



# *FIVE YEARS OF THE FUTURES INITIATIVE (2011-16)*

Building capacity for an uncertain world

## **ABSTRACT**

This report provides an overview of the Futures Initiative, from its inception at the HEA Green Academic (2011) to the development of the University's Framework for Sustainability (2015). It evaluates the early years, through which the approach evolved and the complexities and barriers were highlighted. And it charts the development of a strategic approach, which sought different ways to support and drive a more systematic approach to sustainability education.

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## 1. EXECUTIVE SUMMARY

This report provides a review of the first 5 years of the *Futures Initiative*, from 2011-16, and is intended to outline its development and approach within the context of two strategic planning cycles. It has been compiled with content from members of the *Futures Initiative* and Sustainability team, along with some of those who have engaged with the initiative over the past 5 years.

### The first three years: Establishing an approach

The *Futures Initiative* was born out of the 1<sup>st</sup> HEA Green Academy in 2011, and was positioned to respond to one of the three principle inhibitors to sustainability education, as articulated by Jones, Selby and Sterling (2010). To paraphrase, they describe three conditions that inhibit progress towards sustainability education; 1. the administration deems the university not ready, 2. that jealously guarded academic freedom creates a significant barrier, and 3. that academic staff lack the knowledge, skills and experience to adapt their curricula. At Christ Church, in 2011 it became clear that inhibitor 1 was no longer in place, since the New Strategic Plan had placed Sustainability as one of the top 5 institutional goals. Inhibitor 2 was evident but approaching this head-on felt counterproductive, but inhibitor 3 was considered to be prevalent.

Over the subsequent three years (2011-14) through the provision of small scale seed-funding, the *Futures Initiative* sought to, develop the knowledge, skills and experience of staff, such that sustainability perspectives would more naturally integrate with curriculum. Academic staff, from within the *Futures Initiative* team, have worked closely with colleagues from across the University, and promoted links with the external community both locally and globally. Initially, it focused on supporting small scale curriculum development projects and staff development events, of which 50 were successfully undertaken. During this period the core values and approaches to engaging staff and students were established and articulated:

### Core values

- Integrity: A principled response to sustainability and the environmental issues
- Optimism: A focus on positive responses to current problems which acknowledges the potential for engagement and action
- Rigour: A commitment to challenging bias through critical and creative thinking
- Inclusion: An inclusive approach which involves academic staff, support staff and students as equals

### Our approach

- Voluntary change: A belief in the value of voluntary and evolutionary change
- Shallow hierarchies: An organisational structure that favours co-operation and the exchange of ideas
- Risk taking: A culture which supports experimentation and risk taking
- Interdisciplinary perspectives: An appreciation that sustainability involves collaborative working and links between subject disciplines

### The next two years: developing strategic focus

During 2013-14, in order to support a more systematic approach to incorporating sustainability into the curriculum, consideration was given towards adjusting the university's organisational infrastructure. This was paralleled during 2014-15 through the development of a new strategic framework (2015-20), which placed

sustainability as a cross-cutting theme. A supporting Framework for Sustainability was developed (2015) and some additional activities have been put in place to enhance the support, development opportunities and space for dialogue and interdisciplinary debate. These include a Reading Group that meets monthly; a Future Leaders programme to support long term staff development; the development of a Student Green Office to enhance peer to peer student engagement; and the Futures Forum to facilitate knowledge exchange and provide strategic research network for sustainability. All these activities seek to build sustainability awareness amongst staff and students. The long term aim is to build the capacity and develop the critical mass needed to initiate long term institutional change.

### **The next four years: Delivering the Framework**

From 2016 to 2020, the *Futures Initiative* is positioned as part of the core infrastructure for delivering the aims, objectives and targets of the Framework for Sustainability (2015-20), and the broader intent of the University Strategic Framework. However, it is important to recognise that the HE landscape has changed significantly over the past 5 years and that the publication of the Government White Paper, *Success in a knowledge economy: teaching excellence, social mobility and student choice*, will challenge the sector fundamentally.

