EXECUTIVE SUMMARY

This paper summaries some of the key sustainability related activities that the University has been engaged in since the beginning of the academic year. It begins with a short section on concepts, in order to provide context for much of the academic and engagement related work, much of which has been focused on the UN Sustainable Development Goals (SDGs). The SDG Accord provides the University commitment, which lays the foundation for considerable partnership working with the Students’ Union, Student Green Office, and the local community.

The Responsible Futures Partnership has driven the use of existing university (UKES) and national (NUS) surveys to provide insight into development of Graduate Attributes and sustainability skills respectively. High CCCU participation rates in the NUS Skills survey are particularly attributed CCSU publicity, with broad engagement from all years and academic faculties. The Green Impact Partnership between the Students’ Union and the Student Green Office continues to thrive, with nine joint events being held through to March 2018.

The Futures Initiative continues to support innovative curriculum development work, with alignment to the SDGs, Personal Development week, and global citizenship; with interesting work emerging around building personal sustainability stories, and the use of a smart phone app to provide gamification for sustainability.

In November the Faculty of Arts and Humanities hosted a successful international symposium, linking social values, theology and spirituality towards sustainability. The following day, the Faculty of Education scholarship day, asked important questions about what education might look like, by linking with modern economic thinking. Memorandums of Understanding with the Bay Trust and the Kent Wildlife Trust cement long standing relationships, which are leading to a 2-day Futures Summit at Pines Calyx, and the potential for an interdisciplinary MA programme on sustainable coastal communities.

On-going continual improvement across the University, driven by the EMS and a wide selection of University staff, has resulted in our first Green Gown Award. This category also goes forward to the International Green Gown awards in May, where it is hoped that further recognition is achieved. Underpinning EMS infrastructure continues to operate effectively, as demonstrated by a good showing in the People & Planet University League; however, recent resource setbacks are putting this at significant risk in the future.

Two significant developments in university operations have come to fruition since September. The agreement to change the University copier paper from recycled to virgin Woodland Trust paper, provides a win-win scenario for cost savings (12%) and for sustainability. After a year of electrical data analysis and adjustment in plant operation at Augustine House, the EMT (Energy Metering Technology) pilot has resulted in a 29% reduction in energy use in a single year. Phase implementation across the Canterbury Campus, for all utilities, is on-going and further reductions are expected.

Unfortunately, resourcing issues have not only put the EMS at risk, but have also resulted in an almost complete halt to the Edible Campus and Beer, Bread and Honey initiative, along with other innovative campus-based engagement activities. However, the Students’ Union harvested the hops in September and this years’ heritage green hop ale ‘St Thomas Ale’ gained 3rd prize at the Canterbury Food and Drink Festival in late September. The heritage hop growing and partnership with the Canterbury Brewers will continue with a St Gregory’s Ale planned for September 2018, in readiness for armistice celebration day at St Gregory’s.

It is also notable that Christ Church staff continue to provide leadership for sustainability to the rest of the sector, through EAUC Board membership, sector project development and authorship of a new Bloomsbury Academic title on ‘Leadership for Sustainability in Higher Education’.
1. INTRODUCTION

Sustainability is a complex concept which makes it challenging to report on effectively. This report therefore starts by presenting a variety of concepts that provide different entry points to or views of sustainability which aim to provide context for the sustainability related work of the University. (Figures referenced below are provided in appendix 1).

The traditional view of sustainable development defined by the Brundtland Commission (1987) as “...development that meets the needs of the present without compromising the ability of future generations to meet their own needs.” now seems simplistic and out of focus. For many it is problematic due to its developmental standpoint, and the financial and social conditions that are implied, although its underlying intent is without question.

30 years on, the world is a very different place, moving ever closer towards ecological overshoot with a rapidly expanding population.

Global Goals, Economics and Social Foundation

2015 was a momentous year for global sustainability with the adoption of UN Sustainable Development Goals (SDGs). Whilst simple and intuitively appealing, the SDGs (fig. 1) provide a somewhat segregated and instrumental view of sustainability. Unpacking, and demonstrating the links to other Goals can be helpful, as demonstrated by the work of the World Health Organisation (WHO) in Fig. 2. However, it is all too easy to see the SDGs as a panacea, especially in the context of higher education, and forget that we have a role to be critical as well supportive.

Even more illustrative of effect of ecological impact on social foundation, is the simple Billiard Ball Model, developed by the Overseas Development Institute (ODI) that illustrates how climate change has direct and interlinked knock-on effects on other resources and social issues (fig. 3).

Goal 8 (Decent work and economic growth) presents a particular issue, since in a neoliberal global society, it is economic growth and it’s link to GDP, which is presented as one of the key reasons why we are finding it so difficult to turn the super tanker around.

This is an argument made most powerfully by Kate Raworth, author of Doughnut Economics (2017). By redrawing the core concepts of the SDGs, as a “doughnut of social and planetary boundaries” she provides a “simple visualisation of the dual conditions that underpin collective human well-being” (fig. 4). The aim is to bring humanity into the “safe and just space” between the outer and inner rings of the doughnut through a regenerative and distributive economy. Without going into further detail, it is much easier to see how the social foundation, derived from the SDGs, should be balanced by the ecological ceiling comprised of the 9 core planetary boundaries. The model is perhaps best summarised by the following quote:

“Meeting the needs of all within the means of the planet.” Raworth (2017)

Ideas about the purpose of education

At this point it might be helpful to consider the purpose of the University in the 21st century that is particularly pertinent to one with a strong sense of values and purpose, such as CCCU. Barnett (2011) proposes the notion of the ‘ecological university’ that brings together the concept of the authentic university (one that is true to itself and confident of its purpose and values) with that of a responsible university, which heeds to the expectations of its ‘stakeholders’. An ecological university is one “that takes seriously both the world’s interconnectedness and the university’s interconnectedness with the world”, Barnet (2011 Page 451).
One implication is that the ecological university should be responsive to the needs of the community and should seek to incorporate real world concerns into its teaching and learning. Another implication is that operationally it should seek to support and promote the health and wellbeing of all its stakeholders. The notion of the health promoting university has gained ground in recent years, in the UK and worldwide, and more recently supported by the international charter for health promoting universities (Okanagan Charter) formulated in 2015. This defines health promoting universities as those which, transform the health and sustainability of our current and future societies, strengthen communities and contribute to the wellbeing of people, places and the planet.

Furthermore, the charter articulates how health promoting universities create campuses centred on a culture of compassion, well-being, equity and social justice thereby strengthening the ecological, social and economic sustainability of both local communities and wider society.

The charter defines a healthy university as one that adopts a holistic understanding of health; takes a whole university approach; and aspires to create a learning environment and organisational culture that enhances the health, wellbeing and sustainability of its community and enables people to achieve their full potential.

So, the idea of both the ecological university and the health promoting university focuses attention on the culture that lies at its heart, and also challenges us to question and redefine the purpose of HE. They have the striking advantage of coalescing around the principles and values which are central to sustainability thinking. However, they also carry forward some of the problems and contradictions which characterise this terrain. One of these is the difficulty of reconciling ‘the traditional academic role of universities and the more instrumental role of preparing young people for the workplace and their role in society’ (Sterling, Maxey and Luna 2013).

**Sustainability reporting or integrated reporting?**

For many years, sustainability reporting focused on environmental performance and mitigation strategies to minimise negative environmental impact. More recently, the Global Reporting Initiative (GRI), underpinned by the guidance standard for Social Responsibility (ISO26000) has led the way in sustainability reporting. It is important to note that of the 7 core principles within ISO2600, environment is only a single part.

In the last decade, integrated reporting, emerging from the need for financial institutions to demonstrate value creation, has found its way into the public sector and within the last two years, Higher Education. Underpinned by the 6 Capitals Model, adding intellectual capital to the 5 Capitals Model originating from Forum for the Future, is remarkably applicable to the sector. At its core is the principle that stocks of capitals flow to create further value within the system, leading to a clearer understanding of the role of financial and natural capital in the development of manufactured and intellectual capital, through the use and development of social and human capital. A current sector project, led by the Leadership Foundation and BUFDG1 is seeking to bring Integrated Reporting (IR) into the sector more widely.

The 6 Capitals Model was introduced to the University in 2014, in order to demonstrate value creation through the Beer, Bread & Honey project. Three years later it has gained traction through the Improvements and Efficiencies Steering Group, with the 2016/17 VFM report for HEFCE including 3 case studies built around the model.

