



Next Generation Sustainability Strategy and Structure

Whole-Institution Approaches to Sustainability
in Universities and Colleges

Ellie Appleton

May 2017

FOREWORD

The EAUC's mission is to make sustainability in post-16 education, the new norm or 'just good business'. We work to reposition the agenda at the heart of the leadership and structure of sector institutions and ensure it aligns as a delivery mechanism for member institution's strategic objectives.

One key thing the EAUC has learnt in its 20 years is that there is no one standard approach to sustainability. Off the peg or tick box approaches can appear attractive on the surface but change can often be just that, on the surface. For the EAUC, the key to success is for a university or college to define sustainability for itself and build a unique strategy and structure which reflects its particular nature, context and geography.

Universities and colleges have a unique and powerful opportunity to combine their campuses, teaching, leadership and research into a potent responsibility to drive change. To enable this, the EAUC developed the LiFE tool which provides our Members with a framework to bring all aspects of the institution together in a holistic, whole-institution approach. See Figure 1 below,



Figure 1: The LiFE Framework www.eauc.org.uk/life

EAUC commissioned this research paper to help Members understand how some in the sector are pushing strategic and structural boundaries and evolving new approaches which reflect a whole-institution approach to sustainability. As ever the dynamism, ambition and creativity in the sector has been evident as a wide range of approaches have been identified in the research. Each have their merits and none are necessarily better than the other, but are appropriate for that institution at this time and place. It's for you to judge which approach might best work in your institution and help you advance your whole-institution approach where sustainability can become 'just good business'.

Iain A Patton

Iain Patton
EAUC CEO

Executive Summary

Across the UK and beyond there is growing recognition of the important contribution that the post-16 education sector can make towards a more sustainable future, well beyond addressing the environmental impacts of its campuses and operations. Universities and colleges can and should take an active role in leading societal transitions: they are uniquely positioned with the opportunity to educate and embed sustainability in the mindset of our future leaders, influencers and decision-makers.

As universities and colleges reflect on how they can contribute towards the UN's Sustainable Development Goals and question how to embark on their own journeys towards sustainability, the concept of a whole-institution approach is gaining substantial interest. A variety of interpretations are emerging as to how this might be implemented in practice.

Research into how some in the sector are trying new, forward-thinking, whole-institution approaches to sustainability revealed a number of key structural and strategic dimensions:

Structural Dimensions

- ❖ Organisational structure
- ❖ Governance matters
 - Highest level of authority
 - Monitoring and reporting
- ❖ Implementation
 - Top down process
 - Careful language
 - Service orientation

Strategic Dimensions

- ❖ Leadership and authority
 - The right leader
 - Champions, sponsors and academic leads
- ❖ Engagement and representation
 - Bottom-up, student voice
 - Partnerships and collaboration
 - Community engagement

Six broad structural models have been developed to summarise the range of approaches observed during this research: 'Estates-based', 'Elsewhere-based', 'Dedicated Department', 'Student Led', 'Decentralised' and 'No Dedicated Roles'. These models are presented, with illustrative case studies.

It is clear, given the diversity of institutions across the sector, that there will not be a 'one size fits all' model. Furthermore, as demonstrated by this research, careful consideration of strategy is just as important as developing an appropriate structure. By offering a deeper understanding about the ultimate aim of the journey and the possible routes that might be taken, this report aims to provide a positive starting point for those seeking to introduce a holistic sustainability approach within their own university or college.

Contents

Foreword	2
Executive Summary	3
Project Landscape	5
Research Outline	6
Research Findings	7
Structural Dimensions	7
Organisational Structure	7
Estates-Based	8
Elsewhere- Based	11
Dedicated Department	13
Student-Led	16
Decentralised	18
No Dedicated Roles	21
Governance Matters	24
Implementation	25
Strategic Dimensions	26
Leadership and Authority	26
Engagement and Representation	26
Conclusion	27
References	28
Resources	28
Further Reading	28
Acknowledgements	29

Project Landscape

Across the UK and internationally, pioneering universities and colleges are developing new organisational models to lead and implement their sustainability ambitions. Historically, activity has been limited to environmentally focussed activities based in Estates and Facilities Departments, primarily driven over recent years by legislation, such as the HEFCE sector carbon reduction target in England and Scotland's mandatory carbon reporting. However, it is widely recognised that sustainability encompasses a broad scope of issues beyond environmental impacts; universities and colleges have responsibilities that extend far beyond their carbon footprint.

The post-16 education sector has an important role to play in working towards the achievement of the UN Sustainable Development Goals (Figure 2), introduced in 2015. There is scope to deliver valuable contributions in multiple areas by means of research, innovation and outreach with communities, enabling student activism, delivering through the curriculum, operations and by acting as exemplars in leadership for sustainable development.



Figure 2: UN Sustainable Development Goals (United Nations, 2016).

Universities and colleges should therefore seek to lead agendas that build social and economic sustainability through partnerships with local communities and beyond. They should contribute to the development of new and innovative sustainability solutions, while also ensuring that their educational programmes are equipping graduates with an appropriate understanding of and engagement with sustainability which they can apply within their future careers. In addition, taking forward a sustainability agenda also serves to offer substantial business benefits to the institution itself, including driving innovation, strengthening competitive advantage, attracting high calibre staff and enhancing the student experience. These and other business benefits are explored in depth in 'A Business Guide for University Governors: Ten reasons to build resilience into the future of your university' (EAUC, 2015), available on the Sustainability Exchange website (see further resources).

Increasingly, a number of institutions are seeking to develop the learning, research, social, economic, leadership and governance aspects of a whole-institution approach to sustainability. Across the sector, questions are being raised as to how to go about implementing such an approach: What has been done so far

in other institutions? What works, and what is needed to make it work? What is the end goal of the journey - is there an ideal to aim towards?

In its role to support sustainability within the UK and Ireland post-16 education sector, the EAUC is looking to provide answers to these questions. The State of Sustainability in Tertiary Education 2016 report (EAUC, NUS & UCU, 2015) showed that although sustainability is a strategic priority for many institutions, in many others it is still broadly seen as an Estates issue. And while senior leadership was widely recognised as having the strongest influence on the importance placed on addressing sustainability, the most senior member of staff with a formal remit to deliver on sustainability was only seen at executive level in 34% of the universities and colleges surveyed. Following on from the survey findings, the EAUC identified the need for a guidance report to inspire and enable those seeking to pursue a forward-thinking, holistic approach to sustainability.

This report therefore aims to summarise the key features from some of the leading approaches already implemented in universities and colleges across the UK and beyond, providing a current picture of the sector. This is intended to enable other universities and colleges to reflect upon their current approaches to sustainability, and how these might be developed over time. The tried and tested approaches will provide ideas and inspiration, and help identify possible paths for others to pursue their own whole-institution sustainability journey.

Research Outline

Based on the EAUC's existing knowledge of the sector, eighteen universities and colleges with progressive whole-institution sustainability approaches were selected as case studies. Given that the EAUC's main membership base is made up of UK institutions, the selection was heavily weighted towards UK-based case studies, however in addition a further 5 international universities were included within the research based on their notable integrative sustainability approaches. The participating institutions are shown in table 1 (below).

Semi-structured interviews were conducted with sustainability leaders from each institution, with questioning focused on the evolution of the approach, authority and structure, strategy, budget, transferability, strengths and weaknesses, and considerations for the future. For each institution, the corporate strategy and sustainability strategy (where applicable) were obtained, as well as organisational charts where available. Further background information on sustainability teams and action was obtained from publicly available information on the respective institutional websites.

Anglia Ruskin University	University of Edinburgh
Bridgend College	University of Exeter
Canterbury Christ Church	University of Gloucestershire
Kingston University	Université Laval
Maastricht University	University of Leeds
Macquarie University	University of Manchester
Massachusetts Institute of Technology	University of Nottingham
RMIT University	University of Wales Trinity St David
South Lanarkshire College	Uxbridge College

Table 1: Participating institutions

Research Findings

A number of features were identified from the case studies as critical aspects of a holistic approach to sustainability. These fall under two key headings: structural dimensions and strategic dimensions.

Structural Dimensions

Organisational Structure

The post-16 education sector is diverse, with institutions ranging from small, specialised colleges to vast universities with staff and student populations the size of small towns. Urban or rural, research or teaching-focused, old or new; it is only right that there are already a wide range of interpretations as to how a whole-institution sustainability approach might look in practice.

