Aligning Campus Strategy with the SDGs: An Institutional Case Study

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Abstract Evidence suggests that while many universities promote their green credentials, fully embedding sustainability across the university (campus, curriculum and community) and securing the full engagement of academic staff, is not without challenge. This paper argues that the Sustainable Development Goals may provide an opportunity to revitalise institutional efforts in relation to education for sustainable development. A case study is presented of an institution that is well-regarded for its green credentials yet continues to struggle to ensure that education for sustainable development permeates the curriculum, despite institutional strategy and policy drivers. The potential of the Sustainable Development Goals to catalyse further engagement within the institution is explored; examples are provided of how they are being used both within the curriculum, and also influencing strategy change. The conclusion suggests that while there is potential in a change of focus, substantial efforts are required to reinforce the responsibilities of higher education in relation to the goals. This paper will be useful to anyone interested in embedding sustainable development within universities and developing a strategy to address the global goals.

Keywords Sustainable development · SDGs · Higher education · Case studies

1 Introduction

In September 2015, world leaders made a commitment to the Sustainable Development Goals (SDGs) formulating 17 goals, aimed at achieving an end to extreme poverty, combatting inequality and injustice and tackling climate change, by 2030.

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It is incumbent on each signatory to bring the goals to life; nothing will be achieved without action on multiple fronts. While governments need to develop national strategies and approaches for realising the goals, all organisations in society have a role to play in contributing to their achievement. Higher education institutions (HEIs), in particular, should be taking a leading role, through research (Leal Filho et al. 2017a); they should also be educating students in relation to the goals and, inspiring engagement within their communities. Just as the role of HEIs has been made quite clear in relation to sustainable development, with a need for integrative approaches (Leal Filho et al. 2015), the role of universities in relation to the SDGs is obvious, albeit not explicit. What is less clear however, is whether universities will fully appreciate their responsibility for the SDGs. History shows that their response to calls to engage with sustainable development was not only notably slow (Tilbury 2013), but has rarely been holistic, or very strategic (Leal Filho et al. 2015). Thus, is it likely that they will respond to the SDGs with greater speed or effectiveness? Will it be the case that many universities endorse the SDGs publically but beyond that, will not regard them as a central agenda for strategic planning and action? Signing up to accords and making declarations is common place within the sector but will education strategies be transformed as consequence? Past performance does not allow for optimism. Ensuring that higher education addresses the SDGs may involve the same challenges that implementing sustainable development has faced, with similarly slow responses and partial outcomes. On the other hand, a more optimistic view, would be that the SDGs serve to inspire engagement in ways that sustainable development might not have previously, thus, some institutions will recognise their potential to catalyse change and to reinvigorate sustainable development initiatives. If a few universities take this approach and lead by example, then others will follow.

This paper offers a case study of how one institution has seen the SDGs as a catalyst, offering insights into how the SDG framework might serve as a vehicle to step-up engagement with education for sustainable development, and to take institutional strategy further.

2 Universities, Sustainable Development and the SDGs

The critical role of universities in relation to sustainable development has been consistently articulated over recent decades (see for example, 'The Sustainable University', Sterling et al. 2013). Sustainable development (in higher education) has become a significant field of research (Barth and Rieckmann 2013), to the extent that examples of what constitutes effective engagement and the many hurdles to progress, are now well documented.

As far as universities' practical engagement with sustainable development, considerable progress has been achieved in a sector that was described as notoriously resistant to change (Wals and Blewitt 2010) and where, for many years, engagement with sustainable development was deplored as both slow and inadequate (Tilbury 2013). In 2018, most universities now address environmental sustainability and/or sustain-

able development in some form; most will address campus sustainability and many highlight their green credentials on their institutional websites. However, while it is widely recognised that sustainable development needs to be addressed in research, campus, education and community, fewer universities have actually found ways to embed education for sustainable development across the entire curriculum (Shiel and Paço 2012), very few will evidence integrative or holistic approaches to sustainability (Leal Filho et al. 2015). Only some institutions meet the criteria for the title 'The Sustainable University' (Sterling et al. 2013). Across the world, and particularly in the UK, it is quite evident that while many universities have exemplified 'campus-greening', focused on environmental management, and are very good at promoting their green credentials, integrative approaches to sustainable development are hard to achieve and less common (Leal Filho et al. 2015).