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1 British Universities Finance Directors Group
ESD in practice

Thus far, the Futures Initiative has focused on working with academic staff to build capacity for enriching curriculum with sustainability. This has largely been free-form, in the sense that it allows staff to work within their own context and approach, using stimuli and provocation from a variety of sources. This was helped significantly by the introduction of the HEA/QAA Guidance on ESD (2014), and more recently the Whole Earth? exhibition (2015), which demonstrated the need for a critical and challenging approach. Once again, the ESD guidance, whilst predating the Global Goals, illustrated the breadth of sustainability, combining:

- Environmental stewardship (ecological foundation) and
- Global citizenship, social justice, ethics and well-being (social foundation)
- With a ‘futures thinking’ approach

The impact of this approach has in many ways has had a profound and long-lasting impact. One early beneficiary of Futures Initiative funding started out believing that

“sustainability is all about what I say and what I do. It’s all green, green, green…”

Which indicates an early stage in the understanding of sustainability. When interviewed 18 months later, she revealed that a more values based transformation had taken place:

“Actually there is a duty upon us as educators to not think this is an add-on but this is actually intrinsic. This is intrinsic…in one sense it’s quite nuanced, but in another one it’s quite profound. It’s almost like a hue, almost like a shade difference.”

Dr Karen Shepherdson, School of Media, Art and Design
2. LEARNING AND TEACHING

As a university we have been engaged in a critical way with the SDGs through a variety of approaches.

The SDG Accord

“CCCU early signatory to the SDG Accord”

Work within the sector, to incorporate the SDGs into teaching and learning is becoming more widespread. In September 2017 the EAUC\textsuperscript{2} launched the SDG Accord, a global initiative to ensure the SDGs are embedded throughout across post-16 education. This Accord calls the world’s universities and colleges to embed the SGDs into our education, research, leadership, operations, administration and engagement activities. By the end of September CCCU became one of the early signatories to the Accord, and thus we recognise:

- The indivisible and interconnected nature of the universal set of Goals – People, Prosperity, Planet, Partnership, Peace
- That, as educators, we have a responsibility to play a central and transformational role in attaining the Sustainable Development Goals by 2030.

NUS SDG Teach In

“CCCU 3\textsuperscript{rd} in the leader board for staff commitment”

In late December the NUS announced that an SDG Teach In would take place during the week commencing 19\textsuperscript{th} February. CCSU publicised widely via the Golden Apple Awards network, along with face to face marketing, which resulted in 24 staff pledges. The Student Green Office designed a series of graphics themed around the 17 Goals, and released throughout the week via social media, as well as taking over 17 of the University display poster sites around campus with A1 posters of each of the goals, with the outcome that Christ Church came 3\textsuperscript{rd} in the leader boards for staff pledges and number of students reached. (Table. 1)

<table>
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<tr>
<th>Leader board: % of students reached</th>
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<td>3\textsuperscript{rd}</td>
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<tr>
<th>Leader board: number of teaching staff pledges</th>
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<td>1\textsuperscript{st}</td>
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<td>2\textsuperscript{nd}</td>
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Table 1: SDG Teach In leaders boards

AS part of the SDG ‘Teach In’ Project 93, the CCSU and the Sustainability team collaborated to produce a set of workshop materials (presentation, workshop outline, activities) that could be used by any tutor, to run a 1 hour introductory workshop.

Feedback from the session run on 21\textsuperscript{st} February is provided in appendix 2, and indicates that the sessions were enlightening, desired and needed.

\textsuperscript{2} Environmental Association of Universities and Colleges
**SDG Blog**

“Student Green Office takes a lead of localising the SDGs”

Since February, the Student Green office have also been involved in publicising the SDGs. Ellie Vasey (Journalism), has been making contact with and interviewing both staff within the university, and professionals out in the local community for a series of blog posts attempting to contextualise each of the Sustainable Development Goals within Kent. These blog posts have been going live weekly during term times through [https://cccusustainability.wordpress.com/](https://cccusustainability.wordpress.com/) (fig. 5) and through the blog space available on the student pages of the CCCU website since early spring. These articles will be compiled into a ‘Student Response to the SDGs’ report at the end of the year. Alongside Ellie’s articles, Martyna Nowak (Psychology and Early Childhood Studies), Publicity Officer, has been producing a series of SDG infographics unpacking particular issues related to each of the SDGs which have been shared on our social media feeds throughout the Spring term. An example is provided in fig. 6.

**Canterbury SDG Forum**

“Local community group to put question to Parliament about SDG progress”

Canterbury SDG Forum has been newly established to raise awareness of the UN Sustainable Development Goals to the larger Canterbury community. It comprises representatives from a number of local community-based groups who are part of a larger group called Community Link. Maz Hamilton and Stephen Scoffham from the Sustainability team are representing the University, and hosting the meetings. They meet on a regular basis with Canterbury MP, Rosie Duffield, to apprise her of local matters and concerns. Currently they are engaged in petitioning Canterbury City Council and are drafting a parliamentary question for Rosie Duffield to pose in the House of Commons:

The current draft is as follows:

To ask the Minister for the Cabinet Office

a) What the Government is doing, in preparing its Voluntary National Review of progress on the Sustainable Development Goals, to secure the active involvement of local authorities in the implementation of the SDGs? and;

b) What is it doing to promote multi-stakeholder engagement and the involvement of civil society organisations in implementing the SDGs?

It is also hoped that CCCU can host a Public Meeting about the SDGs and what they mean to the community, later in the year (November 2018).

**Responsible Futures**

The Responsible Futures process has asked valuable questions about the status of student attitudes to and skills for sustainability. Using existing national surveys, such as the NUS Sustainability Skills survey and the UKES, enhances understanding without adding significant extra burden.

**NUS Sustainability Skills survey 2016-17**

“CCCU students 7th in the leaders board for participation in nations sustainability skills survey”

Over the last 8 years, the NUS (funded by the HEA until 2015) has run a national on-survey in order to investigate the experiences of teaching and learning on sustainable development in HE. Since 2016 this has also been distributed to students studying at Further Education institutions. Run in October 2017, over 12,000 respondents completed the survey which aimed to assess student:
University ‘Responsible Futures’ and ‘Green Impact’ Partnerships with Christ Church Students’ Union, drove a significantly more proactive approach to encouraging student participation in the research this year. Resulting in CCCU achieving 7th position in the leader board for participation (Table 2), which allowed the University to receive the raw data and a report of our own results. The executive summary from the national report is included in appendix 3.

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<thead>
<tr>
<th>Rank</th>
<th>University</th>
<th>No.</th>
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<tr>
<td>1</td>
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<td>1015</td>
</tr>
<tr>
<td>2</td>
<td>Kingston University</td>
<td>747</td>
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<td>3</td>
<td>University of Sheffield</td>
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<td>4</td>
<td>University of Cambridge</td>
<td>571</td>
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<tr>
<td>5</td>
<td>Northumbria University Newcastle</td>
<td>509</td>
</tr>
<tr>
<td>6</td>
<td>University of the West of Scotland</td>
<td>482</td>
</tr>
<tr>
<td>7</td>
<td>Canterbury Christ Church University</td>
<td>481</td>
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</tbody>
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Table 2: Top section of leader board for student participation in NUS Skills Survey 2016-17

Headline results from the national research conclude that:

- There is overwhelming agreement amongst 2016/17 respondents in HE that sustainable development is something that university and colleges should actively incorporate and promote;
- 58% agree that sustainable development is something they would like to learn about;
- Students are significantly more likely to say they would accept a salary sacrifice of £1,000 to work for a company with a strong environmental and social record;
- An understanding of the relationships between humans and nature continues to reflect both the lack of coverage in teaching and received low assessment of importance amongst HE respondents in comparison with other sustainability skills.

The CCCU report is very long and contains a wealth of information that would be more widely applicable, and further discussion with the Student Survey Unit is needed to ensure that appropriate analysis and best use can be made from this. However, it is interesting to note the demographics, which indicate a good spread across 3 undergraduate years and all 4 faculties. In future years, it is hoped that further enhancement of participation rates can be achieved through direct Faculty involvement. The Students’ Union have also provided a summary of headline results for CCCU responses, which are included in appendix 4.

- 30% 1st year
- 33% 2nd year
- 37% 3rd year
- 31% Faculty of Education
- 14% Faculty of Health & Wellbeing
- 32% Social & Applied Sciences
- 23% Arts & Humanities
The UK Engagement Survey

“Using the UKES to monitor progress towards developing Graduate Attributes”

2017 was the first time that all non-final year students were asked to complete the UKES at CCCU, as a replacement for the USS. An additional set of questions was included to gather information related to Social Responsibility (Table 3). However, further consideration of the rest of the UKES questions revealed considerable overlap with the CCCU Graduate Attributes (GAs) statement. Therefore, once the results of the UKES were available, the Student Survey Unit were asked to consider the feasibility of using the UKES to measure development of the (GAs). The results of this analysis can be found in appendix 6, and Jonathan Pratt concluded that the UKES could be used in this way going forward.