Those already making progress in this area are in agreement that while their approaches may be to a certain extent transferrable to other institutions of a similar size and/or background, there certainly isn't one ideal model that will suit all. While each case study was unique, six broad models emerged which encompassed all of the observed structures:

- ❖ Estates-Based
- ❖ Elsewhere-Based
- ❖ Dedicated Department
- ❖ Student-Led
- ❖ Decentralised
- ❖ No Dedicated Roles

These may not be a perfect fit in all cases, but with a little flexibility they cover the team structures implemented in each of the examples visited. Other universities and colleges might usefully consider an approach based on one of these model structures, subject to suitability to their own background and circumstances.

It is worth noting that most of the examples researched for the purpose of this report have some sort of formal sustainability committee above and beyond the 'structure' as classified here. Within organisational charts, such committees are likely to be represented by dotted lines. They consist of staff members from across business and academic areas of the university or college, whose line management is in their respective departments. In some instances, student representatives (or a representative from the student union) are also included in the committee.

The importance of such committees should not be underestimated, and indeed many of the contributors to this research expressed quite how significant the role of the committee can be. With careful consideration of who sits on a committee and how it is implemented, it can prove to be a valuable tool in providing reach across all departments, and therefore enable a far wider sphere of influence than might otherwise be achievable. Similarly, the presence of SMT or executive level members on a sustainability committee can provide a direct link to higher levels of authority and increase how seriously sustainability is taken.

The identified structural models will be reviewed in turn, describing their features in the following focal areas: leadership and people, budget, authority and scope of influence, and strategy. The benefits and risks of each model, as perceived by those contributing to the research, are summarised.

Estates-Based *(An individual or team within the Estates department)*

Observed at both the University of Nottingham and RMIT University, a team dealing with institutional sustainability is positioned within the Estates department, with the budget embedded within the overall Estates budget. While this is the traditional position from which environmental issues are tackled, the cases observed consciously go beyond implementing an Environmental Management System (EMS), addressing sustainability in the curriculum and culture of the respective universities.

Leadership and People	An Estates-based team may be led by the Head of Estates or by a dedicated sustainability lead within the Estates department, as is the case at the University of Nottingham where there is a dedicated Director of Sustainability, underneath whom there is a team of approximately 10.
Budget	The sustainability budget is embedded within the overall Estates budget. Depending on the strategic emphasis given to sustainability, a sum may or may not be ring-fenced within the overall departmental budget.
Authority and Scope of Influence	Being based within the Estates department naturally limits the scope of authority and influence to Estates based issues. This varies, however, depending on the seniority of the individual heading the sustainability team. A Director of Sustainability sitting at SMT level, such as at the University of Nottingham for example, has the freedom to make decisions on action and spending without seeking prior approval, on all but the largest projects. Their position may also allow influential outreach across other departments. In contrast, a team headed by a lower manager is likely to have significantly less scope for influence in areas beyond those traditionally considered within the jurisdiction of Estates.
Strategy	The inclusion of sustainability within the institutional strategy is not a key feature of the Estates-based approach. However, incorporation into the mission, vision and values is likely to positively affect the scope of influence of the team, as well as the allocated resource and budget.
Student Perspective	Estates-related operational issues may impact students by means of the creation of high profile buildings and other campus features, but the real scope for offering an improved student experience and enhanced graduate attributes lies in the collaboration between the curriculum and other areas (for example research, community partnerships). The extent of this impact depends upon the effectiveness of the means of horizontal reach from the Estates-based sustainability team across other areas.

Benefits	Risks
A base in Estates is well-suited for implementing an EMS approach, to address both big-ticket projects (eg. carbon management) and 'quick-hits' (such as waste reduction). Incorporating sustainability within the responsibilities of the existing Estates team negates the need for significant structural upheaval: any new posts are a simple extension of the existing department. Similarly, it is relatively straightforward to expand the Estates budget as required to cover additional sustainability initiative costs. This position also offers relative safety when the wider university agenda is being challenged or when cuts need to be made.	While the Estates department is the ideal position from which to deal with environmental issues, the risk is that this builds a narrow, environment-focussed interpretation of sustainability. Social and economic sustainability issues, which would not traditionally be dealt with by Estates, risk being neglected. In the same vein, the ability to influence broader areas such as curriculum and research is likely to be limited given that these do not normally fall within the remit of the Estates department.

Estates-Based Case Study: University of Nottingham



The University of
Nottingham

Highest level of authority: Executive level

Reporting to: Chief Estates and Facilities Officer

Web: <http://www.nottingham.ac.uk/sustainability/>

The Estates department at the University of Nottingham is somewhat unique in that it has three directors, including a Director of Sustainability whose team is responsible for a number of operational areas as well as environmental management. While a large proportion of the team's work focuses on operational responsibilities, the role of the directorate also spans engagement with teaching and learning, careers and research areas, as well as working with the students union and linking to the campuses in Malaysia and China. Outreach to these areas is enabled by the Environment Committee, which is chaired by a member of the Executive Board and has Senior Director level attendance.

Director of Sustainability, Andy Nolan, does not consider the team's base in Estates to be restrictive, but recognises that many of the connections to other business areas are made possible by his position at SMT level. The Environment Committee is also key to enabling a whole-institution approach, because of the diverse membership.

Within the directorate sits an Environment Team of three, who are heavily involved in engagement with staff and students, working closely with student societies, JCRs, and the students union - in particular with the ethical and social justice officer. On the teaching and learning side there is an academic lead, who has been instrumental in developing teaching delivery using a range of platforms.

Because of its significant operational responsibilities, the directorate has a healthy budget. The majority of sustainability spend is contained within that budget, although there is an additional Environmental Initiatives Fund. This is overseen by the Environment Committee, and used for smaller projects such as cycling initiatives and funding for interns.

The 2010 corporate strategy was written with a clear commitment to the environment. The current strategy, 'Global Strategy 2020', demonstrates a progressive understanding of the breadth of sustainability, incorporating wider principles of sustainability and social responsibility within the vision and core values. The sustainability strategy is written in alignment with the corporate strategy, so that the work of the directorate supports the overall aims and objectives of the university. KPIs within the sustainability strategy are crucial for maintaining currency and charting progress, with annual reporting to the University Council.

The most recent landmark development at the University of Nottingham is the GlaxoSmithKline Carbon Neutral Laboratory for Sustainable Chemistry, located on the Jubilee Campus. The Centre is unique in its focus on world-leading research activity in sustainable chemistry, and will put in place an innovative training framework to develop an ethos for sustainability, producing scientists with a thorough understanding of the impact and sustainability of their work.



The future agenda is to look at ways to evolve and do things smarter, to develop the relationship and linkages with the city, and to build on the delivery of an enhanced student experience and graduate employability in order to respond to the student voice, which is one of the key drivers for sustainability at the University.

Estates-Based Case Study: Royal Melbourne Institute of Technology (RMIT) University

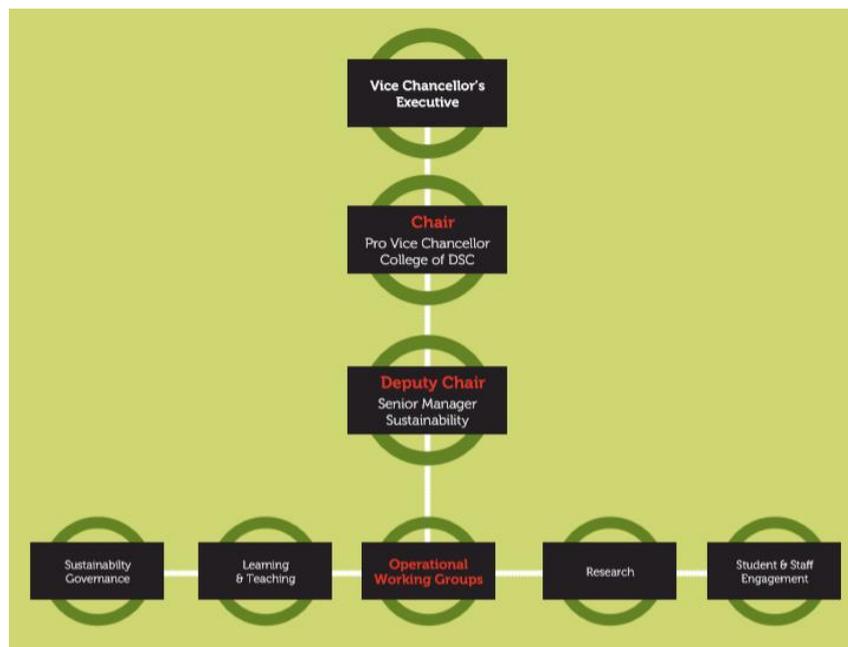


Highest level of authority: Executive Level

Reporting to: Pro-Vice Chancellor of Design and Social Context

Web: <http://www1.rmit.edu.au/staff/sustainability>

The Sustainability Team at RMIT sits within Risk, Reporting and Compliance, which is a branch of Property Services. The current team of 4 is complemented by a Sustainability Committee (see below), which is a sub-committee of the Vice Chancellor's Executive. Chaired by the Pro-Vice Chancellor of the College of Design and Social Context, it provides horizontal reach across the whole university. The Committee includes the Dean of Teaching and Learning, who has a high level overview and authority across all schools, and has a dedicated staff member within his office to work on embedding sustainability within the curriculum.



