escalate or go through a quieter period. It can also be long or short, expected or unexpected. Also, institutions vary with regard to their needs. It is important to take all of these into consideration, as it will influence the co-creation choices being made to preserve institutions' intended educational activities during conflicts. Such an approach is expected to prevent higher education institutions from collapsing during times of war. Arguably, this is a form of resilience and a way of fighting back against the negativities of war.

There is growing interest in and research on student engagement, and co-creation is a form of such engagement. The co-authors of this study hope that it will shed some more light on this subject and help support universities by showing how they can re-evaluate their student engagement strategies. Student representation is among the processes that seek to enhance the student engagement and co-creation experience overall

and through times of war. The results suggest a need for universities to re-evaluate their engagement strategies with students and incorporate more student-led initiatives in crisis management. However, this requires that SRs possess skills in crisis management and psychological support, beyond those needed for traditional academic concerns. This study confirmed that SRs can provide reassurance to their peers during such trying times. They are also capable of suggesting and working on some good and reasonable solutions for the continuation of the teaching and learning process. In a co-creation framework, universities are expected to provide required training and enhance relevant skills during peaceful times to ensure that they are prepared for unexpected times of crisis. The findings have significant implications for educational and student representation policy in times of peace as well as war. There is a clear need for policies and strategies that support and strengthen student bodies, provide resources for mental health and crisis management, and facilitate effective communication and co-creational channels between students and university authorities.

The research showed that to prevent crisis-inflicted damage as much as possible and to prepare for the post-crisis situation, co-creation with SRs is paramount.

This study did not explore armed-conflict management, but it investigated some aspects of institutional management of war crisis situations and abrupt change, which are of great relevance to SRs' role in times of crisis, as stated earlier. Student co-creation during such difficult times as well as in the post-crisis world supports everyone to act efficiently and maintain tertiary education. The satisfaction of the student population at the Faculty of Law with the co-creation role played by its Students' Steering Association (FLSSA) during the ongoing war suggests that it was successful and effective. Students needed institutional communication, tailored support and continued provision of the teaching and learning process, and the institution made this happen through its effective co-creation with the FLSSA, utilising its powers and the resources available to it.

Finally, the co-creation approach adopted in conducting this research is in conformity with the spirit of the historical features of the student movement in Sudan. The scourges of war have severely affected the youth of Sudan. Institution-wide co-creation with elected and non-elected SRs strengthens the principles of empowerment and democratisation, which have always been behind the student movement in this country.

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CHAPTER 11

Life Gain: Using a Co-creation Approach to Developing the Socio-emotional Intelligence of a Foundation Year Student Cohort

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Introduction

The transition from school to university can be a difficult time for students. It is a time when students need to be supported to develop a sense of belonging so that they feel comfortable to stay in their chosen programme of study. It is therefore important to support and engage these students effectively so that they can succeed educationally. This chapter uses a co-creation approach to explore the 'life gain' of a small pilot cohort of students in the Foundation Year of a university business school in the South of England. A similar whole-class approach has also been applied by Teh and Chong in Chap. 8.

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Life gain in this context is a term which refers to how each student has personally developed. Specifically, the chapter explores the development of their socio-emotional intelligence following a programme of study which explicitly explored this subject, and the inherent themes, within an academic and professional practice module. The academic team worked with the students in a co-creation manner to enable them to develop their socio-emotional intelligence.

In Chap. 1, Jamil and Howard-Matthews provide a comprehensive definition of co-creation. For the purposes of this study, co-creation is about staff and students working together in a collaborative manner to discover and implement effective educational approaches (Bovill, 2019, 2020). To this end, and specifically to evaluate their life gain, students were asked to complete a socio-emotional intelligence self-assessment questionnaire during the first week of their programme, and again at the end of their year, so that a comparison could be undertaken to reveal any changes in the development that had occurred during the academic year. We wanted to know how effective the activities that we were undertaking to advance their socio-emotional intelligence actually were in practice. The socio-emotional intelligence questionnaire used for this study was previously devised by Devis-Rozental (2020). An alternative example of using a questionnaire approach to stimulate co-creation has been explored by Polkinghorne et al. in Chap. 4.

Enhancing the Preparedness of Students

Previous studies have demonstrated that many UK students feel ill-prepared for undergraduate study at university (Lowe & Cook, 2003), and as a result, many of these students leave university prematurely before completing their degree, often during their first year of study (Lee et al., 2019). For these students, the transition between school and university is simply too great, with many feeling overwhelmed and under-prepared for undergraduate study (Devis-Rozental & Barron, 2020). These students are known to experience pedagogical shock because of the change (Zhu & O'Sullivan, 2020).

According to both Prensky (2001), and Seemiller and Grace (2018), individuals born after 1980 learn and think differently from previous generations because they have been immersed in digital technology whilst their brains are still developing. Today's students within higher education in England are typically born after the year 2000 and are often referred to

as Generation Z (Singh, 2014). In fact, the Higher Education Statistics Agency (2022) reports that 60% of the current UK student body falls into the Generation Z age group, and this percentage is set to increase further over the next few years. In addition, the student body is now far more diverse than was the case for previous cohorts. This diversity may be represented by gender, ethnicity and/or socio-economic backgrounds. In approximately two-thirds of cases, these students are actually the first members of their family (excluding siblings) who have been exposed to a university education (Coombs, 2021, p. 9). Since they started to enter higher education, it has become increasingly clear that this unique generation of students requires, and expects, a different approach to their learning (Phillips & Trainor, 2014) and we, as educators, may need to adapt and evolve our approaches to teaching to accommodate this change.

Across the higher education sector in England, university retention rates have not improved, and according to the Higher Education Statistics Agency (2023), consistently over 7% of students do not continue their studies after their first year at university. In the case of 20 specific higher education providers (HEPs) targeted for a research study, data indicates that one in ten students have not continued their studies after their first year of degree-level education, and that whilst no significant progress may have been made in improving retention rates, those HEPs that are making a success of delivering a high-quality student experience, are likely to have higher rates of completion for their degree courses as a result (Mian & Richards, 2016). There is therefore thought to be a correlation between student contentment with their course of study, and student completion. How to increase levels of student contentment, and how to smooth the transition for students entering the higher education system for the first time, have now become important issues for discussion and consideration across the sector.

One mechanism being tested by some HEPs in England is the introduction of a 'Foundation Year'. According to the Higher Education Statistics Agency (Nathwani, 2019, p. 1), the purpose of the Foundation Year is to 'help students who may not meet the standard requirements for entry into university to spend one year developing the academic and soft skills needed to succeed in higher education'. As such, the Foundation Year can help to address social inclusion within higher education by mitigating barriers caused by a student's social, demographic, or economic background.