## **2. THE FIRST THREE YEARS 2011-14: ESTABLISHING AN APPROACH**

### ***Futures Initiative* projects**

Building the capacity and understanding of staff and students is central to the *Futures Initiative* agenda. Over the first three years, small scale grants (typically £500-£1000) were made available to staff on an annual basis, to facilitate the enrichment of curriculum with sustainability. As increasing numbers of staff became involved, 'hot spots' began to develop in different parts of the University, which generated collaboration either within or across Departments. These 'communities of practice' create the potential to bring about lasting change and to create tipping points, beyond which sustainability becomes securely embedded as a principle for curriculum development.

Between 2011 and 2014, a total of 50 projects were approved, of which around 90% were completed successfully. There is no set formula; the diversity and inventiveness of the projects indicate how allowing colleagues to respond according to their needs and interests empowers them creatively and enhances them professionally. In some cases, projects have failed because the member of staff involved has been diverted by other commitments. Changes within individual programmes or Department structure have been another disruptive factor. The case studies outlined in the next section show how departments and faculties across the University are responding to the challenge of developing and repositioning their courses to explore sustainability perspectives. New modules are the most direct approach but the more ambitious projects involve making links with the local community, promoting discussions, undertaking research or working



internationally. Some projects have taken two or even three years to develop. Relying on the enthusiasm and commitment of individuals, whilst a strength, can also be a slow process.

Figure 1: Katie Barnes, PGCE student, talking about sustainability with school children in India as part of her 'Alternative Learning Experience'

A table listing all the approved project bids can be found in appendix I, which is followed by a selection of project summaries in appendix II. Appendix III contains a brief timeline for research related activity during this period; Appendix IV contains a list of resources that are available through the *Futures Initiative* and sustainability offices.

## Evaluation process

During the summer of 2014 an evaluation questionnaire was circulated to all those who undertook *Futures Initiative* projects during the first three years (2011-14). It focused on aspects of the project itself (impact, challenges, dissemination, long term implications or developments, new connections, new understandings of sustainability, motivations, and involvement of students) and on the *Futures Initiative* process (support towards the project, salience, strengths and suggestions for improvement). The questionnaire was sent to 40 project leads, and whilst only 10 responded, a statistical analysis was felt to be worthwhile, which forms the basis for the analysis below. Responses were anonymous and returned via internal post. Data was entered into SPSS (version 20) and tables with significance values from One sample t-test. The full evaluation report is available from the Sustainability Office.

### *Futures Initiative* Projects: Key Findings

**Project Initiation:** Project leads tended to be driven by a personal interest and a wish to raise awareness about sustainability. Indeed, a considerable number of leads in the sample had taken part in other *Futures Initiative* run workshops/staff development activities and/or engaged in other funded projects. This suggests that these early adopters were already engaging with sustainability in some way before they developed an FI project. However, the findings also highlight the role of *Futures Initiative* staff in promoting the funding opportunities, engaging and motivating them and supporting them in project development and delivery.

**Reported impact:** All project leads considered their projects to have had some positive impact with a majority reporting that the project impacted on their knowledge and understanding of sustainability.

*"I have learnt: what sustainability really means; how to complete a funding bid; about the university purchasing procedures"*

*"I have been able to develop and implement a project in two topics that I am very passionate about. This has given me a lot of satisfaction and I am extremely grateful for the opportunity."*

Project leads also reported that undertaking their project extended their network of connections; promoting new links with colleagues and facilitating new cooperation within their department. There was also robust indication that projects resulted in cooperation across disciplines, departments and organizations. However, results suggest that links with the community were not common practice in the sample.

Other identified benefits included:

- Increased pedagogical debate about sustainability between staff and student
- Increased engagement with sustainability by staff and students
- The development of academic practice
- The incorporation of sustainability into the curriculum
- The development of materials and resources through projects that can be used beyond the life of the project

**Project challenges:** Many projects experienced challenges. These included a lack of student voluntary participation and/or engagement, unexpected costs and difficulties in sourcing and/or purchasing specialized equipment.

**Dissemination:** Projects were disseminated mostly through presentation at internal conferences and workshops, with some presenting externally. However, dissemination by publishing, in journals and newsletters, either internal or external was limited. The use of findings in the everyday teaching was common and there was evidence of sharing practice in other modules.