Table. 3: Additional question for UKES on Social Responsibility.

Teaching Resources for Sustainability

A comprehensive set of teaching related resources, to support Education for Sustainable Development, are now available through the ‘Academic Support’ Blackboard. Organised by Faculty and School, this provides a wide range of papers, presentations, workshop materials and videos that can be used throughout the curriculum. A direct link is provided below:

https://learn.canterbury.ac.uk/webapps/blackboard/execute/content/blankPage?cmd=view&content_id=1354794_1&course_id=5451_1

The Futures Initiative

“Inspiring curriculum developments continue to emerge through the Futures Initiative”

The Futures Initiative continues to provide small amounts of resource for curriculum development and project work. Some particular examples include:

- Enter the Culturarium. Project lead: JB Adrey, formerly Director of International, Arts and Humanities

  Recognising that there are few, if any dedicated spaces or schemes within the University for non-UK and UK students to come together and develop cross-cultural cohesive bonds, the ‘Culturarium’ was conceived as a place where students and staff of all cultural, national and religious backgrounds could gather to learn about each other’s cultures in a festive or informal way. Launched by the Deputy VC on the evening of 8th February, a series of extracurricular (or informal curricular)
activities such as film screenings, an international poetry night, a quiz, food tastings, a theatre performance and much more, took place over the week until the closing night on 15th February. A number of international students helped to organise the events and publicity, and all events were well attended and well received by students.

- Augmented Reality Sustainability Trail. Project lead: Jo Samuel, Lecturer, School of Media, Art and Design

As part of her PhD exploring the effectiveness of different interactive experiences on raising awareness of sustainability-related issues, Jo created a trail around the campus using posters and augmented reality to highlight relevant areas, such as the allotment plots, insect houses etc. Upon download of a free app called Zappar, participants used their mobile devices to unlock hidden content on the posters. Each participant was given a guide for the trail, which included a question relating to each video. Feedback was collected at the end of the trail and all participants were entered into a prize draw to win high street vouchers. Almost 100 students engaged in the trail, which was made available to coincide with Personal Development Week for three weeks during January.

- Global Primer. Project lead: Prof. Peter Vujakovic, Schools of Human and Life Sciences.

Delivered as part of Personal Development Week, the pilot GLOBAL PRIMER event was based around the question, “how do we meet the challenges of the 21st century?” It consisted of debates and workshops exploring major questions facing society; e.g. food security, the nature of education, and key sustainability goals. The event draws on research and professional expertise from across the university.

The event was supported by the Futures Initiative, and organised by the University’s Sustainability Research Network (SRN), in association with the University’s Professoriate. Five of the sixteen staff directly involved were members of the Professoriate.

The event had been broadly advertised, as part of Personal Development Week with over fifty students registering. Unfortunately, only 17 attended on the day including two members of the Student Green Office (who provided help on the day; including running the award-wining carbon footprint interactive game, How Bad are Bananas?). Feedback from staff and students was very positive, and the format proved to be engaging and well received.

- Project 93 (continuation). Project Lead: Zulfi Ali, Senior Lecturer, School Childhood and Education Sciences.

The idea for Project 93 was first shared in 2016 through a discussion paper that was circulated to all staff and students with an invitation to participate in a pilot project to create a tradition of rigorous dialogue, discussion and debate, based on critical thinking on social issues. A programme of activities began in late September 2017, with core aims to:

- Develop new and support existing innovative and creative ideas for creating spaces for high quality and interactive academic activities and events outside the formal curriculum
- Act as a catalyst in developing synergies amongst various players for more collaborative and partnership-based activities and events
- Inspire and encourage greater and more active engagement and activism from students and staff
Activities fall into 6 sub-projects:

- Discussion & debate gatherings
- Podcasts
- International Film
- Clubs & Societies
- Communications Hub
- Social, Cultural and other Events

The overall response from staff and students has been extremely encouraging, although numbers of people attending events has varied from event to event. The most promising aspect of the pilot project has been the fact that it demonstrates that regular, well attended, cross disciplinary events can be held on campus and can generate a lot of interest.

The most successful part of the work has been the approach whereby tutors have brought their students to attend events within their seminar times, signalling that these events enrich the learning experience and are very much part of a wider education. This approach has also meant that many events have been very well attended and students as well as staff have had a chance to have a cross disciplinary dialogue about key social and environmental issues.

Based on the work of the first academic year, plans are now under way to develop a full programme for the next academic year, which will enhance coordination and collaboration for AY 2018-19. The programme of events thus far in AY 2017-18 is provided in appendix 5.

- Sustainability Stories. Project Lead: Dr Nicola Kemp, ESD Lead & Senior Lecturer, School Childhood and Education Sciences.

In response to SMT concern about wider awareness of the University's sustainability work, this project aims to use story-telling as a way of communicating the story of CCCU sustainability work over the past 10 years. The project will involve carrying out semi-structured interviews with a range of staff who have engaged with sustainability during this time-frame.

The aim is to capture a diverse range of experience and start with the project lead interviewing a long-standing advocate of sustainability at CCCU. The interviewee will then select someone they consider to be important to the CCCU sustainability story. This interview will be conducted by the previous interviewee using the interview schedule. This process will be repeated on a relay basis with the interviewee becoming the interviewer each time. A ‘listening stone’ will be kept by the interviewer for the duration of the interview and then passed to the interviewee to represent the transition from speaker to listener. It is hoped that this approach will provide a different and more personal flavour, in contrast to the normal ‘case study’ approach.

3. RESEARCH AND ENTERPRISE

Faculty of Arts & Humanities

“International Symposium hosted”

On 8th November 2017, the University hosted an international symposium on Sustainability and Humanities: linking social values, theology and spirituality towards sustainability.

Professor Walter Leal, Chair of Environment and Technology at Manchester Metropolitan University, and Dr Adriana Consorte-McCrea, Education for Sustainable Futures Lead CCCU, organised and chaired the event with the support of the Revd Dr Jeremy Law, Dean of Chapel, and Kath Abiker, Faculty Director of Learning and Teaching in the Faculty of Arts and Humanities.
The symposium featured speakers from international universities presenting on research, literature reviews, curriculum innovation and projects, and explored themes around faith, church, the sacred, spirituality, culture, science-fiction, values, compassion, wellbeing and global citizenship in relation to a sustainable future.

The closing talk, by Jeremy Law, explored the search for ecological wisdom, summing up the spirit of the day. Papers that document the wealth of experiences presented at the symposium will be published in 2018 as part of the ‘World Sustainability Series’, published by Springer.

*Faculty of Education*

“Faculty raises big questions about the role of education”

*Doughnut Education: What might it look like?*

On 9th November 2017 the Faculty of Education Scholarship Day used Kate Raworth’s “Doughnut Economics” model that defines a new goal for 21st century economics, as a reflection on to the parallel world of education. Authors such as Biesta and Alexander vociferously challenge the assumption that test results, in a narrow range of subject areas, can stand as a proxy for the whole of a child’s education. What sits behind this reification of simple metrics (whether GDP or PISA) is the discredited (since 2008) but still dominant ideology of neoliberalism, arguably the main driving force behind policy change in the UK since Thatcher. Using this link between the worlds of economics and education as a springboard, the conference asked the question: what would a “doughnut education” look like?

More than 100 participants experienced contributions that raised questions and offered insights from early years to Higher Education, from mainstream, informal and alternative settings. As well as drawing in colleagues from across the wider university, external partner organisations were invited to participate and attend the event.

*What does critical pedagogy have to say to us in 2018?*

On 1st February 2018 the Faculty of Education held its second scholarship day of the year, which provided a platform for theoretical discussions and a space for deep reflection about the current educational climate. Professor Gert Biesta’s keynote address and the subsequent workshops raised critical questions about the dominant discourses that frame the taken-for-granted beliefs and cultural norms underpinning our practices and behaviours. Critical Pedagogy is at the heart of our work.

*Memorandum of Understanding with Kent Wildlife Trust*

The strong partnership between the Faculty of Education and Kent Wildlife Trust (KWT) was formally acknowledged at the November scholarship day through the signing of a Memorandum of Understanding. This was the result of several years of working together, encouraged by the late Ann Nussey, who supported the endangered Forest School project to provide engagement opportunities to student teachers. One of the shared interests between the KWT and CCCU is in sustainable coastal communities and work is underway to put on an event to explore this in more detail.

*Sustainability Research Network*

“An interdisciplinary Masters programme in the making”

Prompted by the signing of the MoU with the Kent Wildlife Trust, cross faculty meeting to explore the potential for a Masters (Level 6) programme in Sustainable Coastal Communities and
Environments was held in late March 2018. The meeting was positive and an interdisciplinary programme using local resources and key coastal settlements was discussed. A short report will be compiled and form the basis for a more formal SRN event in the spring/summer, which will include an invitation to Dr Anne Nortcliffe, the Director of Engineering Curriculum, to discuss sustainability within engineering programmes.