This Foundation Year concept has therefore quickly been adopted across the sector as a means to create a softer entry point into higher education for students who need additional transitional support (Devis-Rozental & Clarke, 2021). By 2023, a total of 120 HEPs in England had already started to offer a Foundation Year for at least some of the undergraduate degree courses being delivered, and this number has been increasing year on year (UCAS, 2023).

For the purposes of this study, a Foundation Year is a one-year educational programme which occurs before the traditional first year of an undergraduate degree course and should not be confused with the wider-known Foundation Degree which is a stand-alone qualification that students can undertake and count towards the first two years of a full degree programme. In contrast, the Foundation Year is a precursor to the traditional undergraduate degree route. It has the advantage of enabling the students to become part of the community of students studying the discipline area, whilst still providing them with a level of developmental support not typically available on a higher education course.

Students participating in Foundation Year programmes often include those who have been unsuccessful with their attempt to gain the full entry qualifications required for acceptance onto the first year of an undergraduate degree course, and those students who recognise that they are not yet ready to deliver the level of independent learning expected on such courses. Successful completion of the Foundation Year will normally enable direct entry to the first year of the chosen undergraduate degree, and in many ways, it acts as an extended interview to help the HEP assess the suitability of the student for continued study, and for the student to acclimatise to the requirements of higher education study within a protected and supportive environment.

At the time of writing, there is insufficient data available to make a conclusive case, however, the thinking across the sector is that successful completion of a Foundation Year programme may enable a smoother transition for students from school to higher education, with the result that when entering the first year of their chosen undergraduate degree course, these students will be better prepared to maximise their learning potential, and that this will ultimately impact upon a more positive student experience for both the individual and for the wider cohort.

By ensuring that students develop key skills that they will need to succeed in higher education during their Foundation Year, their transition to becoming independent and self-directed learners is expected to be

smoother and quicker. There can also be benefits to a student's sense of self, which gives them the confidence and resilience to continue their studies, especially if these programmes include opportunities to develop the soft skills they will need to succeed in their future academic journeys (Devis-Rozental, 2018; Devis-Rozental & Farquharson, 2020).

The benefit of this for an individual HEP is that it will reduce the need for academic staff to devote valuable time and resources to helping students develop these essential building blocks during their main degree programme, enabling them to concentrate instead on delivering subject-specific learning from the outset. There are therefore compelling financial reasons for HEPs to invest in offering a Foundation Year for key undergraduate degree courses, especially given the current turbulent and competitive marketplace (Chapleo & O'Sullivan, 2017; Polkinghorne et al., 2017).

The ultimate measure of any Foundation Year's success is the identification of a quantifiable reduction in attrition rates, both for the Foundation Year itself and for the subsequent undergraduate degree programme. In addition, increased levels of engagement and sense of belonging amongst those students who move from the Foundation Year, and onto a subsequent undergraduate degree programme, are expected as they will be better prepared for their future studies compared to those students directly entering higher education straight into Level 4 (first year) education.

There are also practical implications which need to be considered, and these include calculating the achievable 'return on investment' from the Foundation Year. Such investment considerations may include an expectation that students migrating from a Foundation Year into Level 4 undergraduate degree first-year studies, will exhibit improved standards of engagement, and learning/attainment, when compared to those students who are direct entrants into Level 4 studies. Furthermore, it is anticipated that these transitional students will be better able to cope with both their educational workload, and the expectations placed upon them. As a result, levels of engagement may be higher, and achieved learning gains may be more significant.

The case study presented in this chapter considers a cohort of students on a new Foundation Year being delivered at Bournemouth University in the UK. Bournemouth University is a medium-sized university, located on the South coast of the UK, with approximately 18,000 students. The undergraduate and postgraduate cohorts include a significant proportion of international students representing 120 different countries.

The development of the students' sense of belonging is explored over the duration of this Foundation Year. This development is discussed in terms of the evolution of their socio-emotional intelligence by evaluating each student's life gain before, and after, the provision of co-creation support. Joseph-Richard and Ringrose further explore the benefits of providing a space for individual exploration, reflection, and targeted skill development within Chap. 7. The research approach undertaken for this study is explained and detailed, followed by a consideration of the data collected. Finally, the findings of the research will be presented, and conclusions drawn regarding the potential value and future implications.

Socio-Emotional Intelligence

Socio-emotional intelligence (SEI) is defined by Devis-Rozental as being the 'ability to integrate feeling, intuition and cognition to acknowledge, understand, manage, apply and express our emotions and social interactions' in a way which is congruent with both place and context (2018, p. 1). Devis-Rozental further adds that the overall aim of SEI is to have a 'positive impact on our environment and to engage ourselves and others to be present, authentic and open; in order to achieve a sense of wellbeing and to build effective relationships in every aspect of our lives'.

Since all expressions of emotions are socially constructed (Gergen & Davis, 1985), SEI is distinct from emotional intelligence as it considers the social aspects of emotions as being key to their understanding and expression (Devis-Rozental, 2018). SEI also accounts for the impact that our actions and emotions may have upon others around us, and upon the environment in which we operate. In this way, being confident and articulate, whilst being narcissistic or selfish, cannot be congruent with being socio-emotionally intelligent. This emphasis on having a positive impact, which in turn creates prosocial behaviours, makes SEI distinct from emotional intelligence (Devis-Rozental, 2018, 2020).

Developing SEI in higher education is important as it can help students to develop the self-efficacy and self-awareness (Devis-Rozental, 2023), that they will each need to succeed both on their own personal educational journey, and subsequently in their professional career and home life (Devis-Rozental, 2018). This need for personal and professional growth is explored further by Islam et al. in Chap. 5. In addition, ensuring that students have opportunities for developing their SEI can have a positive

impact upon their student experience and ultimate learning outcomes (Devis-Rozental & Barron, 2020).

With an increasing number of students arriving to university reporting mental health issues and being largely unprepared for the higher education demands (Devis-Rozental & Farquharson, 2020), HEPS must find ways to embed activities which can help students build the resilience, confidence and self-awareness needed to succeed, and become the best person that they can be. Co-creation, with a focus on SEI, is thought to be an effective way of working together with students to achieve this. Shakir and Siddiquee further discuss the need to build students' self-esteem and confidence in Chap. 9.

Research Procedure

The research described in this chapter is based upon a small-scale pilot study considering primary data collection based upon self-reflective surveys, with ranking style answer choices for each question asked using a range from 1 (this is not me at all) to 5 (this is so much like me). Mahgoub et al. present a complementary example of using a reflective approach in Chap. 10.