The previous Strategic Plan (to 2015) saw sustainability incorporated in the context of the three core goals 'Global, Urban and Connected'. This document was superseded by the new Strategic Plan 2015-2020, 'Ready for Life and Work', which has sustainability clearly articulated, including a wider ethical and social focus. This angle from the new Vice Chancellor allows scope for the team to be broader in what they are able to do.

There are three separate budgets in relation to sustainability:

- Sustainability annual works budget - for capital infrastructure
- Sustainability Committee budget
- Property Services Operational budget for staffing and utilities

Senior Sustainability Manager Linda Stevenson considers the approach to be transferable, suggesting that it would sit well with other 'practical' universities in a similar vein to RMIT.

Elsewhere-Based *(An individual or team based within a department other than Estates)*

The second model identified was that of a small team or individual based within a department other than Estates. At the University of Exeter, while operational initiatives have remained in Campus Services, just one individual is employed as an Environment and Sustainability Advisor to coordinate sustainability across the institution. This role is based in the Safety, Health and Wellbeing Service, within HR Services. The position at Bridgend College is similar: here, sustainability is incorporated with health and wellbeing, with the approach led by the Health, Safety and Sustainable Development Manager.

Leadership and People	Approaches based in a department other than Estates tend to be led by an individual sustainability lead, with or without the support of a small team. At Bridgend College, sustainability has been incorporated with Health, Safety and Wellbeing, resulting in the combined 'Health, Safety and Sustainable Development Manager' role, supported by one more staff member. At the University of Exeter, the 'Environment and Sustainability Advisor' is based within the HR department, under the Assistant Director of HR (Safety, Health and Wellbeing), with no team attached.
Budget	The sustainability budget will be embedded within the overall budget of the department in which the team is based. It is likely that the sustainability team will influence spending across other departments and as such there is effectively a sustainability budget embedded across the whole institution.
Authority and Scope of Influence	From a base within another department, the authority for decision making and spending may be very limited, however there is potential for a broad scope of influence across departments institution-wide if positioned as an advisory service. If the lead is in a management position, such as is the case at Bridgend College, this can overcome the risk of restriction to authority.
Strategy	While not necessarily central to the structure, the incorporation of sustainability into the mission, vision and values is useful in supporting the individual or team in their ability to influence across the institution.
Student Perspective	The visibility is likely to depend on the level of leadership and incorporation into overall strategy. It is possible that a team using an advisory approach will be less directly involved with students, but nevertheless the same benefits should filter down to the student experience.

Benefits	Risks
Without the restrictions to the scope of influence likely to be experienced with a base in Estates, this structure offers the potential to start making connections across the institution. There is not the inclination to restrict work to an environmental-only agenda; broader aspects of sustainability can be more easily addressed. Both of the 'elsewhere-based' cases reviewed take an advisory approach, offering a service to all departments. This has the benefit of being well-received in contrast to dictatorial approaches. Furthermore, by providing implementation advice to departments as opposed to implementing initiatives directly, there is no need for a large team or budget, therefore this structure is minimal in terms of resource requirements.	As an addition within another department, there is the potential to encourage the thinking that sustainability is a 'bolt-on' rather than a priority in its own right. With this comes the risk that it is viewed a dispensable extra if there are cuts to funding, or if there isn't sufficient resource within the home department.

Elsewhere-Based Case Study: University of Exeter



Highest level of authority: Governing Body (Council)

Reporting to: Council

Web: <http://www.exeter.ac.uk/sustainability/>

In the last year, the University of Exeter has reshaped its management and governance model for in-house environment and sustainability work. The changes were made to ensure it continues to drive forward improvement in its own performance. The environmental sustainability programme is now divided into three sections of the university, each with a clear portfolio and action plan.

1. Environmental policy, strategy, teaching and audit: an Environment and Sustainability Advisor is based within HR Services (Safety, Health and Wellbeing Service)
2. College and Professional Services: each Director is responsible for driving forward local improvements based on targets and audit outcomes
3. Energy, waste, green travel, water, biodiversity, etc.: this is managed by specific leads within Campus Services



This whole-institution approach to environmental sustainability ensures that within the devolved structure the importance of the environment is recognised and acted upon in all areas of the University. Because operational initiatives (for example energy, waste and travel) have remained in Campus Services, more time can be invested in a strategic focus such as training, audit, and a number of engagement initiatives and staff/student participation awards. The Environmental Sustainability Advisor, Karen Gallagher, finds that from this position she is able to be objective and critically evaluate processes, getting to the root cause of issues rather than simply being reactive, and she is therefore able to engage with people across the university and enable real change. She uses policy standards to set out Exeter's environment and sustainability principles, measure the impact and performance and embed sustainability as a core management need across the university, including ISO14001 certification.

Environmental sustainability is governed by a Dual Assurance process. This is a university wide programme for all governed topics such as Environment, Health and Safety, and Equality and Diversity. The Dual Assurance team comprises a member of the Vice Chancellor's Executive Group and a member of Council. They are responsible for giving support, scrutiny and ensuring progress with approved plans and targets. Dual Assurance is also an excellent model for giving environment and sustainability a supported profile at Council. The Environment and Sustainability Advisor reports to Council once per year, and she reports the progress from across each of the programme areas (as above).

There are two underpinning environmental and sustainability groups which are in place to make things happen. The newly set up 'Sustainability Vision & Change Catalyst Group' is chaired and led by senior academics and is very engagement (student and staff) focused, allowing the ideas of both to be enacted and bringing ESD firmly on to the agenda. The Student Guild has an elected Deputy Vice President for Sustainability, who sits on the governance group and provides a crucial link to the student community. Sustainability is incorporated into the Education Strategy, which aims for students to develop a range of attributes, one of which is to become an active and committed global citizen. The second group 'Campus Environment Management Group' is chaired by the Director of Campus Services and members all have responsibility for driving forward the Environment and Sustainability targets and measure the performance of the institution.

The current institutional strategic plan contains a clear commitment to sustainability throughout. This is supported by the Environmental Sustainability Strategy 2015-2020 which sets out three key performance targets, all of which have been signed off at Executive level.

Karen suggests that a particular strength of being based 'elsewhere' coupled with a devolved management model is the capacity to act independently, give expert advice, inspire people to make a difference and create change. Using a devolved management model means that everyone has a role achieving success - a true team spirited approach which works very well for Exeter.

Dedicated Department *(A department in its own right)*

The most commonly seen structure within the selected case study institutions was that of a dedicated sustainability department, sitting as an independent department alongside others such as Finance, Estates and HR. These departments vary in size and organisation, reflecting the diversity of institutions across the sector. The most suitable set-up will vary depending on an institution's background, type and size. Features in common for all of the dedicated departments were a dedicated budget, reasonable dedicated resource, and a Director of Sustainability sitting in most instances at senior management team level or higher.