This paper is set in the context that there is still much more to be achieved (Amaral et al. 2015; Brennan et al. 2015) if higher education is to make a full contribution to sustainable development. As the UK report on sustainability in education shows (National Union of Students (NUS) et al. 2017), leaders recognise that sustainability is a priority but are still failing to deliver. The biggest barriers identified in the report are: finances, lack of senior management commitment and strategic direction and lack of staff resources. In summary, progress to date has been slow, there is further to go and the SDGs may be a way to accelerate wider engagement.

3 The Goals and Higher Education

The SDGs represent an expanded follow-on, from the eight Millennium Development Goals (MDGs) which sought to "end poverty in all its forms" (United Nations 2015, p. 2). While some good progress was made towards the MDGs (which expired in 2015) they were never fully achieved; they had very little impact (beyond a research agenda and taught as a topic on a limited number of programmes) on the day-to day activity of higher education. Sachs (2012) provides a useful summary of development, from the MDGs to the SDGs, the latter seek a shared focus on economic, environmental, and social goals as a hallmark of sustainable development. As the SDGs emerged following rigorous and extensive consultation, they constitute a broad consensus on which the world can build through cooperation between stakeholders. Although they are not legally binding, they are likely to be a major influencer on governments and organisations over the next fifteen years.

The United Nations (2015, p. 14) articulates the 17 goals:

- Goal 1. End poverty in all its forms everywhere
- Goal 2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture
- Goal 3. Ensure healthy lives and promote well-being for all at all ages
- Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

- Goal 5. Achieve gender equality and empower all women and girls
- Goal 6. Ensure availability and sustainable management of water and sanitation for all
- Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all
- Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
- Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
- Goal 10. Reduce inequality within and among countries
- Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable
- Goal 12. Ensure sustainable consumption and production patterns
- Goal 13. Take urgent action to combat climate change and its impacts*
- Goal 14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development
- Goal 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
- Goal 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels
- Goal 17. Strengthen the means of implementation and revitalize the global partnership for sustainable development.

Of the seventeen SDGs, only Goal 4 explicitly references education however Mader and Rammel (2015) suggest that universities have a much wider transformative role to play to achieve sustainable development. In their opinion, the most pertinent SDGs for education are Goals 4, 9, 12, 16 and 17. Although they highlight specifically just five goals, what is of overarching importance is that all students need to understand the implications of the entirety of the framework; all students need to develop the knowledge and skills required to live sustainably, within environmental limits. Further, meeting the SDGs will require universities to provide appropriately skilled graduates (Association of Commonwealth Universities 2015) and this will require rethinking the curriculum. Dramatically more globally relevant curricula are needed in all countries if students are to meet employability requirements and to address the social, environmental cultural, economic and health challenges that the world faces (Hall and Tandon 2013).

An inspiring publication by the Sustainable Development Solutions Network in the Pacific Rim (SDSN Australia/Pacific 2017) exemplifies what needs to happen in regard to the SDGs. The paper reinforces that universities (as knowledge creators) must play a vital role in developing those who will be the current and future implementers of the SDGs; "Addressing the challenges of the SDGs will require new knowledge, new ways of doing things, hard choices between competing options, and in some cases profound transformations" (p. 8). Further, the paper suggests that an

extensive contribution involves universities embodying the SDGs through organisational governance, operations and culture, as well as using their leadership role to influence partners and stakeholders in the community. The paper (p. 9) also sets out why universities need the SDGs: to demonstrate impact; capture demand for SDG related education; to build new partnerships and to access new funding streams.

Their guide is to be applauded and suggests that what is required for the SDGs is a strategic and integrative approach to sustainability, as has been argued previously for sustainable development (e.g. Leal Filho et al. 2015; Sterling et al. 2013)—through research, across the curriculum and in the extra-curricular sphere, and through working in the community to educate and encourage capacity building.

There are currently only a few early adopters of such an approach. One of the partners in the Pacific Rim collaboration, Victoria University of Wellington, New Zealand for example, has already mapped their current curriculum against the SDGs with the aim to track their own contributions towards the global goals and improve their offerings (Wilks and Van den Belt 2017). Similarly in the UK, the University of the West of England (UWE) is leading the way in taking a strategic approach to the SDGs and undertaking curriculum mapping to establish a benchmark for progress (Gough and Longhurst 2018), as is Nottingham Trent University (Willats et al. 2018) however, these examples are uncommon.