In this study, the data collected is based on the personal perceptions and feelings of the participants involved in the study and is therefore subjective in nature. The 30 data collection questions used for this study have been sourced from the SEI self-assessment questionnaire developed by Devis-Rozental (2020, p. 26). For the purposes of this study, these questions are detailed in Table 11.1.

Face validity (Saunders et al., 2019) and discriminant validity (Bell et al., 2018) checks were undertaken to ensure that the question constructs had clear distinctions. The time-horizon for this study is longitudinal as the original data were collected at the start of the students' Foundation Year, and for comparative purposes, the final data were collected at the end of the students' Foundation Year. The same students were used for both the initial (Stage 1) and the final (Stage 2) data collections.

Data were grouped together so that all of the responses for each of the answer categories in the range 'Not Like Me' through to 'Like Me' were collated. It should be noted that the negative responses of 'Not like ME' and 'Somewhat Not Like ME' were combined. Similarly, the positive responses of 'Like Me' and 'Somewhat Like ME' were combined.

Table 11.1 Data collection questions (adapted from Devis-Rozental, 2020, p. 26)

1.	I know when I am happy.
2.	I like listening to what others have to say.
3.	I can always get motivated even when I have to do difficult tasks.
4.	I know when I am stressed.
5.	I never interrupt people when they are talking.
6.	I always meet my deadlines.
7.	I make friends easily.
8.	I usually like the way I look.
9.	I don't worry too much about things.
10.	I always know how someone is feeling.
11.	I always feel good about myself.
12.	I never leave things until the last minute.
13.	I know when I get angry.
14.	I can change my mood easily.
15.	When others are sad, I feel sad too.
16.	I know when I feel emotional.
17.	I know when someone isn't happy.
18.	I can put bad situations into perspective quite easily.
19.	I get along with most people.
20.	It doesn't bother me when someone criticises me.
21.	I don't like wasting time.
22.	I don't usually lose my temper.
23.	I don't procrastinate.
24.	I like spending time with people.
25.	I often make my own decisions.
26.	I can see things from another person's point of view.
27.	I can list my strengths quite easily.
28.	I know what makes me happy.
29.	I enjoy working in teams.
30.	I don't get annoyed by difficult people.

Codes were applied to the response data collected to identify the Stage 1 and Stage 2 responses for each individual student, whilst simultaneously protecting their anonymity. This enabled anonymous data collected in Stage 2 of the data collection to be linked to the same student's data submitted in Stage 1, so that any changes in a student's perceptions could be monitored and evaluated. The coding of student responses was undertaken by a member of the research team who was not involved in the subsequent data analysis.

Data analysis was based upon a frequency method which considered the number of respondents answering negatively (code 1 or 2), neutral (code

3) or positively (code 4 or 5) to each question. There were 11 participants in this small-scale pilot study, of which 9 were male and 2 (participants A and B) were female. Due to the lack of female responses, no evaluation based on gender has been undertaken. Whilst not statistically significant, this data nevertheless helps us to understand both student perceptions and experiences.

Jamil and Howard-Matthews reflect upon the role of feedback in co-creation in Chap. 1. McIntosh and May (Chap. 2), and Torn (Chap. 6), also describe the importance of considering the student voice within successful co-creation, and so additionally, informal feedback from the students has also been included as part of the evidence presented in this chapter to account for the students' own voices. Furthermore, we have included data gathered to evidence the impact of the unit on completion and continuation.

This study was performed in line with the principles of the Declaration of Helsinki. Approval was granted by the Ethics Committee of Bournemouth University B (Date: 03/03/2021, Reference 36559).

Findings

Although there were a few exceptions, from the Stage 1 data collected, it was clear that the students were largely comfortable that many of the questions represented their own personal self-reflection, with the number of students reporting a positive response far outnumbering those reporting a negative response for most questions. It was apparent that from the start, some students were aware of their emotions and could potentially demonstrate empathy and social awareness. The Stage 2 data collected represented a different picture, with some demonstrable student growth in several areas. Overall, almost a third of questions (30%) reported a reduction in negative responses, a sixth (17%) of questions reported an increase in negative responses, and just over half (53%) of questions reported no change in negative response responses.

Although interesting to see the results for the individual questions asked, the real value that can be derived from using this set of socio-emotional intelligence questions is to group the questions asked, and the responses received, into categories that represent self-awareness, motivation, emotion, self-esteem, social awareness and empathy (Table 11.2).

In this context, self-awareness is defined as being a student's understanding of how to feel and behave in different situations, motivation

Table 11.2 Socio-emotional intelligence groupings (author's own work)

Self-Awareness	Q1	I know when I am happy.
	Q4	I know when I am stressed
	Q13	I know when I get angry.
	Q16	I know when I feel emotional.
	Q28	I know what makes me happy.
Motivation	Q3	I can always get motivated even when I have to do difficult tasks.
	Q6	I always meet my deadlines.
	Q12	I never leave things until the last minute.
	Q21	I don't like wasting time.
	Q23	I don't procrastinate.
Emotion	Q9	I don't worry too much about things.
	Q14	I can change my mood easily.
	Q18	I can put bad situations into perspective quite easily.
	Q22	I don't usually lose my temper.
	Q30	I don't get annoyed by difficult people.
Self-Esteem	Q8	I usually like the way I look.
	Q11	I always feel good about myself.
	Q20	It doesn't bother me when someone criticises me.
	Q25	I often make my own decisions
	Q27	I can list my strengths quite easily.
Social Awareness	Q5	I never interrupt people when they are talking.
	Q7	I make friends easily.
	Q19	I get along with most people.
	Q24	I like spending time with people.
	Q29	I enjoy working in teams.
Empathy	Q2	I like listening to what others have to say.
	Q10	I always know how someone is feeling.
	Q15	When others are sad, I feel sad too.
	Q17	I know when someone isn't happy.
	Q26	I can see things from another person's point of view.

relates to a student's ability to use feelings and emotions to achieve goals, emotion relates to a student's ability to manage their feelings, emotions and their reactions in different situations, self-esteem is about how a student sees and values themself, social awareness is about how a student manages relationships and responds to external stimuli, and empathy is defined as being a student's ability to sense, understand and react to the feelings of another person.