### *The Futures Initiative Process: Key findings*

Most Project leads recognised that the *Futures Initiative* provided them with opportunities to learn about sustainability, made them feel part of a community of practice and expanded their network, facilitating new interactions and collaborations. Many felt it encouraged interactive, holistic, creative approaches to learning, provided information resources and capacity building, while some felt it supported their professional development through funding. However, only one lead felt supported throughout the development of their project. When asked, all 10 leads reported they had spoken to others about the *Futures Initiative*, who were not aware of it; and all in the sample considered *Futures Initiative* valuable.

### *Implications*

Complete freedom was given to participants to talk about the development of their projects and the role of *Futures Initiative*, by asking for anonymous feedback. As a consequence, the evaluation cannot track the development of each individual project or the achievement of their individual goals. However, the responses provided an insight into the overall success of the aims of the *Futures Initiative* during the first three years. Overall, project leads acknowledged *Futures Initiative* as being responsible for supporting their professional development and feedback indicated that the *Futures Initiative* had been very successful in meeting its aims of promoting an understanding of varied aspects of sustainability and of embedding sustainability themes within the curriculum at CCCU. Feedback also identified areas for further development including connections with existing organisational procedures such as formal assessment and programme review.

In summary the evaluation:

- a) Validated the overall success of the FI approach which led to it being clearly articulated
- b) Identified the potential to develop the scope of FI to incorporate a more strategic focus.

These are discussed in the following sections.

### 3. THE *FUTURES INITIATIVE* APPROACH

From the outset, the *Futures Initiative* emphasised the importance of an ethical and principled response to sustainability issues. With no expectation of orthodoxy, a concern for the planet and for the quality of life now and in the future has permeated all *Futures Initiative* endeavours. This in turn implies a commitment to inclusion, a respect for cultural diversity and greater social and economic justice. The first three years with its focus on values put the *Futures Initiative* on firm foundations and the subsequent evaluation highlighted the need to articulate the key features of the approach more explicitly.

#### Staff development

One of the other key features of the *Futures Initiative* is that it is clearly focussed on staff development. Building the capacity and capabilities of colleagues holds out the promise of effective long term change. There is an underlying premise that subject knowledge is held by the academic staff and that they hold the key to embedding sustainability within the curriculum. This has meant that there can be no unified, top-down checklist of whether a particular module or programme is ‘sustainable.’ Rather, through the *Futures Initiative* process, individual colleagues are encouraged to engage with ESD and bring their own academic disciplinary knowledge and understanding to the challenge. Building capacity takes time but then so does any lasting curriculum and attitudinal change.

#### Encouraging change and innovation

Teaching and learning about sustainability sits uneasily within existing University structures. It requires multi-disciplinary perspectives and new ways of thinking. The ability to experiment and take risks in a secure and supportive environment is liable to play a pivotal role in encouraging change and supporting innovation. It is also important to be honest in recognising the complexities and challenges involved. The *Futures Initiative* has sought to establish a range of settings where colleagues can collaborate, share ideas and develop new practice. As communities of practice begin to become established the possibilities for wider institutional change are enhanced.

The way that the *Futures Initiative* seeks to promote curriculum change is paralleled by developments in other universities in and beyond the UK. However, whilst there are common elements, the emphasis which they are given at Christ Church and the way in which they are combined serve to make the *Futures Initiative* distinctive. Figure 1 provides a visual summary of the key features. It is the practical experience of seeking to implement these principles in practice which gives them authenticity.