The 2017 Green Gown Awards UK and Ireland, a scheme delivered by the Environmental Association for Universities and Colleges (EAUC) that recognises exceptional sustainability initiatives undertaken by university and colleagues, tasked applicants with mapping the SDGs that their projects were delivering against. Canterbury Christ Church University emerged as another example of how a strategic approach to sustainability is transforming their University, both operationally and academically, and The London School of Economics and Political Science stated that sustainability was a fundamental strand running through teaching, research, operations and public engagement (EAUC 2017). However, not even at this high level of awards, was it possible to see that a strategic and integrative approach to the SDGs is commonplace.

In the UK, 75% of student respondents in the National Union of Students (NUS) et al. (2017) annual sector survey, reported that their institution had progressed action linked to the United Nation's SDGs initiative, seeing the SDGs as the biggest motivator of the initiatives listed. However, institutional innovators are in the minority and, there are few examples of how institutions are implementing their approaches. Further, there is no evidence yet of the impact or success of approaches. More examples are needed to share practice and particularly to extend conversations about aligning strategy with the SDGs in a higher education setting in order to build momentum for change.

4 Method

This paper adopts a case study approach (Yin 2014), and represents an empirical inquiry into sustainable development progress within a particular setting, the case

study institution. Two sources of information have informed the case study: literature related to higher education, sustainable development and the SDGs; and reflection and analysis on the part of the authors, who are members of the case study university's Sustainability Strategy Group (SSG) but also champions of change. A single site case study obviously has limitations but learning from such cases is important to inform processes of systemic transformation across higher education (Sharp 2002); therein, rests the value of this paper, case studies are useful in that they demonstrate to others possibilities and challenges. They are particularly pertinent in the early stages of developments such as engaging with the SDGs within an HE setting, where examples of practice may inspire others to follow similar paths.

5 The Case Study Context: Sustainable Development at BU

Bournemouth University (BU) has consistently aimed for an integrative approach to sustainability and was one of the first institutions that sought to explore a holistic approach, the challenges of which have been documented (see Shiel and Williams 2014; Shiel and Smith 2017).

The institution (BU) is a medium-sized UK university, inaugurated in 1992, with around 19,000 students, 740 full-time equivalent academic staff and 846 professional and support staff. Environmental issues became a focus of attention at the end of the nineties with a concern for saving resources, particularly utilities. Engagement with the broader concept of sustainable development became a more strategic concern in 2005, when a strategy was developed for the whole institution; from 2006, strategy embraced both global citizenship and sustainability (Shiel 2007) with education for sustainable development becoming a curriculum requirement. The importance of a holistic approach and integrative ways of working on over-lapping agendas (Shiel et al. 2005) was established at the outset but has never been fully achieved or easy to reinforce (Shiel 2011). However the driver has been to implement an approach not dissimilar to the "4C" model (curriculum, campus, community and culture) at Plymouth University (Jones et al. 2010, p. 7). The strategic vision for the university up to 2018, has made a clear commitment to "a holistic approach" to sustainable development, with the aim of "inspiring our students, graduates and staff to enrich the world", and the assurance that: "we will ensure our environmental credentials are held in high esteem" (Bournemouth University 2012). Substantial progress has been made over the course of the strategy and BU is perceived as one of the greener universities in the UK, with a 'first-class' award, consistently maintained in the UK Green League (People and Planet 2017). Campus sustainability is such that the estates at BU provide a very good 'Living Lab' environment where students learn from and contribute to campus greening approaches.

In 2016, a number of actions were pursued to achieve a "step change" in progress, and to reinforce a holistic approach:

- Achieving the highest credential to exemplify best practice in the environmental management of the University (i.e. EcoCampus Platinum and ISO14001 certification)
- Reinvigorating the education agenda
- Developing the culture and building capacity by working in the extra-curricular sphere—initiating Green Impact teams across the university (Shiel and Smith 2017).

The actions resulted in partial success.

EcoCampus Platinum (EcoCampus 2018) and ISO14001:2004 (International Organization for Standardization (ISO) 2015) certification was achieved in 2016 and BU became, at that time, one of only 15 universities with this dual certification. Eco-Campus was designed by the higher education sector to help universities implement environmental management systems (EMS). An EMS is a risk management tool to minimise the impact on the environment whilst also promoting positive impacts, such as Education for Sustainable Development (ESD). BU's EMS currently provides a structured approach, supported by senior management, to continual improvement with its ESD programme.