Leadership and People	Dedicated sustainability departments are usually led by a 'Director of Sustainability' who is likely to sit at either middle management level or on the SMT. The wide variety of ways in which such departments are organised is a reflection of the diversity within the education sector. The most suitable approach depends very much on the background of the institution and its resulting needs. Likewise, the size of the institution is likely to influence what size team is appropriate.
Budget	A dedicated sustainability department will have its own budget, allocated centrally.
Authority and Scope of Influence	Having its own budget and sitting independently result in a department with the authority to undertake the majority of projects and initiatives without the requirement to seek prior approval. Because the role of the department is to address sustainability throughout the institution, the sphere of influence spans all departments.
Strategy	A dedicated department tends to come hand in hand with the incorporation of sustainability into the organisational mission, vision and/or values. This strategic focus validates the existence of such a department; in return, the department provides a structural means by which to actively work towards the strategic aims. Dedicated departments usually have ownership of an additional institutional sustainability strategy.
Student Perspective	The existence of a dedicated department, particularly when coupled with incorporation into the institution's strategy, will maximise visibility to students; the dedicated budget can serve to provide opportunities for their involvement.

Benefits	Risks
<p>A dedicated team resourced sufficiently to undertake a range of initiatives has the capability to deliver a consistent stream of success stories, which can be utilised for PR and marketing purposes in order to enhance the reputation of the university or college. Having the dedicated resource to be able to enter and win sustainability-related awards is similarly beneficial to the reputation.</p> <p>Having a defined focus gives confidence that the resource is there for projects to be sufficiently facilitated, which can help overcome any pre-existing resistance to spending on sustainability, and can enhance the likelihood of securing external grants. Leadership at directorial level enables close working relationships to be built with counterparts in departments across the university or college. This horizontal reach unlocks the potential for collaboration across different areas, in keeping with the concept of a whole-institution approach.</p>	<p>Appointing a director and creating a dedicated team is a major and visible structural undertaking, which will always hold the potential for criticism. It is likely to create a tension, with concerns in certain departments about the sustainability team cutting across their own areas. The process of creating a new department needs either significant resource to do so quickly, or the patience to allow the structure to evolve over a number of years.</p>

Dedicated Department Case Study: Canterbury Christ Church University



Highest level of authority: Executive Level

Reporting to: Dean of Social and Applied Sciences

Web: <https://www.canterbury.ac.uk/about-us/sustainability/sustainability.aspx>

The structure at Canterbury Christ Church University has evolved gradually over a number of years. There is a history of bottom-up activity, and the structure was created to facilitate that activity and drive it upwards through the organisation. This allows the university to not only absorb within its consciousness what sustainability is all about, but also to realise its importance and value in a business context. The developed structure is now enabling sustainability to be addressed systemically from the top down.

The Director of Sustainability Development, a full time role at senior leadership level, was created in 2010. Underneath the director there is now a small dedicated sustainability team of three, plus two fractional academics and paid student interns running the Student Green Office. Wider reach comes in the form of a flexible structure of working groups, which evolve year on year dependent on the needs of the university.

One key component, the Sustainability Strategic Management Group, is chaired by the Dean of Social and Applied Sciences. The Group reports directly to the Senior Management Team, of which it is an executive group. Membership includes five of the twelve senior managers of the university. Having senior managers involved at this level means that when the Director of Sustainability Development takes proposals to the SMT, there is already support around the table. The Director of Sustainability Development reports centrally to the Dean of Social and Applied Sciences. Reporting in to the executive level gives the role validity and visibility within the organisation.

Amongst the working groups is the Education for Sustainable Futures Group, which is chaired by a faculty Dean. Peter Rands, Director of Sustainability Development, emphasises that it is essential to have academics on board who are able to take the Education for Sustainability agenda forward.

A more recent addition to the structure is the Student Green Office, which has one paid student acting as a coordinator and currently around 27 students, paid and volunteers, involved. Although initially set up by the sustainability team, it now operates independently with minimal support, working on the premise of peer-to-peer engagement.

The team has a significant budget, covering staff and non-staff costs, as well as an internal grant for the Futures Initiative (a university wide programme for enhancing curriculum with sustainability perspectives).

The University's Strategic Framework 2015-2020 states four strategic aims, and identifies sustainability as one of six cross-cutting themes. Getting recognition within the strategy has been made easier by the fact that Canterbury Christ Church University is a church foundation, because the mission and values of the Church of England and the organisation sit hand in hand with sustainability. One significant success has been getting a strategic Key Performance Indicator introduced relating to sustainability.

The work of the sustainability team has been aligned with ISO14001 since 2011, and everything has been incorporated including elements such as food and curriculum work. Including these positive areas has been helpful in enhancing the value of the structure. The team also works using the LiFE Framework¹, which they cite as a useful tool to fine tune what is being done in relation to the policy and strategy, who is being engaged, how it is being measured and communicated and what support is in place.



According to Peter Rands, the future for sustainability at Canterbury Christ Church is about consolidating the approach they have now while maintaining the flexibility to adapt. *"It's about moving forward with current agendas by tying in with the action that's already going on. It's a long game, it's about being tenacious and keeping going. In that respect, it's transferable to anywhere."*

¹ Living Labs is a concept that aims to establish partnerships or programmes which connect academic activities of the institution (i.e. learning & teaching, and academic research) with non-academic partners – <http://www.eauc.org.uk/livinglabs>

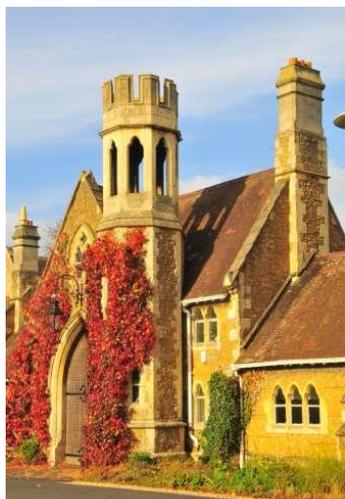
Dedicated Department Case Study: University of Gloucestershire



Highest level of authority: Executive Level

Reporting to: Pro-Vice Chancellor

Web: <http://sustainability.glos.ac.uk/>



The University of Gloucestershire has taken action on sustainability for over 25 years but its current structure was established in 2007, with the appointment of an institutional lead and creation of a Sustainability Team to deliver its cross-business Sustainability Strategy. The team's expertise covers education and research, estates and operations, partnerships and outreach, and student experience. It also hosts RCE Severn, a United Nations University Regional Centre of Expertise in Sustainability Education that connects partners across the region.

The department is positioned within professional services, reporting to the Pro-Vice Chancellor, who holds executive responsibility for sustainability. Its lead role is the Director of Sustainability, who is a member of the SMT, responsible for sustainability KPIs in the University's Operational Plan and Chair of the Sustainable Development Committee that supports governance and policy development. As a department in its own right, the team has an independent budget and is not constrained by being located within estates and facilities.

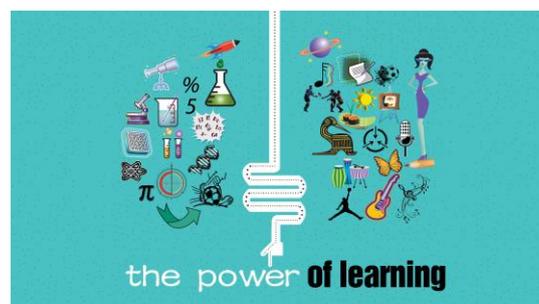
Director of Sustainability, Dr Alex Ryan, notes that blending academic innovation with corporate strategy is key to the University of Gloucestershire's approach to organisational change for sustainability. Sustainability has been a core institutional value since 2010 and is integrated into the University's Strategic Plan for 2017-22 as a key strategic enabler. The University is about to launch its Sustainability Strategy 2017-22 which is driven by Education for Sustainability principles. It states: 'We see sustainability as a force for transformative change across our academic activities, business operations, public outreach and the entire student experience'.

The Sustainability Strategy aims to engage people in transformational change, focusing on the development of pedagogy, not just the transmission of specialist knowledge in sustainability. It recognises that sustainability is a process of learning, not just in the curriculum but for student experiences, staff development and organisational learning. Under the new strategy and to extend existing success in curriculum development, structural links have been established with the

central academic development services to increase cross-faculty integration of Education for Sustainability. Having a lead role with management responsibility as well as academic credibility is critical to this shift and will enable deeper integration with initiatives geared to future success in the TEF and REF.