Table 11.3 details the changes in these socio-emotional intelligence groupings for each participating student comparing the positive (like me/

Table 11.3 Comparison of the change in responses for socio-emotional intelligence groupings (author's own work)

		Participants										
		A (%)	*B (%)*	*C (%)*	*D (%)*	*E (%)*	*F (%)*	*G (%)*	*H (%)*	*I (%)*	*J (%)*	*K (%)*
Self-awareness	Stage 1	100	100	100	20	80	80	40	100	100	100	40
	Stage 2	100	80	60	20	40	80	100	100	100	100	40
	Δ	*0*	*−20*	*−40*	*0*	*−40*	*0*	*60*	*0*	*0*	*0*	*0*
Motivation	Stage 1	80	20	40	40	40	0	20	0	20	20	20
	Stage 2	80	20	60	40	20	20	40	40	0	20	20
	Δ	*0*	*0*	*20*	*0*	*−20*	*20*	*20*	*40*	*−20*	*0*	*0*
Emotions	Stage 1	40	20	100	40	40	40	20	20	60	0	20
	Stage 2	60	60	60	40	20	60	0	40	40	20	20
	Δ	*20*	*40*	*−40*	*0*	*−20*	*20*	*−20*	*20*	*−20*	*20*	*0*
Self-esteem	Stage 1	20	0	60	80	20	40	0	80	40	0	40
	Stage 2	80	20	80	80	20	60	0	100	80	20	40
	Δ	*60*	*20*	*20*	*0*	*0*	*20*	*0*	*20*	*40*	*20*	*0*
Social awareness	Stage 1	100	60	40	40	80	0	60	80	80	0	60
	Stage 2	100	40	60	40	60	20	80	60	60	20	60
	Δ	*0*	*−20*	*20*	*0*	*−20*	*20*	*20*	*−20*	*−20*	*20*	*0*
Empathy	Stage 1	100	60	100	60	60	20	20	40	60	40	20
	Stage 2	100	100	80	60	60	40	20	20	60	40	20
	Δ	*0*	*40*	*−20*	*0*	*0*	*20*	*0*	*−20*	*0*	*0*	*0*

Note: Δ = Difference between Stage 1 and Stage 2 data

somewhat like me) data collected in Stage 1 to the positive (like me/somewhat like me) data collected at the Stage 2 point. There are a total of five questions in each socio-emotional intelligence group and 100% indicates that all five questions in that particular socio-emotional intelligence group have received a positive response from the student.

In terms of self-awareness, seven students didn't change their position, whereas three students reported a drop. For motivation, four students reported an increase, and two students reported a drop. Considering managing emotions, five students reported an increase, and four students reported a drop. In the case of self-esteem, seven students reported an increase. Concerning social awareness, four students reported an increase and also four students reported a drop. The results for empathy revealed that seven students reported no change.

Discussion

By taking a co-creation approach, this study has compared the self-reported changes in socio-emotional intelligence of the Foundation Year students across the entirety of the academic year. The results for self-awareness started very positively for eight students and so there is little surprise that this category, alongside the category of empathy, reported the least improvements. Nevertheless, Participant G did report a 60% increase in their perceived self-awareness which is a significant development.

It should be noted that three students reported a drop in perception of their own self-awareness. Perhaps this is because they did not have a sound understanding of self-awareness at the beginning and as a result over-reported in the first instance. As their socio-emotional intelligence has developed during the Foundation Year, conceivably they now have a better understanding of what self-awareness means, and so are more likely to make sensible and realistic judgements. There are similar reductions for motivation, emotion regulation, social awareness, and empathy.

However, there is no reduction in reporting by participants for the category of self-esteem which not only did not drop, but in reality, seven students reported a positive increase, which was the greatest change of all six categories. This is encouraging since self-esteem and confidence are key components of a student's ability to thrive (Devis-Rozental, 2018; Devis-Rozental & Barron, 2020). What is more, this further supports the notion that knowledge gives students confidence (Devis-Rozental, 2018). Building confidence is a topic also explored by Arm in Chap. 3. Informal feedback provided by one of the Foundation Year students evidenced this further:

> I've recently had a little bit of trouble with organisation … and motivational issues … this would have really knocked my confidence and killed my motivation further … [but] fortunately, resilience and self-esteem are things we covered. (Anonymous Foundation Year Student)

Following on from self-esteem was emotion regulation, with five students reporting positively on their ability to manage their emotions more effectively. It could be argued that the content delivered in the academic and professional practice unit had a positive effect on these results. Formative feedback provided by one of the Foundation Year students regarding some of the content delivered stated:

> This unit has also given students the chance to learn a lot about themselves and the way their emotions have an impact on their daily lives. (Anonymous Foundation Year Student)

In terms of their socio-emotional intelligence, it is difficult to differentiate between participants who have grown, compared to those who are now reporting more accurately. However, reporting more accurately is itself an indication of an improved understanding of the constituent elements of socio-emotional intelligence, and so indirectly this is also representative of growth. Learning about the importance of diversity, kindness, teamwork, and purpose will certainly help students to develop relationships with others which are both more meaningful and more impactful.

> Learning the importance of diversity, kindness, teamwork and purpose has helped in developing meaningful relationships and encouraged students to engage and feel like part of a team. (Anonymous Foundation Year Student)

This type of development is also thought to have the potential to help students acclimatise to higher education faster, and to enable them to undertake roles, challenges and activities more effectively.

> The content being taught within this Academic and Professional Practice unit is incredibly important and is something I think that plays a part in everyone's journey through university. (Anonymous Foundation Year Student)

The co-creation approach reported in this chapter has facilitated staff and Foundation Year students working together to understand how the socio-emotional intelligence of the students themselves has evolved over time. It would not have been possible to have gained this level of understanding through conventional assessment, and it needed the students to be willing to engage in this way, and to reveal their own personal feelings, so that the data collected was both meaningful and relevant. Whilst the sample size is small, it is already possible to see the potential value in terms of developing the socio-emotional intelligence of these students, and from this understanding, the academic team will now revise and evolve their approaches to optimise future delivery and support.

Conclusion

The results of this study are based upon benchmarking students at the start of their Foundation Year using a self-reporting 30-question survey, developing their socio-emotional intelligence during the Foundation Year through the teaching of specific related topics (and carrying out co-creation based practical activities), and then measuring their socio-emotional intelligence at the end of the Foundation Year by repeating the same self-reporting 30-question survey.

Results obtained are promising and indicate that personal growth has occurred. How this growth translates to performance at Level 4 (first-year undergraduate degree) will be identified by following these students as part of a longitudinal study. This change in an individual's ability to interact more successfully with others is a skill which will last a lifetime.

It is therefore the recommendation of this study that universities across the higher education sector consider the benefits of introducing activities which will enable students to develop their understanding of socio-emotional intelligence, and other related soft skills, so that students can better manage themselves within an educational setting and thrive during their studies and beyond.