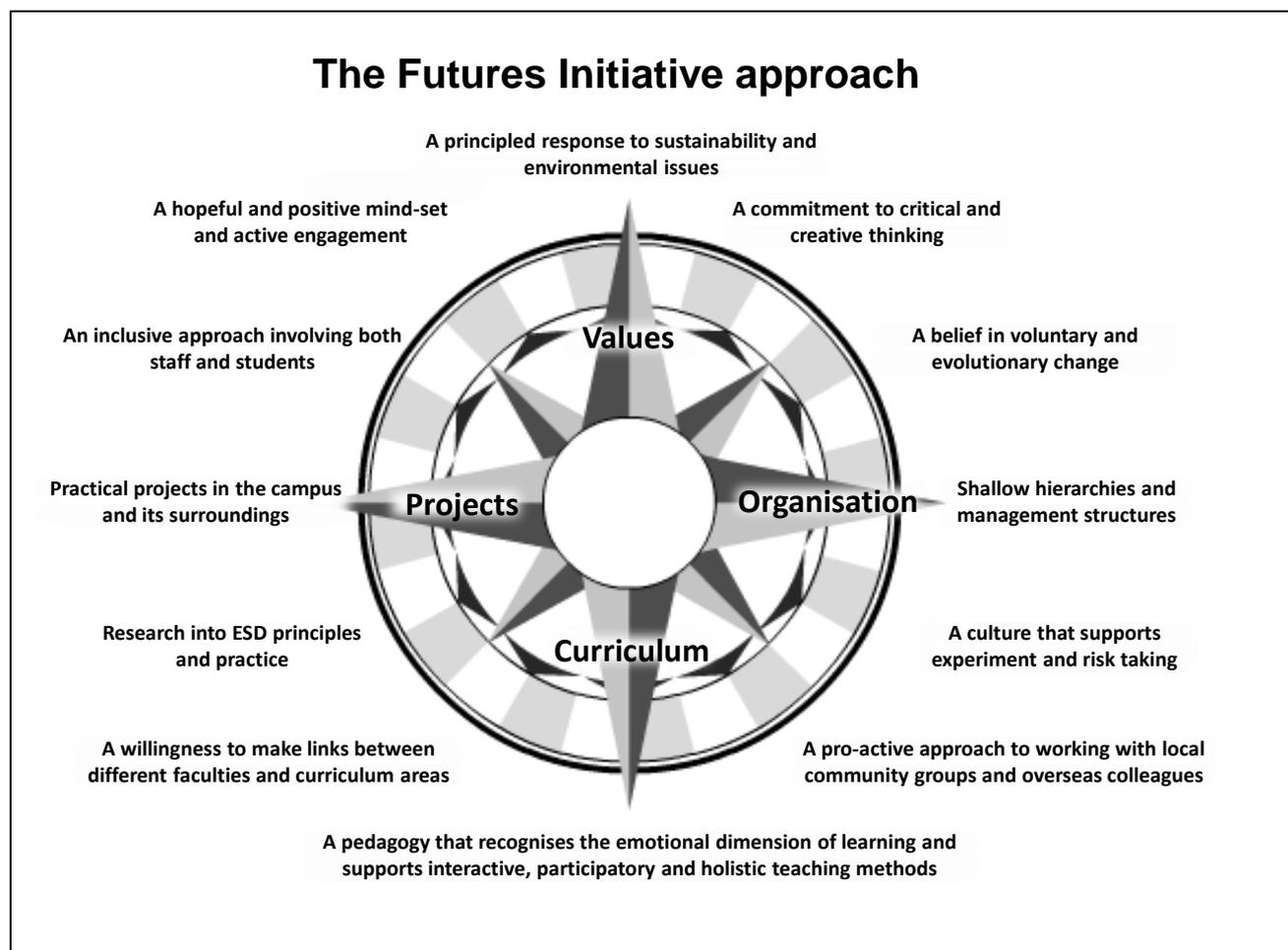


Figure 2: The *Futures Initiative* is a long-term staff development programme based on clearly articulated principles and understandings

#### 4. THE NEXT TWO YEARS 2014-16: DEVELOPING A STRATEGIC FOCUS

In 2014 the Higher Education Academy issued guidance on ESD for higher education providers (HEA/QAA 2014). Its publication coincided with a new strategic planning cycle internally and meant that there was an opportunity to reposition and develop the Futures Initiative and, in particular, to align it with existing organisational processes. During the period 2014-16, the Futures Initiative has grown and whilst still supporting projects it has developed a strategic focus which includes the following dimensions.

##### Future Leaders

In April 2015 a pilot programme ‘Future Leaders’ was launched jointly by the *Futures Initiative* and the Student Green Office (SGO). Aimed at staff and students from across the university, the programme responds to the University’s Framework for Sustainability and its commitment (2015-20) to “provide opportunities for students and staff to engage meaningfully in activities, dialogue and debate, which will help to develop skills, knowledge, understanding and experience of sustainability in the 21st century.”