Members of the wider sustainability team continue to present the University’s innovative work at conferences and symposia, publish in academic journals, and either author or contribute to edited collections. A summary is provided in appendix 6.

**Futures Summit**

*“MoU signed with the Bay Trust leads to 2-day Futures Summit”*

After many years of ad hoc collaboration with the Bay Trust (based at the Pines Calyx in St Margaret’s at Cliffe) the University has signed an MoU for research and collaboration, that will be initiated by an ambitious Futures Summit on 18th & 19th June 2018.

This summit will showcase and cutting edge environmental design and enhancement; rural and urban sustainable dwelling, design and architecture for wellbeing; and innovation projects co-created with communities that are impacting positively on sustainable community health and wellbeing across the lifespan in the UK and Europe. A problem-based approach will be used, to tackle thorny economic, geopolitical and social issues of a lack of affordable housing, homelessness, fragmented social care, and intergenerational health care gaps.

The summit will address the critical questions of:

- How do we create new vibrant communities; places to live, work and thrive together?
- New places that tackle the thorny issues of a lack affordable housing and homelessness, fragmented social care and the gaps in healthcare from the outset.
- How we work more creatively to co-design and build communities that work for the residents, businesses, and people that live there?
- What new business models do we need to encourage social enterprise generated by the communities themselves to sustain their own innovation and creative capital?

The summit is directed at anyone committed to improving lives through environmental enhancement, rural and urban sustainable dwelling, design and architecture, community and health and wellbeing. 80 places are available, of which 15 will be allocated to students, supported by the Futures Initiative. Students will play a pivotal role in capturing and publicising key messages and design ideas, with the potential for follow-on funding for students to take ideas to the next level in collaborative research projects.
4. AWARDS AND ACCREDITATIONS

**National and International Green Gown Awards**

“A first and well-earned national award for continual improvement”

In November 2017 the University achieved its first winner’s award at the annual Green Gown Awards ceremony. The University won the award in the Continuous Improvement: Institutional Change category, which recognises significant and ongoing improvement in four key areas: leadership and governance; estates and operations; learning, teaching and research; and partnership and engagement.

With strong competition from Aston, Goldsmiths, London Met, Edinburgh and Leicester, the University managed to demonstrate a very broad and creative approach over the last seven years, which was clearly articulated in the judges’ comments. The judges said:

“No stone is left unturned at Canterbury in this broad focussed application reflecting the diversity of sustainability. The persistent approach taken has resulted in evidence of embedded strategic ownership and organisational culture change, which we celebrate. The cross organisational and very creative work being done to engage and partner students, researchers and the local community was particularly inspiring. Well done!”

Three Green Gown Award categories, including ‘Continuous Improvement’, go forward to the International Green Gown Awards 16th May 2018, where the University will be up against one other national winner; University of Southern Queensland, Australia.

**People & Planet University League**

“Maintaining a 1st Class position in a competitive league”

The consistent good work across the University was also recognised by an excellent result in the annual People & Planet University League, in which the University achieved a solid joint 21st place within the 1st Class category. All university positions within this category are shown in fig. 7.

**ISO14001 and EcoCampus external Audit**

“Ensuring on-going continual improvement”

The University recently completed the annual internal audit cycle, which was presented to the EMS Management Review Committee on 22nd March 2018. The external surveillance audit took place during the week of 16th April, and included below is the executive summary from the audit report:

“This report addresses the first surveillance audit of the University, following its successful transition to ISO14001:2015 in 2017. There have been a number of organisational changes, plans to close the Broadstairs campus, and new construction projects at the Canterbury campus are making progress.

Management Review is carried out by the Sustainability Strategic Management Group, and appears comprehensive and effective. Despite the strain on resources within the sustainability team, internal audit has been given and continues to be given priority.”
There is strong commitment from students and faculty to make their own decisions as to how sustainability should be introduced to the teaching and learning environment. This was largely evidenced through detailed discussions with students and academics, and a review of some pertinent documents, e.g. The Futures Initiative, version IV, 2011 – 2014, and Five Years of the Futures Initiative.

It was very clear during tour of the Canterbury campus, that the grounds team is passionate about Bio-Diversity and Paul Sims has very clear ideas and plans for creating garden places that promote Bio-Diversity while being pleasant places for students and Academic to relax and work.

It is still the relatively early stages of using the Energy Monitoring Technology (EMT), but it is already helping identify areas of high energy use and demonstration of effectiveness of switch off and improvement.

The University has a highly structured approach to identifying its aspects, objectives and governance, and uses the LiFE index to assess maturity (progress), and set targets. Time did not allow a full drill down of this process and more time will be devoted during the 2019 surveillance visit.

It was particularly encouraging to hear discussions at a high level around the University’s progress in relation to ensuring F-gas compliance, meeting its internal audit programme, and experience of the use of the EMT – see earlier in this report. Use of EMT in Augustine House has helped identify areas of high use, reduction initiatives and subsequent energy saving of 29%.

The system continues to operate well, but resources have been reduced: priority has been given in the short term to internal audit and compliance. Future resourcing needs to be secured and maintained to enable the system to continue to operate effectively and deliver compliance and improvements.

Two opportunities for improvement have raised. Continuing registration to ISO14001:2015 is recommended.”

5. INFLUENCING THE SECTOR

Sustainability Leadership Scorecard

“Director of Sustainability Development has national sector impact”

In response to the widespread sector boycott of the 2014 People & Planet Green League, AUDE commissioned ARUP to develop the Green Scorecard. This on-line tool, draws data from the HESA EMR and allows HEIs to set targets and report against estates based metrics, which link to carbon reduction. These include:

- Energy & Emissions
- Transport
- Water
- Waste
- Adaptation
- Procurement
- Biodiversity & Landscape
- Management

Recently the EAUC received grant funding from HEFCE to develop the Green Scorecard, and incorporate all Priority areas from the LiFE Index. A small project team, comprising AUDE ARUP and EAUC staff, along with EAUC and AUDE representatives (Peter Rands and Stephen Wells respectively) have driven the project through a very tight development phase, with the Sustainability Leadership Scorecard (SLS) being launched at the AUDE conference at the University of Kent on 10th April.

The University has embedded the LiFE Index into sustainability governance, to provide underpinning support for continual improvement. Once the SLS has gone live in May/June, all LiFE Frameworks will be

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3 Association of University Directors of Estates
4 Higher Education Statistics Agency Estates Management Record
transferred to SLS. Some adjustments to the Priority Areas have taken place to fill gaps in the original LiFE Index, and to ensure consistency. A complete list is provided in fig. 8.

**Leadership for Sustainability in Higher Education**

“Christ Church staff publish academic monograph”

In June 2018 Bloomsbury Academic will add to their series on 'Perspectives on Leadership in Higher Education’ with a title jointly authored by Prof Janet Haddock-Fraser (Formally Dean of SAS at CCCU), Dr Peter Rands and Dr Stephen Scoffham, entitled ‘Leadership for Sustainability in Higher Education’. It will be launched at the EAUC annual conference at Keele University on 19-20 June.

### 6. UNIVERSITY OPERATIONS

**Paper Procurement**

“Making a win-win decision on paper procurement”

The University spends nearly £50,000 on paper every year, with the majority of this being used in our copiers, MFDs and printers. As part of a review into cost effectiveness, alternative options were put forward by our existing supplier, and by our supplier of specialist paper.

Until recently, our paper was manufactured from 100% recycled content, which requires a de-inking and pulping process in a facility in France followed by transportation to a paper factory in Germany. This not only significantly increases the carbon footprint of the paper, but also does not guard against unsustainably produced paper being used in the recycled pulp. Essentially, recycling paper is a good thing to do, but it is important to ensure the provenance of the paper supply chain.