Limitations of the Research

This research has only considered one year group on a single course studying at one university. Whilst the results are interesting and informative, the population size is too small to make generalisations from, and a wider more expansive study is recommended to explore the implications and potential value across a range of discipline areas.

Potential Long-Term Impacts

When considered as a collective, these results provide evidence that the Foundation Year does have a positive impact upon retention and belonging. Continuation and success data for the students who completed the unit showed that 93% of students who completed the year were successful. Of those, 100% continued their studies at the same university. The work undertaken in this research study is therefore important when

taken in the context of the transition that students face when entering higher education for the first time. If we can smooth this transition and support students effectively, we can enable students to be more productive in a shorter period of time and so position them up for subsequent success. This has the potential to reduce stress and other mental health issues, and to decrease the attrition rates which are based upon those who leave early.

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CHAPTER 12

Conclusion: Making Space for Constructive Co-creation

Fiona Shelton, Catherine O'Connor, and Jo Wilkinson

Introduction

Co-creation is not a fix, it is not a one-size-fits-all and its boundaries shift and change depending on many factors, such as how it has been designed, the process, the outcomes, the participants and the scale. This is discussed in the preceding chapters and captured in the student reflections presented in this chapter, regarding how they have experienced co-creation in higher education.

Co-creation, we would argue, is best viewed as a journey, one that is unpredictable, full of stops, starts and changes but one that can provide fulfilment, surprises and unexpected destinations.

In their chapters, the authors share a broad range of examples and perspectives on co-creation practices. Through our reading, three common themes emerge:

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Authenticity

The need for genuine co-creation, where we mean it and where we are committed to all its twists and turns. This involves equal reciprocity between students and staff.

Value

Where we adopt equitable approaches to co-creation, and value each student as an authority in their learning journey. This includes how we develop our relational pedagogic approaches with students, and it also extends to the value students place on and find in their educational experiences.

Change

We need to be open to challenging inequitable structures and anachronistic practices which can hinder co-creation practice and to creating new pathways which engage student participation at all levels of institutional decision making, from co-creating an assessment to engaging in board discussions.

These themes do not operate exclusively, they are interlinked, there is an *intersection*. If we were to draw it as a Venn diagram there would be an arrow pointing to the middle of the circles, this is the point where constructive co-creation, activity which helps development and improvement at every level, is achieved. We can collaborate with students in an authentic manner, we can value their contributions, recognise them as individuals, seek and act on their feedback and we can make systemic changes. However, if we undertake these activities in isolation from one another, we do not achieve constructive co-creation. Our reasoning is that the three elements we have identified in this particular intersection—authenticity, value and change—can create the conditions for constructive co-creation. We will revisit the notion of a 'co-creation intersection' later in this chapter.

In reflecting on the chapters in this book and the ways in which authors have viewed the co-creation journey, we would draw out that it is a journey that

- requires planning but we should not expect the route to remain fixed;
- is multi-faceted and requires a genuine exchange of ideas, activities and positionality;
- is likely to confound our normal expectations;

- may provoke resistance to the direction of travel;
- needs everyone—staff and students—to find their space on board but grab the chance to change spaces where the opportunity arises or be willing to move if prompted;
- will be full of stops and re-routing and we all need to embrace to possibilities this will bring; and
- may well have an unplanned destination.

Mapping the Route

In mapping their route to engaging in co-creation, the chapter authors help us navigate the territory by exploring and examining the benefits, insights and challenges experienced in engaging in co-creative practice. It is through drawing on their insights, research and practice which has supported us in arriving at the notion of a co-creation intersection as a means of capturing the interconnected, complex, rich and sometimes circuitous nature of this practice.

We see the authors capturing their co-creative practices in a variety of ways, including narrative, conceptual models and other various means of defining their journeys. In Chap. 2, McIntosh and May provide us with the 3 C's model of staff-student co-creation, identifying collaboration, community and cohesion as essential components of this practice which they see as being built on the foundations of relationship-rich education and social constructivist learning theory. They note the ability of their model to be applied at institutional, unit or individual level—but see the benefits of co-creation extending beyond HE and into society. They are clear that engaging, dynamic, inclusive and flexible communities are essential for co-creation to thrive, as is senior leadership sponsorship and strategy to place value on the activity and to ensure it is fully integrated.

The collaborative nature of co-creation is framed as a matrix environment in Chap. 3 by Arm who explores how this approach can break down hierarchies through a process of 'becoming', where students can become active, empowered and feel a true sense of connection, where they are valued. This requires changes to structures, giving up traditional positions and making spaces for students to be decision makers and change agents in significant cross institutional projects.

Active reflection by students on their perceptions of learning gain is central of the work of Polkinghorne, McIntyre-Bhatty and Roushan in Chap. 4. They utilise a series of pilot studies to explore the effectiveness of

teaching delivery through these reflections, with findings resulted in the evolution of teaching practices. The insights this approach offered allowed students to have a deeper understanding of their own learning journey and staff to understand this journey in a much deeper way than traditional summative assessments can reveal.

The value of co-creation beyond university boundaries is picked up by Islam et al. in Chap. 5. Drawing on three co-creation case studies linked to sustainable development goals, they consider how continuous dialogue supports collaboration and creates space to address societal issues, with outcomes of staff-student co-creation being closely linked to community well-being. This dialogue and practice, they note, promotes teamwork, supports students to navigate disparate perspectives and allows institutions to draw in a range of external stakeholders to be partners in educational activities and, potentially, influence policy formation.

The challenges and benefits of involving large groups of students in co-creative practice is central to the work of Torn and Whitaker in Chap. 6. They involved students in co-creating module structure, content and resources, as well as dissemination activities within the university. By involving student participants in data collection across a cohort and analysis of the data, they were able to gain greater insight into the experiences of those studying with them, allowing for the identification and exchange of shared interests, motivations and barriers. This supported feelings of belonging among the cohort.

This exchange or reciprocity is visible again in Chap. 7, where Joseph-Richard and Ringrose investigates co-creation with industry, using a value co-creation theoretical lens for developing executive leadership development programmes. The co-creation process, which was not without challenge, resulted in greater access to acquisition of skills that are in demand, and that it encouraged individuals to bring their own authentic selves and perspectives to the workplace and initiate positive change.

Extending beyond knowledge transmission and transactional learning, in Chap. 8, Teh and Chong challenge anachronistic approaches to learning in higher education (HE) within the Asian context. They reflect on archaic classroom practices and the rise in pedagogical discourse of student engagement. They too consider the relevance of reciprocal processes where collaboration and partnership enhance and centre student agency in the learning process.