Reinvigorating the education for sustainable development (ESD) agenda involved working with the Centre of Excellence in Learning (CEL) and gaining approval of a sustainability focus on the Post Graduate Certificate in Education (PGCert), which is compulsory for new staff. In 2017, this took the limited form of a one-off presentation to staff on the PGCert. The presentation created some interest but was perceived as a bolt-on, with limited impact on wider curriculum change. Similarly, a competition to surface good ESD teaching practise (again in collaboration with CEL) made public a few excellent examples, but mainly only gained the participation of already engaged academics, rather than serving to inspire the wider body of staff.

Another area where academics appeared not to be engaging related to the Green Impact programme, which had been introduced at BU in 2015. The programme involves staff working in teams within their departments to complete a workbook of actions covering several aspects of sustainability. The more actions completed, the more points are gained, leading to a Bronze, Silver, Gold or Platinum award. In 2017, four teams gained awards, with three at Silver and one at Bronze but three of the four teams were based in administrative functions, with only one academic team participating since 2015. Efforts to extend the programme have secured an increase in the number of teams (14 teams in 2017/18), however academic teams are still in the minority. Other universities (e.g. the University of Sheffield) have had greater success in securing academic staff participation in the programme, demonstrating that at BU, there is potential for further improvement. A survey investigating the barriers to pro-environmental behaviours at BU, including participation into the green impact programme, highlighted that the biggest barriers facing staff were: lack of time, funding and organisational support (Scarborough and Cantarello 2018). This echoes some of the barriers identified by the National Union of Students (NUS) et al. (2017) in their sustainability in education report. However, it is interesting to note that while time was the most highly reported barrier at BU, this barrier is

only listed in position six in the NUS report; this suggests that incorporating green impact participation into staff workload could provide an effective solution for BU to encourage more staff to adopt pro-environmental behaviours and so, where more staff lead through example, more students might be encouraged to follow.

In early 2017, it seemed to be the case that while considerable progress was being achieved in relation to campus greening, community engagement and sustainability research, since achieving ISO 14001, the ESD agenda was lagging; securing staff commitment and interest was continuing to be a challenge. In essence a different approach was required to engage academic colleagues.

6   A Further Shift of Approach: Aligning with the SDGs

As a consequence of ESD being incorporated into the EMS and hence an item on the 'risk register', it became an agenda item for the SSG. This was an important turning point highlighting the need to try other approaches. The group evaluated ESD as at 'high risk' of not being achieved. The main reason for this decision was the lack of evidence that sustainability had been embedded in courses further obtaining robust and objective evidence to report on the extent to which it had been embedded, was likely to be challenging. Other Universities, such as the University of Winchester, have addressed how to embed and benchmark sustainability in the curriculum by signing up to the NUS Responsible Futures programme which provides a framework for implementing and reporting on ESD (NUS 2017). BU had not participated in such a scheme.

Discussion on how to move forward highlighted the importance of communication that appealed to all stakeholders. Communication of sustainability messages is key to engaging with academics (Djordjevic and Cotton 2011) and to culture change. SSG recognised the potential of focusing communication on the SDGs, as a vehicle to engage with a wider academic audience and to achieve greater adoption of ESD. This decision was based on the assumptions that: all staff might address one or more SDGs in their subjects; the topic might have greater appeal than ESD, given that some staff were unable to relate to sustainability, let alone ESD; others were finding it difficult to understand how their actions today are either directly or indirectly affecting the future of the planet to support human life; others struggled to connect taking personal responsibility for relatively simple actions, such as recycling, with protecting the environment. The SDGs would provide a different lens for people to understand and explore what sustainability means for them, plus the tangible ways they might help make a difference.

The first communication initiative took the form of an adaption of the earlier ESD competition: instead of requesting examples of ESD, academics were asked to submit case studies of where they incorporate the SDGs in their programmes. Disappointingly, the competition had less impact than anticipated but did allow for three excellent winning academic examples to be promoted. These included an academic who teaches Film and TV. She had incorporated the SDGs into two modules and

organised sustainable literacy training for staff in the Media and Communication Faculty. Another academic from the same Faculty had incorporated the SDGs into the assessment of a BA Film Language unit where students were required to produce a three minute film and consider the environmental sub-plot. A third academic from the Law Department, illustrated how 'Advanced Criminal Law' was concerned with the United Nation's Goal Peace, Justice and Institutions (SDG 16). Further, in discussing types of gross human rights violations, the Goals regarding Inequalities (SDG 10) and Gender violence (SDG 5) were covered.