The outcome from the review is that Woodland Trust Office Paper offers the most sustainable solution, along with the greatest saving; reducing procurement costs by 12%. The Woodland Trust paper production process operates as follows:

- Raw material comes from the woodland thinning process, and from saw mills within 100km radius of the production mill; thus minimising transportation related carbon dioxide emissions and cost.
- The pulp and paper mill are integrated, which eliminates transport between the two.
- The integrated mill is entirely self-sufficient in heat, using waste products from the production process, and produces 40% of its total electricity needs.
- Additional energy is purchased from climate neutral sources.
- Surplus heat from the production process is piped to the nearby district heating network, which heats over 3,000 homes and civic buildings.
Augustine House: Electrical sub-metering pilot scheme

“A 29% reduction in energy consumption at Augustine House in 1 year”

Augustine House is the University’s second biggest consumer of gas and electricity behind the North Holmes Road Campus. The building has electrical sub meters installed but gathering this data has proved difficult and time consuming. A solution was sought from Energy Metering Technology (EMT) who were invited to capture the information from the sub meters through the installation of small Automatic Meter Readers (AMR) and analyse the data. Historically, analysis of the Half Hourly electrical data shows an off-peak baseline of 100 kW with the peak load of 250 kW. Analysis of the sub-metering data identified the circuits using the most power throughout the day, which provided the focus for further investigation. By using out of hours surveys, Building Management System optimisation (changing schedules and timings), improving plant maintenance and upgrading equipment, electrical consumption has been significantly reduced. Re-analysis of the half-hourly data showed a dramatic reduction in both peak and off-peak loads to 170 kW and 40 kW respectively, with no negative effect on comfort levels. These differences can be clearly seen in the graphs below. When combined with Gas, the total energy reduction over the past year equates to 29%, which is largely attributable to the EMT pilot project.

Fig 1: Half-hourly data before sub-metering works

Fig 2: Half-hourly data following data analysis and consumption reduction projects
Following this successful trial, EMT are conducting sub-metering work on the North Holmes Road Campus and are liaising with South East Water on the installation of AMRs onto water meters at 10 of the University’s larger sites. EMT are also investigating using QR codes for accurate meter reading with a forthcoming trial at Pin Hill, along with displaying the live data collected on an interactive carbon dashboard.

Heritage, Food and Growing

“A setback in resourcing for innovative work”

Unfortunately, work on Edible Campus, and projects such as Beer, Bread & Honey, are largely in abeyance due to the long term sickness, and subsequent departure of Alex Metcalfe in January 2018. Recruitment to this post has not been permitted, which will have a long-term impact on these activities, as well as putting the on-going success of the ISO14001 accredited EMS at risk.

Student Green Office and SU Partnership

“A bourgeoning partnership flourishes”

In addition to the work on the SDGs described earlier, the SGO have been busy working on other projects, and collaborating with the Students’ Union as part of the Green Impact and Responsible Futures Partnerships. Additional students have been recruited into 5 specific roles (4 hours/week), comprising three Events Co-ordinators, one Communications Officer and one Publicity Officer.

Events Co-ordinator Claire Nicholson produced a cookbook over the summer months, with guest recipes from other students, which is targeted at new students learning to cook for themselves for the first time. Physical copies were put into every university managed student kitchen by arrangement with the Accommodation team, with digital copies being available for free download on Kindle during Freshers’ Week, and available as a downloadable pdf on the sustainability website thereafter.

Across the autumn and spring terms, events have included Fairtrade chocolate tasting, ‘brain food’ pop up stands during revision periods and collaboration with the annual Events Management students’ Spring Festival, and the Student Eats funded project ‘Gastro-Hub’ run by Charmaine Jacobs. There are plans for a revised second edition of the cook book for the next academic year, with more vegetarian and vegan offerings and a guest collaboration with the Gastro Hub.

The SGO have also used these events to continue the reusable bottle campaign started by PR & Media students on work experience placements over the summer of 2017; distributing maps, information and free water bottles to students to encourage them to cut back on plastic wastage and make use of the refill points across campus.

One of the new Events Co-ordinators, Chloe Bale (3rd year Events Management), was contracted to work until Easter only and assigned to work with academic colleague Prof Peter Vujakovic on his first Global Primer event, attracting around 40 attendees to workshops across the day. She was then well-placed to organise and be the liaison for our collaboration with the Spring Festival.

Partnership with the Students’ Union has thrived this year, with a whole series of events taking place at which the new carbon footprint game ‘How Bad are Bananas’ was also used:

- 3rd Nov: The Lounge, 35 game event
- 4th Nov: Open Day, 300 prospective students and parents
- 29th Nov: Barista & Baker SGO event, 15 attendees
- 30th Nov: Medway ‘Union on Tour’, 30 engaged in the game
- 23rd Jan: ‘Global Primer’, 16 staff 17 student attendees
7. CONCLUSIONS

Significant on-going work is evident and successful on a variety of fronts, with external recognition for this now being achieved. The partnership approach, both internally and externally is bearing fruit and will continue to form the basis for our work. The SDGs and Responsible Futures are providing more focus, whilst maintaining opportunities for criticality. The Students’ Union Green Impact partnership with the SGO is also flourishing, and the outlook going forward with the restructured sabbatical roles is promising.

Renewed focus on energy performance and consumption has reaped significant improvements at Augustine House, and provides a blueprint for further implementation. Unfortunately, resource issues have hit the Sustainability team as well as Estates and Facilities, which have put the EMS at high risk, and have severely limited all campus based activities relating to Edible Campus.

Dr Peter Rands
Director of Sustainability Development
Appendix 1: Images and Diagrams

Fig. 1: The UN Sustainable Development Goals

Fig. 2: Interconnections between SDG3 (WHO 2015)
Fig. 3: ODI Billiard Ball Model (Gutierrez, M., McFarland, W. and Fonua, L. (2014))

Fig. 4: Doughnut Economics (Raworth, K (2017))
Fig. 5: The Sustainability Blog run by the SGO, providing SDG insight.
Impacts of climate change include changing weather patterns, rising sea level, and more extreme weather events.

Greenhouse gas emissions causing the climate change are now at the highest levels in history.

The poorest countries are affected the most.

To address climate change, countries adopted the Paris Agreement at the COP21 in Paris on 12 December 2015. The Agreement entered into force less than a year later. In the agreement, all countries agreed to work to limit global temperature rise to well below 2°C and given the grave risks, to strive for 1.5°C.

Rising sea levels will erase England’s sandy beaches.

Hotter summers, with more droughts, are also going to affect agriculture, with traditional crops being too difficult to cultivate.

According to the Health Protection Agency, increased temperatures will mean a rise in heat-related mortality in the UK of 70% by the 2020s, compared with the 2000s.

How can you help?

BE THE CHANGE
Take the Challenge

Every person on Earth can make an impact and help tackle climate change.

See the UN’s Lazy Person’s Guide to Saving the World for ideas on how to live more sustainably.

http://www.un.org/sustainabledevelopment/takeaction/

Fig. 6: Example SDG Infographic produced by the Student Green Office.
<table>
<thead>
<tr>
<th>Rank</th>
<th>University</th>
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<tbody>
<tr>
<td>1</td>
<td>Manchester Metropolitan University</td>
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<td>2</td>
<td>University of Gloucestershire</td>
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<td>De Montfort University</td>
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| 15   | Plymouth University                            |
| 16 equal | University of Leeds                            |
| 17 equal | University of Reading                          |
| 18   | University of Exeter                           |
| 19   | University of Greenwich                        |
| 20   | Newcastle University                           |
| 21 equal | Canterbury Christ Church University            |
| 22 equal | University of Chester                          |
| 23   | Coventry University                            |
| 24   | Royal Agricultural University                  |
| 25 equal | University of The West of England, Br...
| 26   | University College London                      |
| 27   | University of Bristol                          |
| 28   | Edinburgh Napier University                    |
| 29   | Bangor University                              |
| 30   | University of East Anglia                      |

Fig. 7: People & Planet University League 1st Class category
<table>
<thead>
<tr>
<th>Leadership and Governance</th>
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<tr>
<td>Staff Engagement and Human Resources</td>
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<td>Leadership</td>
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<td>Business and Industry Interface</td>
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<td>Procurement and Supplier Engagement</td>
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<td>Food and Drink</td>
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<td>Biodiversity</td>
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<td>Construction and Renovation</td>
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<td>Water</td>
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<td>Travel and Transport</td>
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<td>Climate Change Adaptation</td>
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<td>Energy</td>
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<td>Learning and Teaching</td>
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<td>Student Engagement</td>
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Fig. 8: Sustainability Leadership Scorecard Priority and Framework areas.
Appendix 2: SDG ‘Teach In’ feedback

Feedback on SDG Teach-In 21-2-18

This session made me realise how many different issues there are in the world. It opened my eyes as to how difficult it would actually be to completely banish all of the issues in order to make the world more equal but also sustainable. The only way to solve most issues is to involve everyone and over the course of many years.

This session is strongly relevant to everyone, everywhere. I personally believe these things such as SDG will never happen without people knowing about them. I found the session extremely interesting and being able to critique property is important. Sustainability can never be achieved without knowledge and being educated.

Sustainable Development Goal Session:

Very useful to educate people on worldwide issues that threaten the planet itself and the people on it. Great discussion in the session that made you think about your own lifestyle and the impact you can have on the planet. Definitely linked to the course as education is vital if we are going to change the world.
The session opened up my eyes and made me realise what is happening. This should be done throughout the University to make students aware, it also encourages understanding of the world and now to help.