The Sustainability Team delivers the strategy using systemic approaches to change, setting priorities that support the current business needs and finding leverage points aligned with the corporate context and future ambitions. Their approach is to offer strategic leadership, specialist advice and practical support, and to develop collaboration but ultimately encourage individuals and teams to take ownership of sustainability and adopt it into their own activities and plans as a gradual process of embedding and enhancement.

As Alex Ryan explains, while issues might be unique to Gloucestershire's context and profile, the strategic principles for tackling them are based on wider experience of leading and managing institutional and academic change, approaches which are transferable to other universities and colleges.



Student-Led *(Involvement of students including part-time employment)*

Maastricht University provided an example of a student-led model. A number of students are employed on a part-time basis to make up the 'Green Office', with support from a dedicated member of staff as well as a wider team of student volunteers. The model is made possible by the official mandate and annual budget given to the Green Office by the University. An important feature of this model is a supervisory board to which the office reports, which includes university staff at executive level as well as senior external figures.

Leadership and People	The model is student-led and staff-supported. A dedicated team of students, working on a part-time employed or voluntary basis, initiate and coordinate sustainability projects – alone or together with staff - across the institution. Reporting is to a supervisory board, ideally including at least one senior member of staff (e.g. executive level). In instances where a sustainability committee also exists, reporting can also be to the committee.
Budget	A budget is allocated centrally, to cover employee, administrative and project costs.
Authority and Scope of Influence	Authority is mandated from the university or college. At least one high level member of staff is needed on board in some capacity in order to broaden the scope of influence of the student office within institutional departments. This model is likely to have greater engagement with the student body than other approaches.
Strategy	Whether or not sustainability is incorporated into the main strategy of the institution, the opportunities this approach offers to students can fit well with strategic goals such as enhancing the student experience and graduate employability, and developing graduates as global citizens.
Student Perspective	The student-led model provides an opportunity for students to enhance their learning and employability. As a key stakeholder group, the approach gives them relevance and ownership: it is 'led by students, for students', but supported by staff to guarantee the quality, continuity and impact of their work.

Benefits	Risks
This approach can usefully increase the visibility of sustainability efforts amongst students, improving the potential for wider student engagement and learning, as well as potentially enabling students and staff to collaborate on sustainability issues. Student-driven approaches tend to result in more activities at the grassroots level, plus lobby efforts to advance structural changes within the organisation.	Adoption of a student-led model requires the official support of the university or college, through a budget, training, office space, staff support and a mandate. This requires lobbying from the side of students. The short timescale of student turnover presents a risk of discontinuity over the medium to long term, unless there is some formal staff involvement to oversee strategic interests and longer projects. Student efforts may not lead to significant changes within the institution, unless they are also supported by staff.

Student-Led Case Study: Maastricht University



Maastricht University

Highest level of authority: Executive Level

Reporting to: Sustainability Board (including the Vice President)

Web: <http://greenofficemaastricht.nl/>

The Maastricht University Green Office (UMGO) is a student-driven and staff-supported sustainability hub, established in 2010 as the result of successful lobbying by a student initiative. The UMGO initiates and coordinates sustainability projects at Maastricht University, by empowering students and staff. The work of the UMGO is divided into five areas: governance, community, operations, research and education.



GOVERNANCE



COMMUNITY



OPERATIONS



RESEARCH



EDUCATION

The UMGO team consists of 8 students and one PhD student, and the environmental coordinator (staff), all employed on a part time basis. The inclusion of a university staff member in a supervisory capacity enables continuity over longer periods of time, to overcome issues created by the short timescale of student turnover. Further support is provided by approximately 30 student volunteers.

The team reports to a supervisory board, which provides feedback and support. The board includes the Vice President of the University, the Dean of the Faculty of Humanities and Science, and a number of other senior internal and external figures. The university provides the UMGO with an official mandate to work on sustainability issues in the organisation, and an annual budget which covers all salaries, office space and project expenses.

Sustainability is not explicitly referenced in the overarching corporate strategy of the university. However, the university's mission refers to developing students as 'global citizens at the forefront of their generation' and making a 'genuine, tangible contribution to a better world', and as such supports the principles of the UMGO. 'Sustainability Vision 2030' is the strategic document setting out Maastricht's aim to become a sustainable university by 2030, and 'Roadmap 2030', developed by the UMGO, sets out how this will be achieved, concentrating on the five portfolios.

The student-led Green Office at Maastricht University was the first of its kind, but this model has since been further developed by rootAbility², an organisation set-up by the founders of the UMGO. The Green Office Model has been recreated in other forward-thinking universities including Utrecht University, VUB (Brussels) and the Humboldt University of Berlin, which demonstrates that it is clearly transferable, subject to adaptation to suit the individual institution.



² rootAbility is a non-profit organisation established to promote, support and enable the creation of 'Green Offices' at European universities – <http://rootability.com/>

Decentralised *(Sustainability-related staff across different areas, with high level overview)*

The decentralised model is closely tied to sustainability as an institutional strategic priority. Crucially, this model is overseen at executive level: at both Anglia Ruskin University and University of Wales Trinity Saint David (UWTSD) there is a Pro-Vice Chancellor for Sustainability; the lead at the University of Manchester is the Associate Vice President for Social Responsibility, and at the University of Laval, this falls within the role of the Vice Rector Executive and Development. Underneath this leadership, responsibility for sustainability is embedded at a high level within each business area of the institution (for example teaching, operations, etc.), whether by means of dedicated roles or incorporation into existing roles.

Leadership and People	<p>The decentralised approach has a dedicated lead at executive level. Below this, responsibility for sustainability is embedded at a high level in each area of business (for example: teaching, research, operations/estates) – in some instances with a dedicated role for sustainability; in others, this is incorporated into existing roles. There may or may not be a team underneath working solely on sustainability, as appropriate for that business area in any particular institution.</p> <p>With the lead at executive level, reporting benefits from a direct line to the Vice Chancellor or Principal.</p>
Budget	While the decentralised approach will see budgets embedded within the areas it spans, it is likely that there will be some sort of project budget allocated to the executive lead.
Authority and Scope of Influence	The level of authority is high, because this approach is led at executive level and closely linked with strategic priorities. The decentralised arrangement with oversight from a high level allows influence across all academic and operational areas.
Strategy	It is key to the decentralised model that sustainability is incorporated within the central strategy of the university or college. Without this, it is unlikely that resource at executive level would be allocated to sustainability in the way that is necessary for the approach to be implemented with success.
Student Perspective	The centrality of institutional strategy to this approach means that sustainability is visibly at the forefront of the agenda and an integral part of the student experience.

Benefits	Risks
The decentralised approach is closely tied to sustainability as a strategic priority, and as such is very visible with the potential to be used as a USP for the university or college. Having leadership at a high level (at least at the level of the Executive group) allows a strategic, whole-institution view, and enables integration between all business areas, from teaching to estates, regardless of how independently from each other they might usually operate. Areas of responsibility are embedded within appropriate departments, and as such the risk of ‘treading on toes’ or duplicated roles is removed.	This structure is highly dependent on leadership; therefore it is crucial that the individual overseeing has the appropriate combination of leadership and management skills, and appreciation for the complex nature of sustainability. A risk with top-down approaches such as this is that they are not received positively by those further down the hierarchy. There is a tendency for instructions from above to be perceived as a ‘tick box exercise’, rather than presenting the issues as something to engage with and adopt into the culture. Therefore it is essential that the delivery approach is handled with forethought and care.

Decentralised Case Study: Anglia Ruskin University

Highest level of authority: Executive level
Reporting to: Pro-Vice Chancellor for Sustainability
Web: <http://www.anglia.ac.uk/sustainability>



Anglia Ruskin
University

Drive from a number of members of the Senior Management Team at Anglia Ruskin University saw sustainability become a major part of the agenda around six years ago, with the integration of sustainability into the Corporate Strategy. Since then, the Vice Chancellor has been instrumental in championing it across the whole university and integrating it centrally.

Prior to the creation of new posts five years ago there was no structure relating to sustainability. This has changed dramatically, most notably with the creation of the Global Sustainability Institute (GSI) – a dedicated research institute of around 40 staff and PhD students, including Education for Sustainability (Efs) as a key research area and driver of quality metrics relating to teaching and the curriculum across the university.



'Our mission, under our commitment to sustainability, is that we will always ask about the long term implications of our present actions.'