In parallel to the competition, it was decided to pursue a more strategic approach. This took three forms:

- Using EcoCampus and the new ISO14001:2015 standard to provide the framework for ESD
- Further and closer collaboration with the CEL Director to ensure ESD was promoted through central communication channels and became an agenda led by CEL
- Using the opportunity of institutional strategy development to embed the SDGs and ensure that they featured during strategy development processes.

As stated above, BU achieved certification to EcoCampus and ISO14001:2004 in 2016, following an external audit. The new version of ISO14001:2015 was launched in September 2015 (International Organization for Standardization (ISO) 2015) with organisations having three years to transition to the new standard. BU achieved the transition at the end of 2017. One of the key changes to the standard, the need to gain greater commitment and leadership from senior management to the EMS, has been of critical importance. This afforded an opportunity to encourage further engagement with senior management. The importance of this clause, which is now a central component of ISO14001:2015, was discussed by the University's Leadership Team as part of implementing the new standard. It served to influence strategic discussion at an opportune moment—the University's "BU 2018" strategy was coming to a close and the new strategy "BU2025" was in development. The perfect opportunity was provided to renew with leaders discussions around commitment to sustainable development but also to introduce the potential of the SDGs.

As a consequence, the new strategy "BU2025" incorporated into an early draft the following statements (Bournemouth University 2018):

(i) Leadership and impact: Enhance our position as a sustainable organisation and manage the environmental impact of our actions.
(ii) Support our staff from all parts of BU and students to take a responsible approach to the environment and sustainable development by:

- including sustainable development in our programmes and support our staff and students to make responsible choices about their environmental impact
- bringing together our academic work on environmental sustainability with our approach to the physical environment at BU
- driving significant worldwide impact on sustainability and the environment through our strategic investment areas.

Leadership for ESD is vital but also requires ownership by the academic community. It seemed important that CEL should be more visible in terms of developing the agenda but also in taking a leadership role. CEL's remit is to provide academics with guidance on curriculum development and excellence in pedagogical approaches, including the use of new technology to enhance the student experience. Further meetings with the Director of CEL served to gain full support for ESD and the SDGs. The CEL Director reports directly to the Deputy Vice Chancellor (Education) providing a strong central pillar for promoting the SDGs throughout BU. Further, in 2017/18, rather than a one-off presentation on sustainable development, CEL agreed that the PGCert in Education would fully address ESD and the SDGs in the Education Policy unit. In developing the pedagogic approach the SDGs would be introduced to participants in week one, considered in other units and become a theme for assessment.

In addition to strengthening the role of CEL, and to extend communications and influence culture change, presentations were made to the four Faculty Education and Student Experience (FESECs) committees with the aim of directly engaging with academic leads in relation to reinforcing the importance of embedding sustainability in the curriculum and introducing the SDGs. Training on the importance of sustainability was also provided to elected student representatives across the Faculties. These students attend programme meetings with academics and thus, they represent the student voice and have the opportunity to comment on and influence what is being taught. At the same time, BU also signed up to and promoted participation in the first "NUS SDG Teach In" which encourages academics to pledge to include the SDGs within their teaching, learning, and assessment on their course(s) during a week in February 2018 (NUS 2018).

The development of the new BU2025 strategy was an iterative process with the opportunity to further embed sustainability and centralise the SDGs to underpin strategy development throughout. The EAUC conference in March 2017, which focused on the adoption of the SDGs, was a very timely opportunity to take stock of what other institutions were doing and consider how BU could use the SDGs to help embed sustainability in all areas of the business. Attendance at the conference enabled BU's Sustainability Manager to provide various inputs based on the SDGs to the Office of the Vice Chancellor (OVC) during the drafting of the strategy, including mapping BU's strategic Fusion model of excellence in education, research and professional practice, against the SDGs. As a result, sustainability became one of the key areas of the new draft strategy. Strategy development at BU is a process of consultation that includes many opportunities for staff participation and stakeholder comments on drafts. Not only did conversations around sustainable development become a wider concern but the SDGs became a noticeable feature of consultation events and staff development workshops.