**SDG Session**

I have a clearer understanding of the goals. It was relevant to our module as some of these aims such as equality, means that education should be available free of charge worldwide at no cost. It’s good to speak about these issues as it makes people become aware that they can contribute

- links to education
- I feel that it helped taught me a lot of what I didn’t know

Enjoyed it, relevant & should be done as it’s relevant to education with a strong tie. Also talking about the relevance this has.

Felt that the lecture on sustainable development goals was thoroughly needed, it highlighted somewhat overlooked issues and prompted self-reflection. Was an enjoyable session.

I think that this session was really interesting in the way that it made me think deeper about sustainability. I think it should be done in all the educational courses as it has a very strong tie to it.

Sustainability Skills | 2017

A national online survey was completed by over 12,000 students in October 2017 to build on the data gathered through six years of previous research\(^1\), funded by the Higher Education Academy. The research continues to track student experiences and expectations around teaching and learning for sustainability. This year, the research has been updated to include new areas of questioning on student experiences of learning about key topics encompassed by sustainability as well as understanding in better detail their experiences of accumulating skills that can contribute to sustainability. Students in further education are included in the research for the first time. This summary highlights the longitudinal trends from the historic research before considering new insight for both higher and further education respondents.

Tracking longitudinal trends in higher education – 2010/11 to 2016/17

- As with the six previous years of research completed with HE students, there is overwhelming agreement amongst 2016/17 respondents in HE that sustainable development is something that universities and colleges should actively incorporate and promote with almost 9 out of 10 respondents (87%, \(n=10,315\)) saying they agree with this statement.
- In 2016/17, 58% agree that sustainable development is something they would like to learn more about (\(n=4439\)). This broadly matches the historic data gathered since 2010, though is significantly lower than other years of research, peaking in 2010/11 and 2014/15 at 63%.
- 2016/17 respondents remain significantly more likely to say they would accept a salary sacrifice of £1000 to work for a company with a strong environmental and social record than respondents to the research from 2010/11 to 2014/15 (e.g. 74%, \(n=5388\) respondents in 2015/16 compared with 69% \(n=3728\) respondents in 2014/15). It is however worth noting the difference in years of study included in the research at each round.
- A range of sustainability skills continue to be seen as important when entering employment. Whilst the skills researched since 2015/16 have been updated, an understanding of the relationships between humans and nature continues to reflect both a lack coverage in teaching and receive low assessment of importance amongst HE respondents in comparison with other sustainability skills. For example, 89% \(n=9205\) rank “communicating complex information clearly and effectively to different types of people” as important, whereas 55% \(n=5685\) rank “understanding how human activity is affecting nature” as important to their future employers.

\(^1\)Details of the previous research can be found at: https://sustainability.nus.org.uk/our-research/our-research/skills-and-sustainable-development
Sustainability Skills | 2017

**FE Respondents: To what extent do you agree that...**

- Sustainable development is something which universities / colleges should actively incorporate and promote: 80% (n=1147) compared to 80% (n=1040) in 2016.
- Sustainable development is something which all university / college courses should actively incorporate and promote: 72% (n=1147) compared to 71% (n=1040) in 2016.
- Sustainable development is something which I would like to learn more about: 55% (n=1147) compared to 55% (n=1040) in 2016.

**Uncovering trends in further education – 2015/16 and 2016/17**

- Similar to students studying in HE, the majority of FE respondents also agree that sustainable development is something their college should actively incorporate and promote. This remains constant across the two years of research (80%, n=919).
- Almost three quarters of FE respondents (71%, n=811) also agree that all courses should actively incorporate and promote sustainable development and just over half say sustainable development is something they want to learn more about (55%, n=635).
- Three quarters of FE respondents say they would be willing to sacrifice £1000 from a starting salary to work for a company with a positive environmental and social record (73%, n=837) and over half say they would sacrifice £3000 from their starting salary to work in a company with these credentials (57%, n=655).
- Exposure to teaching on the most overtly sustainability-focused skills is reported as lowest by FE respondents, for example 29% (n=310) say they have experienced teaching on 'understanding how human activity is affecting nature' and 30% (n=322) say they have experienced teaching on 'looking at global problems from the perspective of people from around the world'. There are no significant changes across the two years of research.

**New insight further and higher education – 2015/16 and 2016/17**

- Respondents were asked to identify which place of study has had the greatest influence on them. Both HE and FE respondents most frequently identify secondary education as the place of study which encouraged them to think and act the most to help the environment and other people in both years of the research (43%, n=484 FE respondents and 35%, n=3565 HE respondents). University is reported as being the strongest influence for around a quarter of HE respondents (26%, n=2546).
- Respondents were also asked to identify the place of study they perceive as taking the most action to reduce its negative impact on the environment and society. For HE respondents, this is their current place of study (31%, n=3179) however this is a significant decrease compared to 2015/16 responses (35%, n=2480). For FE respondents, secondary education is seen as the place of study which has acted to reduce its negative impact on the environment and society the most however again this is a decrease compared to 2015/16 responses (38%, n=446 2016/17 and 43%, n=429 2015/16).
- HE and FE respondents attribute most of their learning on sustainability related issues to their time in secondary school, when considering their time in formal education as a whole. For example, 72% (n=817) FE respondents say climate change was covered during their time in secondary school and 73% (n=7449) of HE respondents the topic was covered at this point.
- The most commonly reported impact of learning about sustainable development by respondents in HE and FE was a belief that they think and do things differently as a result. Respondents also felt that learning about these issues improved them as individuals, and were generally important life skills to have.

**HE Respondents: Which place where you have studied encouraged you to think and act to help the environment, and other people the most?**

- Primary education: 12% in 2016 and 11% in 2017.
- College: 19% in 2016 and 8% in 2017.
- University: 26% in 2016 and 29% in 2017.
- I've not learnt this yet: 2% in 2016 and 3% in 2017.
- Don't know: 6% in 2016 and 6% in 2017.
Appendix 4: NUS Sustainability Skills Survey

Headline results from students at CCCU taking part in the National Union of Students (NUS) Sustainability Skills survey, in October 2017, with 481 responses from students at CCCU.

Here are just some of the highlights from the results:

- 200 people surveyed at CCCU said one of the main reasons for taking their course was to make a difference to other people.

- 245 people surveyed at CCCU said they hoped to use the research from their dissertations to help make a difference to other people.

- 73% of respondents agreed that Universities should develop student’s social and environmental skills.

69% of respondents agreed that CCCU takes action to limit its negative impact on the environment and society.

60% of respondents felt that being a student at CCCU has encouraged them to think and act to help the environment and other people.

85% of respondents felt that Sustainable Development is something that universities should actively incorporate and promote.
Appendix 5: Activities and Events undertaken by Project 93 (Sept 2017 - Mar 2018)

<table>
<thead>
<tr>
<th>Title</th>
<th>Date</th>
<th>Details</th>
</tr>
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| Attending, Achieving and Attaining: “What is the point of university?” | 29-Sep  | Speaker 1: Jeremy Law  
Speaker 2: Alan Bainbridge                                                |
| Schooling the World: The White Man’s Last Burden            | 06-Oct  | Dir: Carol Black                                                        |
| HOME                                                       | 17-Oct  | Dir: Yaan Arthus-Bertrand                                              |
| SAMSARA                                                    | 14-Nov  | Dir: Ron Fricke                                                         |
| A Celebration of Universal Children’s Day                   | 20-Nov  | Speaker 1: Professor Hugh Cunningham  
Speaker 2: Professor Kathy Goouch                                   |
| The Lunchbox                                               | 08-Feb  | Dir: Ritesh Batra                                                       |
| The Past                                                   | 09-Feb  | Dir: Asghar Farhidi                                                     |
| A Celebration of Poetry from Around the World               | 12-Feb  | Roots Project & Various Students and Staff                              |
| BARAKA                                                     | 15-Feb  | Dir: Ron Fricke                                                         |
| Miss Representation                                        | 08-Mar  | Dir: Jennifer Newsom                                                    |
| “Changes in the role of Maasai women: from colonialism to climate adaptation” | 08-Mar  | Speaker: Joy Stephens                                                   |
| Made in Dagenham                                           | 08-Mar  | Dir: Nigel Cole                                                         |
| The Good Life                                              | 14-Mar  | Speaker: Jeremy Law                                                     |
| One Team                                                   | 19-Mar  | Dir: Ian Clough                                                         |
| SDG Teach-In                                               | Feb/Mar | Ongoing                                                                 |
| Podcasts recording                                         | Oct/Mar | Ongoing                                                                 |
Appendix 6: CCCU Graduate Attributes and the UK Engagement Survey

1. Introduction

This briefing explores the extent to which the UK Engagement Survey could be used as a tool to measure the development of Graduate Attributes in CCCU’s student population over time.