Photo credit: Brian Richardson, Student Services, 2nd place 2015 Staff Biodiversity Photography Competition

The Pro-Vice Chancellor for Sustainability has the highest level of authority for sustainability. The structure is decentralised, with four 'threads': research (GSI), teaching (Efs), estates (Estates Department) and students (Students Union). Though these areas are structurally independent from each other (with the exception of Efs, which sits within the GSI), for the purpose of sustainability the head of each reports to the Pro-Vice Chancellor for Sustainability. Research and teaching are well integrated, driven centrally by a top-down strategy. There has always been some bottom-up consideration of sustainability within estates; this is now linked in with research.

Newly introduced this year is an implementation group, consisting of the Director of the GSI, the Director of Efs, the Head of Estates, the SU President and the Chaplaincy. The aim of this group is to look at the implementation of the new sustainability strategy, and again report to the Pro-Vice Chancellor for Sustainability.

The budget is decentralised as might be expected: Education for Sustainability is signed off centrally; sustainability work within Estates is embedded within the departmental budget; the Students Union is a separate legal entity from the university, and therefore is also financially separate.

Sustainability is crucially included in the mission and values of the 2015-2017 institutional corporate plan, as it was in the previous plan. The sustainability strategy is set out until 2020. This is deliberately a longer time scale than might normally be used for strategies, in order to allow time for a real transformation of the university.

Looking to the future, Aled Jones, Director of the Global Sustainability Institute, explains that the structure is still evolving. Because Education for Sustainability sits within the Institute, it is naturally easier to consider the research and teaching agendas together and to integrate well between these areas. The next challenge is to focus on how to integrate better with the work of Estates and the Students Union, and how to support engagement in these areas.

Decentralised Case Study: University of Wales Trinity St David



Highest level of authority: Executive level

Reporting to: Vice Chancellor

Web: <http://www.uwtsd.ac.uk/inspire/>

The University of Wales Trinity Saint David (UWTSD) was formed by the merger of the University of Wales Lampeter and Trinity College University Carmarthen in 2010 and with Swansea Metropolitan University in 2012. In 2013, two FE colleges, Coleg Sir Gar with 5 campuses in Carmarthenshire and Coleg Ceredigion with 2 campuses in Ceredigion joined with HE partners to create the UWTSD Group. A commitment to embedding Education for Sustainable Development and Global Citizenship was already high on the agenda of Trinity College, as was sustainability at Lampeter. With the Wellbeing and Future Generations (Wales) Act on the horizon, the university saw an opportunity to prepare themselves for this incoming legislation while also creating a USP in keeping with the ethos of the founding institutions.

The Institute of Sustainable Practice, Innovation and Resource Effectiveness (INSPIRE) was launched in January 2012, acting as a start-point for cross-institutional activity. The structure is minimal: the Director of INSPIRE, Jane Davidson, winner of the 2015 Green Gown Awards Leadership Award - sits at Pro Vice-Chancellor level, and oversees personally the delivery across the whole university - the aim being to embed sustainability strategically in all areas of the university's activity – culture, curriculum, campus and community. She is supported by the Head of Sustainability Delivery (Operations) and his team; one fractional academic lead; a senior policy and strategy officer within Corporate Services; the Chief Executive of the Students' Union, a student paid internship programme and Sustainability Link Contacts in every school and department of the university.

The input from Corporate Services is crucial in enabling access to get sustainability within all departments. The Sustainability Delivery Team sits within the Operations Directorate.

The director and fractional academic lead posts are covered by a dedicated budget, but other sustainability spending is embedded within faculty and departmental budgets. There are also additional project budgets, which cover intern funding, the NUS Green Impact initiative and other projects.

Sustainability is incorporated into all strategic documents; in particular the institutional strategic plan makes very clear the commitment to sustainability through a Key Performance Indicator (KPI) to embed sustainability as a core principle across all aspects of the university. Within the Sustainability Strategy, KPIs sit under four pillars of activity: 'Campus' (environmental sustainability), 'Culture' (embedding sustainability), 'Curriculum' (teaching and learning) and 'Competitive Advantage'. Every department and faculty is required to provide plans demonstrating how sustainability will be embedded within their area.

Achievements and awards are used to define KPIs, embed goals and further the cultural agenda for sustainability. Examples are performance in the People and Planet University League, ISO14001 across the whole university, Green Dragon Level 5, Green Gown Awards and Soil Association Awards.

The university has recently committed to integrating the aims of the Wellbeing of Future Generations (Wales) Act in everything it does. The next area of focus for sustainability at UWTSD is 'Competitive Advantage': demonstrating the commercial opportunities of sustainability as a USP, and showing that it can generate income and attract valuable people to the university.

Jane considers a key strength of this model to be that it is able to systemically and organisationally change the whole culture of the university. The approach is transferrable, but it is crucial that the individual taking overall responsibility and leading the sustainability agenda is placed high enough in the organisation to be able to oversee a total analysis of the institution and identify where sustainability needs be embedded and how this can be achieved.



No Dedicated Roles

Two different approaches to a model with no dedicated roles were observed amongst the participating institutions. Uxbridge College is at an early stage of its sustainability 'journey', and does not yet have any dedicated resource or budget for sustainability. The structure is simply a committee open to students and staff from all areas, chaired at executive level. The college sees this as a stepping-stone in the direction of securing dedicated resource in the longer term. In contrast, South Lanarkshire College could be considered to be near the other end of the journey, claiming that sustainability is embedded within the system-wide processes and entire culture of the institution, thus negating the need for any dedicated sustainability roles. That said, there is still some structure in the form of a sustainability committee, comprised of representatives from all departments in addition to student representatives.

Leadership and People	There is no outright leader or team, though it is essential that there is top level authority for sustainability in order to ensure it does not disappear from the agenda in the absence of a physical 'team'. Comparable to equality and diversity, there is an expectation that every member of staff acknowledges sustainability and it is accepted as a key element of the business culture and embedded within work processes.
Budget	The budget for sustainability is integrated with the budget of each department rather than being held separately, because all sustainability-related work is an integral part of the delivery from each department.
Authority and Scope of Influence	Every individual has responsibility for sustainability and the authority to act within the scope of influence of their own role. If reporting to governor level is incorporated within the model, this ensures influence right across every corner of the university or college.
Strategy	It is absolutely crucial for the success of this model that sustainability is incorporated into the mission, vision and values.
Student Perspective	The case studies visited included a sustainability 'group' or 'committee', and in both instances this was the means by which student representatives were able to get directly involved. The student perspective is highly dependent upon how closely and in what way sustainability is tied in with strategic priorities.

Benefits	Risks
<p>A 'no dedicated roles' model can be useful for smaller institutions early on in their sustainability journey, as a way of introducing it into the culture and mind-set of staff and students perhaps before there is resource and budget available to create dedicated roles. Over time this enables the business case for dedicated resource to become justified, and transition to another structural model is then likely to be possible.</p> <p>Alternatively, this model has potential at the other end of the journey: some might see sustainability truly embedded within the whole culture and system-wide processes as an ideal towards which an institution might aim, if this level of embeddedness is indeed achievable. Combined with authority sitting at governor level, this would render it safe from the uncertainty of top level staff changes, such as the instance of an incoming Vice Chancellor or Principal for whom the organisational benefits of sustainability are not yet recognised. If achieved, it presents the widest possible reach to every corner of a university or college: sustainability becomes a normal and expected target for all departments in the same way that equality and health and safety already are, with the incorporation of reporting and targets into business processes.</p>	<p>With no dedicated resource and authority comes the risk that sustainability becomes 'out of sight, out of mind'. While the aim is for it to be embedded within the culture and considered by all, when no one is answerable to a specified authority for sustainability, it may become forgotten about altogether. Furthermore, any claim that it is embedded within values might be seen as an opportunity to justify the removal of existing resource where financial cuts are being sought.</p> <p>This concept raises the question of whether sustainability can be too embedded: is it visible, or does it negate the opportunity to use sustainability as a USP? It is postulated that sustainability is a never-ending journey and there is always more that can be done. So without a team pushing ever further with new ideas, might a fully embedded approach self-limit the extent of sustainability that is actually achieved?</p>

No Dedicated Roles Case Study: South Lanarkshire College



South
Lanarkshire
College

East Kilbride

Highest level of authority: Executive level

Reporting to: Depute Principal

Web: <http://www.south-lanarkshire-college.ac.uk/about-us/sustainability/low-carbon-house-project/>

The absence of dedicated sustainability roles at South Lanarkshire has not hindered a strong ethos of sustainability across the college, which is instead supported by the 'Sustainability Group'. This is a committee chaired by a Deputy Head of Faculty and comprises representatives from different departments and faculties as well as student representatives. The Depute Principal is a noteworthy member of the Sustainability Group.