The relational pedagogic approach is forefront in balancing power dynamics. In Chap. 9, Shakir and Siddiquee offer the view that as

university communities consist of students and staff together, they should be regarded as one body, where power dynamics between staff and students need to be constantly evaluated and dismantled to achieve an authentic, anti-racist, relational alliance. Shakir and Siddiquee share how 'teaching with love' (Hooks, 2003, p. 127), building mutual respect and trust form the basis for decolonising curricula and can go some way to redress the balance in Eurocentric knowledge bases.

The HE context outlined by Mahgoub et al. in Chap. 10 is in stark contrast to the consumerist context noted in other chapters. Their study was set amid war and armed conflict and the associated intense disruption this brought. They outline the key role of student representatives in 'co-creational management of the circumstances caused by the war'. While their work evidences how armed conflict drove an evolutionary rather than designed approach to co-creation, the approach addressed the threat to learning and teaching caused by war and helped them identify the value of incorporating student-led initiatives in crisis management.

Finally, Chap. 11 explores life gain with a focus on Foundation Year students embarking on their studies in HE. Devis-Rozental et al. explore how students transition from the compulsory education environment into HE and how they can experience pedagogical shock. This chapter focuses on Gen Z students, and the greater diversity of student cohorts. The authors challenge us to think about how Gen Z students require, and expect, a different approach to their learning, and they question how educators may need to evolve and adapt their pedagogical approaches to effectively meet the needs of students.

A Co-creation Intersection

We briefly mentioned the notion of a co-creation intersection earlier in this concluding chapter. This emerged from the themes we drew from the work of the authors in this collection and the clear notion that there are many elements that need to coalesce to create the conditions for co-creation. To try to define one approach to co-creation, or indeed a right approach to co-creation, would be in conflict with the practice and commitment to social justice. Hence, we call it 'a' co-creation intersection as opposed to 'the' co-creation intersection and identify three components—authenticity, value and change—which we believe are central to constructive co-creation and which are explored further below in a discussion

which seeks to clarify the notion of this intersection. This identification of 'a' co-creation intersection is done in full awareness that different lenses and a different collection of work would identify other intersections, but this, we would argue highlights the richness and multi-faceted nature of co-creative journeys. Indeed, Cook-Sather (2022) reminds us that we need to provide structures, not prescription for engagement. Equitable co-creation does not point us down a track of 'the right way' or 'one way', in fact, as Cook-Sather explains it can be detrimental:

> I have grown increasingly certain that such thinking and practice are detrimental at every level, and I have come embrace, instead, the principle that providing structures, or what some call scaffolding – that support a wide range of ways of engaging (including moving beyond those structures) is not only more effective in furthering learning but also essential to equity and justice efforts. (Cook-Sather, 2022, p. 57)

The notion of authenticity runs throughout this book—the need for activity, learning and involvement to be genuine and real. This may sound relatively straightforward but authenticity has to be on many levels. Co-creative work has to be authentic to the principles of co-creation; but it also demands authenticity in terms of the actual task or activity defined within the work, to teaching and pedagogical practices. In some instances, work may need to be authentic to discipline; and a further layer of complexity could be in terms of authenticity to institutional, discipline or individual values. In Chap. 3 Arm discusses the challenge of resistance that can be present. Through co-creating change with students, it is possible to begin to break down some of these barriers through reciprocal exchange; this reciprocity brings value and authenticity to co-creating with students. Arm highlights the importance of creating space for the student partners to come together to develop a collective identity and support network between them. Critically, what we learn is, that by bringing students together in a matrix environment, they can be supported to understand both the institutional impact (outcomes) and personal value (process) of their role as co-creators, enhancing their articulation of skills to support future employability. What also emerges from the work outlined in this book is that achieving authenticity may require constant checks, balances and questioning of a project in order that teams navigate their work along a meaningful co-creative track.

It is this meaningful engagement, where students are able to see the purpose in what is required to achieve a goal, that can make the difference in why they may or may not engage and support them to see both the value of their education and the value of their role in it. Too often we can assume that students might not engage in co-creation work due to apathy, when the reality is that they do not know what is required or the intention of the practice. Because co-creation work is complex, because many universities are set up in ways that structures and systems can seem impenetrable and because it does not come with a fixed process, it can take time, trial and error to have a positive impact. However, when co-creation is facilitated to become embedded in processes and practices, at module, course and faculty level, it can have greater meaning for and engagement from students.

Co-creating in the classroom, democratising the space and providing structures and scaffolding co-creation activity, as we have learned from many of the preceding chapters, can be a good place to start. The centrality of the curriculum should not be underestimated, after all it is the one place all students are required to engage with, and where they are most likely to commit their time. As discussed by Lubicz-Nawrocka (2022, p. 26) the curriculum is 'a creative, student-centred space where staff and students engage in the process of learning and teaching that they continually adapt—and can take up opportunities to co-create within certain constraints—to meet their shared objectives of developing students' knowledge, skills, and wider capabilities'. This is reflected in Chap. 6, where Torn and Whitaker make clear the questions which gave them pause for thought during their work, particularly in terms of reflecting on the extent to which their original plan genuinely captured the essence of and possibilities in teacher / learner partnership opportunities.

Returning to the notion of a co-creation intersection, it is evident that as practitioners we need to be open to what students bring, where we value their ideas, knowledge and experiences, and where we co-create change and communicate these changes to students. Co-creation, then, goes beyond transaction as students do not just buy the ticket for the journey (fees), they co-plan the route and co-create the journey, resulting a sense of shared ownership. In Chap. 7, this is evident in the collaboration between industry and university partners. The collaborative nature of the reciprocal exchange addressed issues of the relevance of university Business Schools, bridging the gap between theory and practice and ultimately creating meaningful scholarship, with practical application that enhances participants' learning.

'Whole-class' co-creation (Bovill, 2020) forms the basis for Teh and Chong's research (Chap. 8) where they examine the tripartite relationship (academics-students-practitioners) of knowledge exchange dynamics. They highlight the role of authenticity in building relationships and trust between students, lecturers, and practitioners for the effective implementation of a portfolio assessment and emphasise the role of co-creation in acknowledging different knowledge bases in the gaining and sharing of new knowledge. This is the where equitable, constructive co-creation begins to redress the power balance and Eurocentric dominance of knowledge.