CCCU’s Graduate Attributes aim to articulate what a student, who engages with the opportunities available, will develop during their time at the University. They are in seven broad areas:

1. Adaptable
2. Digitally Literate
3. Effective Communicator
4. Informed
5. Innovative
6. Professional
7. Self-aware

Each attribute is further defined through a series of statements that outline some of the typical abilities and behaviours a student would exhibit if they possessed that attribute. The Attributes are designed to be embedded into the University curriculum.

The United Kingdom Engagement Survey (UKES) is an annual survey that assesses how much effort students invest in their studies and how engaged they are with their learning. Non-final year undergraduates at CCCU are invited to participate in the survey. The survey is co-ordinated nationally by the Higher Education Academy, which enables CCCU to benchmark many of the questions against other universities.

The UKES consists of eight categories of statements, seven of which are core. These are:

a) Critical Thinking (4 questions)
b) Learning with Others (4 questions),
c) Interacting with Staff (6 questions),
d) Reflecting and Connecting (6 questions),
e) Course Challenge (2 questions),
f) Staff-Student Partnership (3 questions) and
g) Skills Development (12 questions).
h) Social Responsibility (7 questions),

Respondents in the survey are asked either ‘how much’ their course or institution has emphasised or encouraged something, or to ‘how often’ they have done something. The Social Responsibility category is a non-core part of the UKES and was included for CCCU only. As such, there is no sector equivalent (and benchmark comparison) for these questions.

2. Matching UKES measures to Graduate Attributes

There is significant overlap between some of the Graduate Attributes and the learning engagement behaviours and skills measured in the UK Engagement Survey.

Of the 44 individual UKES questions, 21 were mapped onto the “Graduate Attributes” structure. Although there is logic to pairing some UKES questions with some the “Graduate Attributes,” a Factor Analysis was also used to help inform this process (See Appendix A for statistical explanation). Each of the Graduate Attributes has at least two potential measures in the UKES
survey, although the UKES measures describe some of the Graduate attributes more fully than others:

1. **Adaptable**
The “Adaptable” graduate attribute describes an ability to be resilient and bring about positive transformation in the face of continuous and rapid change. Being “Adaptable” also describes a capacity to apply knowledge and skills in order to thrive within a globalised society.

Two UKES questions are a good match for this attribute: Question 36 is analogous to that of dealing with continuous and rapid change. That is, “continuous and rapid change” is an example, or subcomponent, of a “complex real-world problem.” Similarly, Question 38 is very much about applying knowledge and skills in the context of a globalised society.

2. **Digitally Literate**
The “Digitally Literate” graduate attribute describes a capacity to: engage critically and creatively with academic and professional communications through a range of media; participate in digital networks for learning and research; manage a professional presence online; and confidently use digital devices, applications and services.

This attribute was the most difficult to link to the UKES, as none of the UKES questions explicitly measure what this attribute describes. Nevertheless, drawing loosely on this attribute’s description, three UKES questions (Questions 12, 26 & 27) were identified. Question 12, which is about discussing ideas with teaching staff using email or online servers is more relevant here, whereas Questions 26 & 27 are less directly relevant. Nevertheless, these two latter questions, which are about writing and speaking clearly and effectively, are included because these skills are essential for being “Digitally Literate,” such as being able to engage and communicate professionally with others online.

3. **Effective Communicator**
The “Effective Communicator” graduate attribute describes a capacity to: understand and express ideas and thoughts with confidence using a variety of media; develop rapport, respect diversity, have passion, and communicate with self-assurance; and collaborate effectively with others.

Three “Learning with Others” UKES questions (Questions 5, 6 & 8) were found to be a reasonable match for this attribute, though these questions only draw on the communication and the social interaction aspects of this attribute, rather than the ability to understand and express ideas and thoughts with confidence.

4. **Informed**
The “Informed” graduate attribute describes a capacity to: explore concepts and issues relating to academic study; be aware of issues relating to social justice, ethic and wellbeing; and understand the concepts of environmental stewardship.

Five UKES questions closely match this graduate attribute: for example, Questions 39, 40 and 42 all tap into the “social justice, ethic and wellbeing” aspect of this attribute. Similarly, Questions 37 and 43, which are about being an informed/active citizen and exploring environmental issues, are both integral steps to “understanding the concepts of environmental stewardship.” That is, a person might find it difficult to understand
these kinds of concepts if they have not previously thought about or explored issues concerning the environment.

5. Innovative
The “Innovative” graduate attribute describes a capacity to exercise initiative in applying critical and creative thinking styles. Being “Innovative” further describes an ability to develop and defend ideas with the capacity to challenge assumptions where necessary.

Three “Critical Thinking” UKES questions are a good match for this attribute: for example, Question 2 measures a capacity for critical thinking, specifically with analysing concepts and theories in depth; and Questions 3 and 4 measure a capacity to challenge assumptions, through developing new understandings, and evaluating different points of view and information sources.

6. Professional
The “Professional” graduate attribute describes a capacity to: possess integrity and instil confidence in others; be adept at team working, adjusting the role as appropriate; be a lifelong learner; and recognise and approach complex problems by making reasoned, ethical decisions.

Two UKES questions are a reasonably good match for this attribute: for example, Question 41 is very similar to the latter description of the “Professional” attribute, specifically the part of the description pertaining to “ethical decisions.” Admittedly, the relevance of Question 44 is less apparent at first glance. However, “bringing about positive change” is loosely analogues to the concepts of “integrity” and “ethics.”

7. Self-Aware
The “Self-Aware” graduate attribute describes a capacity to respect and appreciate other people’s point of view. Being “Self-Aware” also describes an ability to develop a sense of self purpose and a capacity for wonder.

Three UKES questions are a good match for this attribute: for example, Questions 18 and 35 both measure a capacity to appreciate another person’s point of view, a key component of the “Self-Aware” attribute. Question 17 is also relevant because examining one’s own views is an integral part of developing a sense of self purpose.

3. What do the results look like?

UKES 2017
As can be seen from Table 1, students at CCCU are more “Innovative” compared with the sector, in terms of analysing ideas or theories in depth; evaluating or judging a point of view, decision or information source; and forming a new understanding from various pieces of information.

Similarly, CCCU students are more “Self-Aware” compared with the sector, in terms of examining the strengths and weaknesses of their own views on a topic or issue; trying to better understand someone else’s views by imaging how an issue looks from his or her perspective; and understanding people of other backgrounds.

Although we are only talking about a 5-6% difference here, this actually represents quite an impressive, and certainly statistically significant, difference; especially when considering how big the response rate was. Therefore, we can conclude that CCCU is doing a good job at developing students’ “innovative” and “Self-Aware” attributes.
There were only minor differences between CCCU and the sector for the “Effective Communicator” and “Digitally Literate” attributes, and no sector equivalent measures were available for comparisons for the “Informed” and “Professional” attributes.

Table 1: CCCU and benchmarked figures (where available)

<table>
<thead>
<tr>
<th>Graduate Attributes (UKES 2017)</th>
<th>CCCU</th>
<th>Sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adaptable</td>
<td>64</td>
<td>-</td>
</tr>
<tr>
<td>36. Exploring complex real-world problems</td>
<td>71</td>
<td>68</td>
</tr>
<tr>
<td>38. Consider how your learning relates to global issues</td>
<td>58</td>
<td>-</td>
</tr>
<tr>
<td>Digitally Literate</td>
<td>58</td>
<td>57</td>
</tr>
<tr>
<td>12. Discussed ideas from your course with teaching staff outside taught sessions, including by email/online</td>
<td>30</td>
<td>28</td>
</tr>
<tr>
<td>26. Writing clearly and effectively</td>
<td>76</td>
<td>73</td>
</tr>
<tr>
<td>27. Speaking clearly and effectively</td>
<td>68</td>
<td>67</td>
</tr>
<tr>
<td>Effective Communicator</td>
<td>58</td>
<td>59</td>
</tr>
<tr>
<td>5. Worked with other students on course projects or assignments</td>
<td>61</td>
<td>62</td>
</tr>
<tr>
<td>6. Explained course material to one or more students</td>
<td>56</td>
<td>58</td>
</tr>
<tr>
<td>8. Prepared for exams or assessments by discussing or working through course material with other students</td>
<td>58</td>
<td>57</td>
</tr>
<tr>
<td>Informed</td>
<td>55</td>
<td>-</td>
</tr>
<tr>
<td>37. Being an informed and active citizen</td>
<td>65</td>
<td>61</td>
</tr>
<tr>
<td>39. Consider how your learning relates to local issues</td>
<td>60</td>
<td>-</td>
</tr>
<tr>
<td>40. Explore issues relating to social justice</td>
<td>51</td>
<td>-</td>
</tr>
<tr>
<td>42. Explore issues relating to individual and community wellbeing</td>
<td>65</td>
<td>-</td>
</tr>
<tr>
<td>43. Explore environmental issues</td>
<td>43</td>
<td>-</td>
</tr>
<tr>
<td>Innovative</td>
<td>82</td>
<td>77</td>
</tr>
<tr>
<td>2. Analysing ideas or theories in depth</td>
<td>83</td>
<td>78</td>
</tr>
<tr>
<td>3. Evaluating or judging a point of view, decision or information source</td>
<td>81</td>
<td>75</td>
</tr>
<tr>
<td>4. Forming a new understanding from various pieces of information</td>
<td>83</td>
<td>79</td>
</tr>
<tr>
<td>Professional</td>
<td>67</td>
<td>-</td>
</tr>
<tr>
<td>41. Explore ethical issues</td>
<td>66</td>
<td>-</td>
</tr>
<tr>
<td>44. Consider how you might bring about positive change</td>
<td>68</td>
<td>-</td>
</tr>
<tr>
<td>Self-Aware</td>
<td>71</td>
<td>65</td>
</tr>
<tr>
<td>17. Examined the strengths and weaknesses of your own views on a topic or issue</td>
<td>71</td>
<td>64</td>
</tr>
<tr>
<td>18. Tried to better understand someone else’s views by imagining how an issue looks from his or her perspective</td>
<td>71</td>
<td>64</td>
</tr>
<tr>
<td>35. Understanding people of other backgrounds (economic, racial/ethnic, political, religious, nationality, etc.)</td>
<td>72</td>
<td>68</td>
</tr>
</tbody>
</table>