One of the major changes in the new strategy will be the need to demonstrate the impact of BU's research, education and professional practice. Under the EMS, BU has already evidenced impact, delivering many environmental and social improvements, such as providing two new buildings to the BREEAM 'Excellent' standard, installing photovoltaics, providing an efficient Unibus service (over 1 M passenger journeys in 2016/17) and using the landscaping of the campus to educate students about the

medicinal value of plants. The new strategy will commit BU to extend developments to secure further opportunities for staff and students to use the estate as a living lab for health and wellbeing, and sustainability.

Concurrent with strategy development, the SDGs are being promoted through various media (including electronic screens in buildings), workshops and presentations with the aim of raising awareness amongst both staff and students of their importance, but importantly, to highlight collective responsibility for achievement. Both the main staff engagement tools, Green Impact and Green Rewards (where staff are rewarded for taking positive action for the environment and their health and wellbeing), now link directly to the SDGs. For Green Impact, this involves team members demonstrating how they have incorporated the SDGs into their professional practice, teaching or research. For Green Rewards, the various activities are all linked to the appropriate SDGs and so staff are able to see how what they do on a day to day basis contributes, for example, staff receive 400 points if they sign up to the SDG Accord. As of January 2018, 83 people had signed up but numbers are increasing rapidly.

Further developments are currently in the planning stages to accelerate participation and action; evaluation will take place as the new institutional strategy rolls out.

7 Discussion and Reflections

A substantial amount of effort is going to be required on the part of many stakeholders if by 2030, under Goal 4 of the SDGs, all learners will have acquired:

> the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development (United Nations 2015, p. 15).

It is imperative that universities contribute fully to sustainable development and particularly the SDGs. However, making progress on such agendas within higher education settings has always been criticised as a slow process (Sterling et al. 2013) with barriers to be overcome (Leal Filho et al. 2017b). BU is by no means at the forefront of developments but it is currently further along than many institutions, in developing a strategic and holistic approach which began in 2005 (Shiel 2007). Continual progress is only achieved where mechanisms are in place to track the success of initiatives and to develop new course of action and this paper has described some of the steps that are being taken to move forward. Currently actions at BU are evolving with the SDGs referred to frequently in strategy development workshops and becoming a feature of BU2025. It is recognised that further work will be needed to develop indicators to evaluate achievement and impact.

The approach at BU, as might be expected in an institution that has sought a holistic approach from the outset, has exemplified each of the patterns that Barth and Rieckmann (2013) suggest are distinct ways that institutions engage with sustainability:

top down institutional approaches, bottom up, and sustainability as the environmental management of estates (Shiel and Smith 2017). All of these approaches have continued to be deployed in the actions described in this case study.

In less than a year, the process of highlighting the SDGs at BU has served to involve a wider staff base in discussion, in ways that were never achieved when education for sustainable development was the main focus. Building wider engagement is also being reinforced by continual workshops for staff development and for students. Staff development is critical for building capacity (Desha and Hargroves 2012) and the requirements for such should not be under-estimated. Staff development is never completed, it needs to be ongoing to support change and curriculum development (Cebrián et al. 2012). Beyond staff development, it will be important that collaboration with CEL leads to the development of resources that staff will find easy to use, given the strong evidence (Scarborough and Cantarello 2018) that lack of time is an inhibitor. CEL will also need to play a larger role in taking ownership and leading the education agenda, so that it is no longer seen as the work of a few committed champions, exemplifying pedagogic innovation. BU has already started providing examples of where sustainable development and the SDGs are relevant to the curriculum and are in fact, essential to the future career aspirations of their students (the use of the British Academy of Film and Television Arts (BAFTA) carbon calculator by the British Broadcasting Corporation and Independent Television for developing media programmes, for example, requires students to understand sustainable development and carbon). Further examples of the importance of the SDGs for graduate employability are being developed and will support further curriculum change.

Recent progress would not have been achieved without maintaining top management support; it has been critical from the start and throughout the process. Such high levels of continued support might have been challenging, without the success in securing the EcoCampus Platinum award and ISO14001:2015. Placing ESD on the risk register has also served as an important trigger to secure and legitimise initiatives for further action. In turn, strengthening engagement with leaders has also led to a willingness to embrace the SDGs as a strategic concern. The success of the new strategy will depend upon how key performance indicators are selected and monitored.