Offering freedom to students in how they tell their stories and share their experience is the approach taken by Shakir and Siddiquee (Chap. 9) in consideration of how to address power balances at the heart of structural and entrenched racism. Their students reported a sense of connectedness as a result of listening to the narratives of others sharing their lived experiences. They explain how student-led co-creation projects, embedded in the curriculum, with social justice at their core, can demonstrate institutional commitment to student voice, engagement, and a call to action. They further add that this authentic engagement with students can help bring about systemic change in universities where there is structural and entrenched racism due to the nature of historical white dominance in organisational structures. Besides, it is this systemic change that brings the authenticity to co-creation. There is a shift from transactional and superficial behaviours where spaces are equally shared and there is equal reciprocity.

Authenticity is visible and obvious when we create spaces where freedom can be practised and knowledge and power are democratised. Students then experience autonomy, ownership, responsibility, accountability and choice, all key features of intrinsic motivation related to successful learning. Accordingly, being presented with authentic opportunities to contribute to the learning journey is highly likely to enhance intrinsic motivation (Men & Ma, 2015). This is evident in Chap. 11, where Deviz-Rozental et al. explore how students develop a sense of belonging and connection to their programme of study as well as the importance of how students are supported and engaged effectively so that they can succeed educationally at university where reflection and self-awareness is developed through enhancing socio-emotional intelligence.

It is apparent from the diverse contributions in this collection that co-creation at its deepest and most meaningful is not a task set for students to complete. Rather, it is a shared endeavour that students can be involved in from the very outset. It should provide an opportunity for students, as well as staff, to set the agenda, or raise an idea for further investigation. It is useful, therefore, to draw on the work of Giroux, who reflects on classroom culture:

> Giving students the opportunity to be problem-posers and engage in a culture of questioning in the classroom foregrounds the crucial issue of who has control over the conditions of learning and how specific modes of knowledge, identities, and authority are constructed within particular sets of classroom relations. (Giroux, 2021, p. 179)

Making space for co-creation practices in HE can be challenging, not least when we can be resistant to doing this because a task or plan might take longer to complete, or we do not genuinely value the insights students can bring to the problems we are seeking to solve. The ways in which we make spaces for students can contribute to the ways in which we can ensure that our students feel they matter within every aspect of the institutions where they have chosen to study, where they invest their time and money, and implicitly, their trust. What we learn from the student contributions in this chapter is that students need to know the rationale and context for their engagement in co-creation, they need clarity in how their contribution will be used and as highlighted in Chap. 3, how engaging in co-creation activity supports their knowledge building of institutional drivers and impact.

If we value what our students bring to our institutions, then we must provide structures for change to be co-created and question how we 'make space' rather than 'take space' (Cook-Sather, 2022) in our organisational, pedagogical and assessment structures. Cook-Sather (p.115,) explains how we can co-create opportunities for students to be 'authorities on learning and teaching alongside faculty and co-create equitable teaching and learning'. This includes co-creating 'brave space' (Cook-Sather, p.116). As discussed in Chap. 9, hearing stories of racism and discrimination impacts on the ways in which students feel they belong and their sense of how they 'matter' (Flett, 2018). Across the chapters, there is evidence of open dialogue and redistribution of power, of students being

given and of the development of shared responsibility and trust (Lubicz-Nawrocka, 2018).

This sense of 'mattering' comes about when students feel their university cares about them. Where they feel valued, in terms of who they are, what they bring and how they are represented in their courses. Arguably, 'mattering' goes beyond feeling a sense of belonging, given there are contested views on belonging (Ghorashi et al., 2018). Relational pedagogic approaches (Bovill, 2020) and feeling like they matter in HE can increase a student's sense of wellbeing and connectedness to their course, their peers and their tutors. In committing to create brave space, painful, difficult experiences can be shared, but importantly, solutions can be co-created, as student agency is centred, and change is initiated.

Bovill (2020) expresses disappointment when students are surprised to know that their tutors care about them. She urges to improve our communication with students so that they know we care deeply about them, that we value their opinions, their progress, their wellbeing, and their success beyond university. This is the relational pedagogic approach in constructive co-creation. It demonstrates how we enter into the constructive co-creation practice in an authentic manner, that we value our students and that we have heard first-hand about students' experiences and taken opportunities to co-create any changes with them. This work collected here evidences strong approaches to communication, to valuing the views of students and to supporting relational practice. One challenge in terms of truly embedding this work is noted by McIntosh and May in Chap. 2 and that is the need for co-creative practice to have senior sponsorship and strategic support.

The value of co-creation practice to students is highlighted in the following student narrative. We learn how working in co-creation, for this student, replaced a sense of other, and provided a space to reflect on the ways in which we can 'belong' to a learning community where there is shared meaning and context. What is also revealed is the desire for co-creation to be an ongoing process, embedded in the curriculum and throughout the learning journey. There is recognition that constructive co-creation requires a sharing of power, space and control, which should be authentic and meaningful to engage all students.

Experience of Co-creation (Jo Wilkinson)

My initial experience of co-creation was during my Master's degree, as a student researcher in a social justice project, exploring inclusive pedagogy and leading to a presentation of findings to peers and academic staff involved in creating a curriculum for social justice.

I found the project rewarding and personally revealing. I realised I viewed the academics in the project as something 'other' to me and was daunted by them being Dr This or Professor That. On reflection, this possibly stems from my working class background, being a first-generation student, an experience documented in studies such as Franceschelli et al. (2016) which focused on working class adults who participated in higher education. This reflection, and the co-creation process as a whole, increased my understanding of the diverse factors impacting marginalised groups in higher education, and the potential of co-creation approaches for removing barriers.

The process contributed to my decision to pursue a PhD—working alongside academic staff replaced some of that feeling of 'other' with the idea a person like me could research at doctoral level. It also guided the focus on my research, which makes use of concepts of habitus and social capital (Bourdieu, 1983) and the link between disadvantage, habitus, and a feeling of belonging within education (Tan & Liu, 2022). I have gone on to be involved in further co-creation projects.

Challenges and Possible Resolutions

The first challenge I observed was disinterest or perhaps apathy. The project under-recruited, which meant that the roles were distributed less widely than had been planned. Perhaps the usefulness of the project not only for the university, but also for individuals, was not promoted or appreciated enough to motivate a higher level of interest. Additionally, students are already stretched thinly, given survey findings that 69% of students work part-time (National Union of Students, 2024) and although a set number of hours were paid to participants, this time-limited contract would not replace regular work elsewhere.