Although the UKES survey was run in 2016 it had a slightly different target population, was conducted at a different times of year and had a much lower response rate. The 2017 survey should therefore be seen as the baseline going forward. It will be interesting to note the extent to which CCCU’s performance on these measures improves over time as the Graduate Attributes are fully embedded in the curriculum.

Progression from L4 to L5?
We might also expect student responses to Graduate Attribute related questions in the UKES to be higher for year 2 students than year 1. However, Table 2 suggests that in 2017 there were only small differences between first and second year undergraduate students, with the exception of the “Digitally Literate” attribute. Second year students reported more agreement on all three “Digitally Literate” questions compared with first year students. Although this comparison is cross-sectional, as opposed to longitudinal, it does still suggest that students’ digital literacy skills improve over the course of their academic study here at CCCU.
Table 2: Comparing 1st and 2nd Year Students on Graduate-UKES Attributes

<table>
<thead>
<tr>
<th>Graduate Attributes (UKES 2017)</th>
<th>Respondents</th>
<th>CCCU</th>
<th>First Year Students</th>
<th>Second Year Students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3056</td>
<td>1234</td>
<td>1155</td>
<td></td>
</tr>
<tr>
<td>Adaptable</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>36. Exploring complex real-world problems</td>
<td>64</td>
<td>66</td>
<td>66</td>
<td></td>
</tr>
<tr>
<td>38. Consider how your learning relates to global issues</td>
<td>71</td>
<td>72</td>
<td>73</td>
<td></td>
</tr>
<tr>
<td>Digitally Literate</td>
<td></td>
<td>58</td>
<td>59</td>
<td>58</td>
</tr>
<tr>
<td>12. Discussed ideas from your course with teaching staff outside taught sessions, including by email/online</td>
<td>30</td>
<td>26</td>
<td>31</td>
<td></td>
</tr>
<tr>
<td>26. Writing clearly and effectively</td>
<td>76</td>
<td>72</td>
<td>79</td>
<td></td>
</tr>
<tr>
<td>Effective Communicator</td>
<td></td>
<td>68</td>
<td>64</td>
<td>71</td>
</tr>
<tr>
<td>5. Worked with other students on course projects or assignments</td>
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</tr>
<tr>
<td>6. Explained course material to one or more students</td>
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<td>57</td>
<td></td>
</tr>
<tr>
<td>8. Prepared for exams or assessments by discussing or working through course material with other students</td>
<td>58</td>
<td>60</td>
<td>59</td>
<td></td>
</tr>
<tr>
<td>Informed</td>
<td></td>
<td>55</td>
<td>56</td>
<td>55</td>
</tr>
<tr>
<td>37. Being an informed and active citizen</td>
<td>65</td>
<td>64</td>
<td>67</td>
<td></td>
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<tr>
<td>39. Consider how your learning relates to local issues</td>
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<td>60</td>
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<tr>
<td>40. Explore issues relating to social justice</td>
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<td>52</td>
<td>51</td>
<td></td>
</tr>
<tr>
<td>42. Explore issues relating to individual and community wellbeing</td>
<td>65</td>
<td>67</td>
<td>65</td>
<td></td>
</tr>
<tr>
<td>Innovative</td>
<td></td>
<td>82</td>
<td>81</td>
<td>82</td>
</tr>
<tr>
<td>2. Analysing ideas or theories in depth</td>
<td>83</td>
<td>82</td>
<td>82</td>
<td></td>
</tr>
<tr>
<td>3. Evaluating or judging a point of view, decision or information source</td>
<td>81</td>
<td>79</td>
<td>82</td>
<td></td>
</tr>
<tr>
<td>4. Forming a new understanding from various pieces of information</td>
<td>83</td>
<td>82</td>
<td>81</td>
<td></td>
</tr>
<tr>
<td>Professional</td>
<td></td>
<td>67</td>
<td>68</td>
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</tr>
<tr>
<td>41. Explore ethical issues</td>
<td></td>
<td>66</td>
<td>67</td>
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</tr>
<tr>
<td>Self-Aware</td>
<td></td>
<td>71</td>
<td>70</td>
<td>72</td>
</tr>
<tr>
<td>17. Examined the strengths and weaknesses of your own views on a topic or issue</td>
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<td>69</td>
<td>70</td>
<td></td>
</tr>
<tr>
<td>18. Tried to better understand someone else's views by imagining how an issue looks from his or her perspective</td>
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<td>69</td>
<td>71</td>
<td></td>
</tr>
<tr>
<td>35. Understanding people of other backgrounds (economic, racial/ethnic, political, religious, nationality, etc.)</td>
<td>72</td>
<td>72</td>
<td>74</td>
<td></td>
</tr>
</tbody>
</table>

One possible explanation for why there are no differences on any other attribute between first and second year students is because the largest changes to personal growth occur from second to third year, not from first to second year. That is, personal growth might reach a critical mass in the third year of academic study wherein students consolidate all of the knowledge that they have gained from the previous two years as they learn to apply it in a practical way, e.g., dissertations.

In support of this, there are three “Personal Development” questions, which were included in the University Student Survey (USS) and National Student Survey (NSS) in 2016, that showed significant change from the second year of study to the third year of study. While this comparison is somewhat limited in scope, it does, nevertheless, suggest that graduate attributes might see their largest improvements in the third year of academic study.

Table 3. The difference between 2nd and 3rd Year Students on Personal Development Questions

<table>
<thead>
<tr>
<th>NSS/USS 2016 Questions</th>
<th>USS - 2nd Years</th>
<th>NSS - 3rd Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal development</td>
<td>77</td>
<td>83</td>
</tr>
<tr>
<td>19. The course has helped me to present myself with confidence.</td>
<td>78</td>
<td>82</td>
</tr>
<tr>
<td>20. My communication skills have improved.</td>
<td>77</td>
<td>84</td>
</tr>
<tr>
<td>21. As a result of the course, I feel confident in tackling unfamiliar problems.</td>
<td>76</td>
<td>81</td>
</tr>
</tbody>
</table>

SSU 03/11/17

Paper prepared by:
Darren McGee and Jonathan Pratt
Appendix 7: Presentations and Publications

Conferences

The following were all presentation to the Sustainability in Higher Education Conference, University of Plymouth, 10th January 2018. This was the 3rd in the series originating at Plymouth in January 2015, and run at CCCU in July 2016.

- Bainbridge, A. ‘Letting go’ of education: re-imagining education as sustaining and sustainable.
- Linehan, A. The Roots Project: Student led initiative to promote cohesion and a stronger sense of identity within a School of Language Studies and Applied Linguistics.
- Rands, P. Successful leadership actions for sustainability.
- Scoffham, S. & Consorte-McCrea, A. Whole Earth? Creating a space to stop, pause and reflect.

Forthcoming presentations:


Publications

A variety of journal and book publications have been achieved or are in train, as follows:

Appendix 7: References

Gutierrez, M., McFarland, W. and Fonua, L. (2014), Zero poverty...think again: Impact of climate change on development efforts, ODI (Overseas Development Institute)