To date, actions to inspire change have been prioritised over an approach that audits the curriculum to search out reference to the SDGs, through detailed searching of module specifications. While such an approach has been avoided, a better alternative for benchmarking progress may not materialise; eventually, module specification analysis, or a large-scale survey may be unavoidable, and is currently being considered. Albareda-Tiana et al. (2018) present an empirical study exploring the principles and practices linked to the SDGs in the International University of Catalonia curriculum. Their study involved a through analysis of terms related to environmental, social and economic sustainability found in the university curriculum and then in-depth semi-structured interviews with the deans of different faculties. While this is an exemplary approach and other universities may wish to start with a similar study, desk-based exercises carry the risk of consuming considerable time and resources,

when efforts deployed in more visible actions, including staff development, might affect greater change.

Green Impact as an initiative has inspired some change, serving to raise awareness of the SDGs and triggering lots of new activities that will enhance environmental management. It is however, to date, not appealing sufficiently to academic teams. Ways will need to be sought to enhance academic engagement. Green Rewards, on the other hand, is a scheme which is engaging all staff across BU, with clear links between activities and the SDGs; to date, nearly 600 staff have signed up (just over 30%). In future, the data will provide an invaluable indicator of the ways that staff are contributing to achieving the SDGs.

In moving forward, in those cases where the SDGs are already included in the curriculum (e.g. M.Sc. Green Economy (an entire programme) and on the final year Globalisation and Sustainable Development unit, at undergraduate level), it will be important that pedagogy seeks to engage students in critical discussion to enable the paradoxes that characterise the larger discourse of sustainable development in educational practice and by extension the SDGs to be explored. Kopnina (2017) illustrates how through the combination of pluralist, participatory, transformative and instrumental ecocentric approaches at three different institutions in the Netherlands (vocational college, undergraduate and postgraduate levels), she was able to stimulate the students' recognition of critique of the most common terms in the SDGs, namely economic development, inclusion and resilience.

It will also be important to enable the transfer of the theoretical concepts mentioned in the SDGs and associated targets, to personal lives and future work contexts and in so doing, encourage individuals to explore the SDGs independently. Crespo et al. (2017) describe how they were able to do that at the University of Vigo (Spain) by introducing a sustainable holistic rubric based on the SDGs targets which was used to assess students' dissertations. This year, at BU, the SDGs have been incorporated into the assignment for the Globalisation and Sustainable Development unit and the authors of this paper will be able to analyse the t extent to which a less time demanding approach compared to Crespo et al. (2017) might still achieve the same result.

As a final reflection, the process of change at BU has taken time but also considerable effort on the part of SSG members but the Sustainability Manager, in particular. Such changes require attendance at numerous workshop sessions and leading the delivery of presentations, as well as being alert to every opportunity to influence conversations with decision makers. Experience has shown that working in partnership with academics, across educational boundaries and university functions, contributes greatly to success; formalising decisions through a strategy group that is chaired by a Deputy Vice Chancellor, gives legitimacy to outcomes.

8 Conclusion

Maintaining momentum with ESD and particularly holistic approaches to sustainable development, poses challenges; those leading the agenda need to be continually evaluating their approaches and instigating new initiatives (Shiel and Williams 2014), or progress may falter. This paper reflects one institution's evaluation of progress, provides a snapshot of the process of change, and highlights initiatives undertaken to develop further engagement. It has shown how the SDGs have captured support to the extent that, they have been used to inform strategic change, and will become a central feature in the new university's strategy. The SDGs have provided a platform to revitalise institutional efforts in relation to ESD and because of their breadth, it is anticipated that wider academic engagement will be catalysed as institutional strategy rolls out. Academics, who previously might have felt that sustainability had nothing to do with them, are already beginning to explore how particular goals resonate with their discipline, teaching and professional practice. The SDGs have enabled a change of focus at BU, which has increased awareness of the university's sustainable development agenda and extended discussion. The impact of efforts will be evaluated in the future.

This paper will be useful to anyone interested in embedding sustainable development within universities, maintaining momentum of such approaches, and developing strategy to embrace the SDGs. Substantial efforts have been required to reinforce the responsibilities of higher education in relation to sustainable development, similar efforts will be required to ensure that higher education accepts its crucial contribution to the achievement of the SDGs. Universities need to ensure that the SDGs are addressed in the curriculum, through research, on campus and in the community. Through outreach activities, universities can influence significant change within their regions. Further research in all those areas will be important. It may be no easier to address the SDGs strategically and in an integrative way, than it has been historically to address sustainable development, so it will be important to evaluate approaches and research the impacts and challenges in different geographical and cultural contexts. Until such time as implementation is commonplace, case studies sharing experience of how the SDGs are being developed will continue to be required.

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