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I began the project with a degree of cynicism—I doubted its authenticity and expected it to be a case of paying 'lip-service' to student voice and involvement. Although this was not the case in the project I worked on, it helped that it had legitimate outcomes shared from the start and was also part of a larger, ongoing project within the university. Any co-creation involves changes to the balance of power, which brings challenge, given the hierarchical nature of HE (Mander et al., 2024). Acknowledgement of the need to share power and genuine belief in the value of co-creation are, in my experience, essential to overcome this challenge.

A further challenge within co-creation, particularly when aiming to widen participation and represent diversity across the student body is a lack of experience of HE as a whole. This may be a first generation or social class identity barrier, as I experienced, or the possession of any number of protected characteristics, recognising also the intersectionality of human identity (Romero, 2018). Effective co-creation involves all parties feeling equally valued and valuable to the work, which may be difficult for students who are already feeling out of place in university culture, as identified by Stephens et al. (2019) whose study focuses on social class but can be applied to a broader population, given the ways low socio-economic status and other aspects of marginalisation intersect.

Next Steps for Co-creation

The challenges I perceived, of low engagement, need for authenticity and also time barriers for co-creation lead me to conclude that the best way for co-creation to move forward would be as an embedded approach within all HE practices, not an add-on project or a periodic survey of student voice or course feedback, but an intrinsic part of teaching and learning content and pedagogy. This would engage students and staff more widely and mitigate against limiting co-creation to those motivated to join a specific project, or targeted by staff to take part—it would make the process more democratic. This would, of course require a commitment to review and adapt current content and approaches and buy-in from all staff, including an openness to sharing at least some power and control.

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Students would also need to be active in constructing their learning, which may not be a popular approach with all. It may need the addition of new content, for example, directed at exploring privilege and identity, taking care that within teaching groups, individuals are not burdened with representing a group identity (Grier-Reed & Williams-Wengerd, 2018) and building in inclusivity as a core feature, rather than relying on students to indicate any particular needs (Moriña, 2020). Making co-creation a core and embedded approach would allow more students to experience the benefits and rewards I have experienced, and contribute to the widening participation agenda in higher education.

Navigating Barriers

Embracing co-creation does not come without a challenge. There can be resistance from colleagues and students. Bovill (2020) considers the common misconception of staff expertise no longer being required, and that sometimes this presents itself as resistance. She contends that expertise is still the key, but that the space usually afforded to academic tutors changes when co-creation is in action. The role of the academic shifts from being an expert, to becoming a facilitator and guide, asking challenging questions and being co-inquirer with students. This relates to the notion of value, and how value is placed on how staff can adapt, how they value student perspectives, questions and capabilities in ways that are sometimes absent in traditional teaching methods in higher education. As can be learned from Chap. 9, the social connection built thorough co-creation can satisfy the human need that is necessary for wellbeing and health (Baumeister & Leary, 1995; Haslam et al., 2021)

For a number of authors (see Chaps. 4 and 6), the challenge of student engagement alongside the notion of students as consumers were important reflection points. The latter is potentially a challenging checkpoint in terms of pursing co-creation. The literature, the evidence and the principle of shared practice with a deep relational underpinning may well be compelling but the blunt reality when students pay fees is that they may have preconceived expectations as to how they expect the educational package

they are buying should be delivered to them. Such preconceptions should not, however, be a reason to shy away from co-creative practice; instead, they should be a driver to focus heavily on the relationships which are the foundation of them to support students in understanding the power of their place in and contribution to their educational experience. Torn and Whitaker utilise the notion of a 'personally consequential active-learning experience' to describe their approach to this in their work, while Polkinghorne et al. bring the view back to the value of education with the notion of empowerment as a central component of their work and focus on 'providing students with an engaging educational experience that they value and appreciate'.

Reaching Beyond the Destination

The chapters in this book can be seen to illustrate what Bergmark and Westman (2016) say about co-creative practice—that it is ambiguous, unpredictable, thought-provoking, motivational, collaborative and transformative. The authors here have variously outlined the lessons and benefits for stakeholder groups inside and outside the university; with the potential for long-term impact on working practice within teaching and student experience space as a minimum. A number of authors discuss the notion of value in co-creation and there is evidence here that the benefits of it stretch beyond the boundaries of institutions. This resonates with literature in the field and contributes to a growing body of evidence about the impact of co-creation beyond the limits of defined projects. Therefore, given what we have learned, and continue to learn, what are the key ideas that can be drawn out and set as pathways for future co-creative work? We suggest that the following can be considered as key benefits:

Inclusion and Equity

By taking deep relational approaches and fostering dialogue from the inception to the conclusion of projects, co-creation can be seen to facilitate inclusion, empathy and resilience in both staff and students (Lubicz-Nawrocka, 2019). Lubicz-Nawrocka notes that the collegiality, central to co-creation, can shift culture and humanises the HE experience. Reconceptualising our classrooms as democratic spaces, where the work of teaching and learning is valued as a shared responsibility, if we view the learning journey through multiple lenses, and provide spaces and

structure for the plurality of voices, we then begin to create more equitable spaces and practices where the balance of power is redressed.

Growth

While the HE experience overall has long been viewed as transformative, Godbold et al. (2021) conceptualise their view to co-creative work as a driver for individual growth and transformation, preparing students to be members of 'civilised democratic societies'. Engaging in co-creation affords benefits to both staff and students, working together to make a change is empowering. Students can grow their research, professional and leadership skills. Staff can acquire deeper insight of the diverse needs of students. Importantly, the opportunity for growth in relational pedagogy means we value what our students bring to our organisations and how they make them a better place to be.

Societal Impact

The space opened up by co-creative approaches is seen by Lubicz-Nawrocka (2019) as one which allows for impact on society, the development of new practice, the potential for reach beyond the university, for student growth, reciprocity and respect. Similarly, for Bergmark and Westman (2016), co-creation goes beyond the value in and of a project to have the power to promote democratic values; it supports those who participate in being open to diverse perspectives and allows consideration of the 'whole human'.

It is clear that co-creation in higher education requires democratisation of our learning and teaching spaces and it is unquestionably relational. If we were to attempt to conclude this chapter with a definitive statement on co-creation, we would be defeating the purpose of these explorations and this practice. Instead, we invite you to travel down the many pathways that co-creation might take you and we offer the following questions as provocations for discussion and further research:

- What opportunities are there in different courses and departments to create structures and space for constructive co-creation practice?
- How do senior leaders best sponsor this work and provide the strategic framework and impetus to allow such endeavours to thrive?
- How do we provide student centred, student-led spaces where freedom can be practised and knowledge and power are democratised?

- How might we adopt co-creation practice to engage students in meaningful projects and curriculum developments to enhance their learning experience and our practices?
- What can co-creation tell us about how students navigate the demands of higher education?

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