Aside from the Sustainability Group, the approach is somewhat comparable to Equality and Diversity, in that there is no dedicated team but every member of staff is expected to acknowledge sustainability as standard. There is no ring fenced budget for sustainability, because all sustainability initiatives are carried out within departments, and therefore spending on sustainability is embedded within departmental budgets.

Crucially, sustainability is central to the strategic plan. 'Promoting sustainability' is one of the three strategic priorities, with Key Performance Measures identified to monitor progress and delivery. Sustainability also features within the college's ethos statements, which are displayed prominently around the campus.

Every departmental manager is required to put together an annual operational plan, which is to include consideration of sustainability in the context of their own department. For example, in the case of academic departments, plans cover how sustainability will be incorporated into the curriculum, which ensures it is built into lesson plans and reaches all students. In this way, sustainability permeates down from the top-level strategic plan right through to delivery.

A highlight at South Lanarkshire College is the award-winning 'Aurora', an innovative low-carbon house which leads the way in eco-friendly house design, and also serves as an education resource for students. Following this success, work is complete on an 8-classroom 'zero-energy' teaching facility. This is the first building in the UK to achieve a BREEAM (2014) Outstanding rating for its design and construction.



Depute Principal, Angus Allan, suggests that the approach of building sustainability into the vision, values and ethos should be easily transferrable to elsewhere, although it is essential that the culture develops with the strategy and commitment from all levels within the organisation, in order for sustainability to embed successfully.

No Dedicated Roles Case Study: Uxbridge College

Highest level of authority: Executive level

Reporting to: Vice Principal, Finance and Corporate Services

Web: <http://www.uxbridge.ac.uk/about-us/campuses/sustainability-at-uxbridge-college>



Sustainability at Uxbridge College has been driven by Sara Sands, Vice Principal, Finance and Corporate Services, who over time has built it into her own objectives and those of the managers for whom she is responsible. It is however incorporated into the roles of Estates Manager and the Health and Safety Manager; in particular, the latter was increased from part time to full time to allow more involvement in sustainability work.



Though there are no roles at Uxbridge College wholly dedicated to sustainability, there is a sustainability committee which includes staff from Estates, Health and Safety, Finance, Marketing, Catering, E-learning and Curriculum, as well as students. The committee meets approximately every six weeks, and is chaired by the Vice Principal, Finance and Corporate Services, with much of the 'front of house' side of the committee's work handled by another senior director. Unlike the committees seen across other case studies visited, the committee at Uxbridge is less formal. It is open to any staff or students who are interested, and is intended as a discussion group to develop and promote initiatives as well as monitoring the operational statistics of facilities. This sustainability activity is promoted under the 'ecollegey' branding, which aims to 'raise awareness and implement environmentally friendly solutions' across the two campuses of the college.

There is a modest sustainability budget, which is used for a variety of initiatives. Because authority for sustainability sits at executive level, other budgets such as that of Estates can be steered towards sustainability spending, so in this sense it is to a certain extent embedded.

Sustainability is incorporated as a core value within the College's strategic plan, and one of the five strategic aims is 'to continue to work with our partners to promote a strong economy and sustainable community development'. A range of sustainability modules are taught across the curriculum as standard.

Sara explains that it is not possible to take the same kind of approach as some of the large universities, because of the small scale of the college. The Uxbridge approach, therefore, is gradual. The ideal for the future would be to see creation of a post dedicated to sustainability, so that it is not competing for time with other responsibilities with the risk of being neglected as a lower priority.

Governance Matters

Highest Level of Authority

The highest level at which authority for sustainability lies, whether as a dedicated role or as part of a broader portfolio of responsibilities, has a significant effect on the impact of a sustainability team. This should not be confused with leadership, which can be effective at any level given the right individual, appropriate support from senior management and endorsement for sustainability within the overarching institutional strategy. Unsurprisingly, the lower the level of authority, the less likely it is that sustainability is perceived as a priority by the wider organisation.

Generally speaking, authority at SMT level or higher comes hand in hand with its incorporation into the corporate strategy of the institution. Authority at middle management or below may start to present challenges in terms of securing resource and a reasonable budget. The key pros and cons of authority for sustainability at levels from governing board down to lower management are summarised below.

Governing Board (excluding Vice Chancellor/Principal)
One or more members of the governing board holding authority for sustainability is more likely to guarantee safety from the uncertainty of top-level staff changes. Charged with setting the educational character and mission of the institution, priorities driven from this level are accepted as core and are unlikely to be challenged or to be viewed as dispensable by executive or senior management level decision-makers. Authority on sustainability this high up could be perceived as the ideal, however if sustainability is not sponsored at this level already, accessing and influencing the governing board in order to persuade them that it should be a central priority can present a tough challenge.
Executive (e.g. Vice Chancellor/Principal, pro-Vice Chancellor, Vice President, etc.)
There was executive level involvement in more than half of the case studies reviewed during this research, in many cases in the capacity of chairing a sustainability committee. Authority at executive level puts sustainability very visibly on the agenda, and as such it can be harnessed as a Unique Selling Point, driving positive reputational effects and attracting and retaining more staff and students. Authority from this high level allows a strategic view across the whole institution, enabling a strategically integrated approach across all areas (for example operations, research and teaching). Where an executive-level authoritative lead goes hand in hand with a top-down implementation approach, this allows efficient use of existing hierarchical structures and makes it relatively straightforward to incorporate sustainability within institutional policies to reach through all departments to all levels of staff. However with this comes the risk of not being received well: care must be taken that it is not seen as a tick-box exercise that must be done because of instruction from above.
Non-executive Senior Management Team
Non-executive SMT level authority for sustainability allows the use of existing working relationships with counterparts, maximising collaboration between different departments and enhancing the sphere of influence across different areas of the university or college. However, this influence comes a step down from those making strategic decisions, which may serve to limit the scope of that influence.

Middle Management

Sustainability instigated from a management level below the SMT and without the negative perceptions of top-down 'instruction' is likely to be more readily accepted, encouraging engagement rather than resistance from departments across the organisation. Authority at this level or lower potentially allows a more flexible approach, allowing initiatives to perhaps be trialled 'under the radar' without the need for prior approval. However, not being answerable at SMT level runs the risk of sustainability being seen as a lower priority and therefore not being taken as seriously as it might be with a higher authority lead.

Lower Management or Individual

Authority for sustainability sitting at lower management level or with a non-management individual has similar benefits to having authority at middle management in that the negative aspects associated with top-down approaches are avoided, and there is the potential for flexibility. At this level, however, there is a risk that sustainability may be perceived as a 'bolt-on' activity, rather than a priority in its own right: this potentially sets it up as something which is easily cut when money, resources or time are limited. Furthermore, a lack of defined authority at a senior level may limit the scope of influence. This approach may be very reliant on one individual, meaning that success may depend somewhat on that one person's level of drive, confidence and ability. Therefore staff changes introduce an element of risk.

Monitoring and Reporting

Frequent reference was made to the importance of monitoring sustainability progress, with the use of appropriate metrics. Many of the case studies regarded the use of Key Performance Indicators (KPIs) as crucial, because this served to keep sustainability high on the corporate agenda. A point of note was the suggestion that the National Student Survey (NSS)³ might usefully be utilised as a metric to capture the student voice on how well an institution is performing with regard to sustainability.

Implementation

Top-Down Process

There is unanimous recognition of the need for both vertical and horizontal reach throughout the organisation to effectively implement a holistic approach to sustainability. The top-down contribution should ideally incorporate sustainability within the mission, vision and values. This must be supported by the strategy, practically applied through policy, and monitored with appropriate metrics. The combination of these strategic tools makes best systemic use of the existing hierarchy.

Careful Language

The definition of sustainability continues to be controversial, and there is often a conscious effort, by some, to avoid using the term altogether for fear of the preconceptions it brings. It is important to communicate with those at all levels throughout the institution as well as external stakeholders using language that they understand, and language that reflects the breadth of what sustainability encompasses. A tactic employed at the University of Leeds was to drop the word 'green' and stop using green colour schemes for the sustainability team, because they found it was encouraging a narrow environmental interpretation of sustainability being solely about issues like recycling and switching off lights.

³ The National Student Survey is a widely recognised authoritative survey of student opinions in the UK, carried out annually – <http://www.thestudentsurvey.com/>

Service Orientation

A number of the cases reviewed showed a common theme of establishing a service orientation, citing how important it had been to demonstrate that the role of the team (or individual) was to support and contribute, rather than taking over the areas of responsibility already spoken for by other departments and ‘treading on toes’. There was also a resounding emphasis on the importance of encouraging and supporting changes rather than demanding them. On the academic side in particular, it has proven valuable to take the time to speak to individual departments and enable them to identify for themselves how sustainability is relevant to their particular area, thus allowing them ownership of sustainability within their respective departments.

Strategic Dimensions:

Leadership and Authority

The Right Leader

Many of the professionals contributing to this research referred to the challenge in hand as one of change management, commenting that it is essential to identify the right individual to lead on sustainability. The collective description was that of an individual who not only has an understanding of the concept of sustainability and systems thinking, but who has the ability to create, lead and manage change, with the vision to see opportunities and the skills to make the most of them.

Champions, Sponsors and Academic Leads

Beyond having the right leader, champions across all levels are essential in initiating and maintaining drive throughout the organisation. Likewise, it is vital to have sponsorship at the top, without which there is the risk of the agenda being seen as weak, and potentially dispensable. Many of the case studies emphasise the importance of having an academic lead heading the approach to sustainability within the areas of teaching and research. One such example is at the University of Gloucestershire, where the link between the Sustainability Team and the Teaching and Learning Development Unit has been formalized. The academic/professional services divide is a familiar hurdle across the sector, and implementing a dedicated academic lead is crucial in bridging this divide and enabling effective communication between areas otherwise detached from one another.

Engagement and Representation

Bottom-Up, Student Voice

At the other end of the hierarchy, grassroots action is equally important. The student voice must be listened to and recognised as a driver of change; after all, students are essentially the core stakeholders within the sector. The NSS survey could be utilised as a metric to capture the student voice on how well an institution is performing with regard to sustainability. The student-led model takes this to another level, putting the students in charge of driving sustainability and allowing them to act as embedded agents of change.

Some of the most successful approaches have developed strategies and structures from the top-down while simultaneously allowing grassroots initiatives to build support and engagement from the bottom-up. These initial approaches at seemingly opposite ends of the spectrum in fact prove to complement each other well,

encouraging the perception that all levels of staff and students are on the same 'team': a whole institution pursuing the same goal of sustainability.

Partnerships and Collaboration

Also emerging as a key point is the importance of breaking down the silo-mentality, instead building partnerships and collaboration in order to extend horizontal reach across business areas that might otherwise remain independent of each other. 'Living Labs' is a positive example of collaborative working, whereby the campus is used as a 'lab' to solve problems and test new sustainability technologies and services in a real world setting. This sees researchers, estates departments and external stakeholders working in partnership with one another, and provides an opportunity for the campus to be used as a learning resource, encouraging greater student engagement.

Community Engagement

The impact of any university or college will be felt most greatly by the local community on its doorstep, and as such it is essential that community relations are nurtured. At the University of Manchester, incorporation of environmental sustainability under the umbrella of social responsibility reflects its recognition that all aspects of sustainability are part of the total impact on the university or college, and community engagement is one of the five core themes of its social responsibility agenda.

Conclusion

It is exciting to see a range of progressive work, innovative structures and pioneering strategies being developed across the sector in an effort to address sustainability. This research has presented a selection of case studies where whole-institution sustainability approaches have already been introduced. The findings have highlighted crucial structural and strategic dimensions. Further to this, it has been possible to identify six broad structural models; the key features, benefits and risks have been explored for each. Without exception, the case study contributors felt that their own approaches were transferable to other institutions, but with caveats in relation to factors such as the institutional background or size, for example. It is evident therefore that there is not a single 'best' model which will be appropriate for all, but that the journey will be unique to each university and college.

And a journey is indeed what we are looking at. While the plentiful selection of positive case studies is inspiring, it is probably safe to say that not one of the universities or colleges visited would claim that they have reached an end goal, if indeed there is one. Some interviewees referenced the aim for sustainability to be so embedded that a team is not required; others have suggested there is always further you can go and more that can be done, so there will always be a need and justification for sustainability leaders within the sector. The ideal for each institution is unique, there is no right or wrong; what is important is that the journey is securely on the agenda.

EAUC has undertaken this research, looking expressly at those breaking with tradition and pushing structural boundaries in new and exciting directions, in order to inspire others to embark on similar paths. This is an opportunity to build reputation and be recognised as a sector leader; making best use of resources to be innovative and guide the tertiary sector towards a sustainable future while generating an array of institutional positives.

References

EAUC, 2015. A Business Guide for University Governors: Ten Reasons to Build Resilience into the Future of your University. Available at: http://www.sustainabilityexchange.ac.uk/a_business_guide_for_university_governors

EAUC, NUS & UCU, 2015. The State of Sustainability in Tertiary Education 2015 report. Available at: http://www.sustainabilityexchange.ac.uk/the_state_of_sustainability_in_tertiary_educati

United Nations, 2016. *Sustainable Development Goals: 17 Goals to Transform our World* [Online]. Available at: <http://www.un.org/sustainabledevelopment/sustainable-development-goals/>

Resources

Further Case Studies

http://www.sustainabilityexchange.ac.uk/next_generation_sustainability_strategy_and_str1

The Environmental Association for Universities and Colleges (EAUC) <http://www.eauc.org.uk/home>

The Sustainability Exchange (delivered by EAUC) <http://www.sustainabilityexchange.ac.uk/>

A Business Guide for University Governors: Ten Reasons to Build Resilience into the Future of your University http://www.sustainabilityexchange.ac.uk/a_business_guide_for_university_governors

LiFE Framework www.eauc.org.uk/life

Living Labs <http://www.eauc.org.uk/livinglabs>

rootAbility <http://rootability.com/>

UN Sustainable Development Goals <http://www.un.org/sustainabledevelopment/sustainable-development-goals/>

Further Reading

Barth, M. 2013. Many roads lead to sustainability: A process-oriented analysis of change in higher education. *International Journal of Sustainability in Higher Education*, 14, 160-175.

Cortese, A. D. 2003. The critical role of higher education in creating a sustainable future. *Planning for Higher Education*. The H.W. Wilson Company.

Leal Filho, W., Shiel, C. & do Paco, A. 2015. Integrative approaches to environmental sustainability at universities: An overview of challenges and priorities. *Journal of Integrative Environmental Sciences*, 12, 1-14.

Ryan, A. 2012. Education for Sustainable Development and Holistic Curriculum Change: A Review and Guide. *York: The Higher Education Academy*.

Sterling, S (ed.), 2013. *The Sustainable University: Progress and Prospects*. London & New York: Routledge.

Velazquez, L., Munguia, N., Platt, A. & Taddei, J. 2006. Sustainable university: What can be the matter? *Journal of Cleaner Production*, 14, 810-819.

Acknowledgements

Extended thanks to all of the universities and colleges that provided case studies, either for use here or on The Sustainability Exchange; in particular the individuals who took time out of their busy schedules to give interviews and feedback:

Angus Allan	Victoria Hands	Peter Rands
Pat Bailey	Carolyn Hayles	Danielle Rostan-Herbert
Mick Dalrymple	Trevor Humphreys	Alex Ryan
Jane Davidson	Aled Jones	Sara Sands
Leanne Denby	Chris Long	Chris Shiel
Louise Ellis	Jim Longhurst	Victoria Smith
Daniel Forget	Lucy Millard	Felix Spira
Karen Gallagher	Julie Newman	Linda Stevenson
Emma Gardner	Andy Nolan	James Thompson
Dave Gorman	Wendy Purcell	

Further thanks go to Iain Patton and Fiona Goodwin for their invaluable advice and support throughout.

Prepared and delivered by