Future Leaders aims to develop knowledge and understanding of Education for Sustainable Development as well as to build and enhance capabilities for leading change. The programme consists of a series of seminars, workshops and practical tasks held over the course of the year to develop leadership skills. Participants are given the opportunity to work collaboratively as part of an inter-disciplinary team on a sustainability issue of

strategic significance to the University. The focus for 2015-16 was the Whole Earth exhibition hosted by Christ Church.

The aim was to develop a partnership model for staff and students which allows them to collaborate to lead institutional change and it was developed on a number of clearly defined principles. The first principle emphasizes the importance of developing inclusive non-hierarchical relationships; recognizing that leadership is essentially relational. Secondly, it acknowledges the importance of voluntary change and that anyone can demonstrate leadership without necessarily being in a formal leadership/management role. Thirdly, it recognizes the importance of critical and creative engagement and the importance of risk-taking in leadership. Twenty-one participants were involved in the pilot and there is already evidence of significant impact in terms of teaching and learning. One participant from the School of Law, Criminal Justice and Computing has been working with a colleague and a group of students to explore local responses to Whole Earth in relation to criminal and social justice. A second cohort of participants has been recruited for 2016-17 and we will be working collaboratively with staff and students from other Universities (including the University of Plymouth) to explore the UN Sustainable Development Goals and develop activity in response to these.

### Futures Reading Group

A small but actively committed group of staff meet once a month at the end of the working day in an upstairs room of a nearby café in Canterbury, to discuss selected book chapters or journal articles. Christ Church Students and collaborators external to the University are also welcome. The Reading Group gives everyone involved an opportunity to choose a focus of interest and exchange views about it with colleagues and peers. Sometimes those views are shared, sometimes not, and discussions can get quite heated! With 'sustainability' discourse being such a broad domain, these discussions reflect the varied range of related areas; for example, from rewilding in Monbiot's *Feral*<sup>1</sup> to modifying our use of language in Stibbe's *Ecolinguistics*<sup>2</sup>.

The Sustainability Reading Group provides a valued space for debate about these compelling and contentious issues; so it is interesting to reflect back to its less than successful beginnings to the autumn of 2012, when the idea for establishing such a group was first conceived by several members of the team. Despite a few attempts to launch it, there wasn't sufficient interest to get it going. Now there are twenty-five people on the Reading Group's circulation list, a measure perhaps, of how far integrating concepts of sustainability into the academic arena has come.

### Futures Forum

The Futures Forum is facilitating the development of a strategic network for sustainability Research and Knowledge Exchange (RKE), which aims to foster a culture of cross-institutional collaboration, to showcase existing RKE activity in sustainability and to support 'Research Involved Teaching' in education for sustainable development. An initial RKE forum in July 2015 drew in more than 50 members of staff from across the University illustrating the level of interest and potential for this initiative. A second event was held in the autumn term and from that a limited life working group was set up to develop the network. At the same time a conference focusing on Higher Education for Sustainability has been planned for July 2016 hosted by CCCU in collaboration with the University of Plymouth. This will provide an opportunity for staff and students to showcase sustainability-related RKE activity and to hear about innovations in sustainability research within the HE sector.

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<sup>1</sup> Monbiot, G (2013). *Feral: Searching for Enchantment on the Frontiers of Rewilding*. Penguin Books.

<sup>2</sup> Stibbe, A. (2015). *Ecolinguistics: language, ecology and the stories we live by*. Routledge.

## Curriculum Review for ESD

Since the publication of the QAA guidance on ESD in June 2014, the ESD Working Group has been focusing attention on the development of a tool to support curriculum review and development based on the four categories outlined in the guidance, which are to:

- consider what the concept of global citizenship means in the context of their own discipline and in their future professional and personal lives;
- consider what the concept of environmental stewardship means in the context of their own discipline and in their future professional and personal lives;
- think about issues of social justice, ethics and wellbeing, and how these relate to ecological and economic factors;
- develop a future-facing outlook; learning to think about the consequences of actions, and how systems and societies can be adapted to ensure sustainable futures.

Many modules and programmes already incorporate sustainability perspectives into their curricula but there is little awareness or recognition of where this good practice exists. Equally there are opportunities to innovate and develop further in other curricular areas but again there is currently no coherent way to surface these. Therefore, the tool is designed to be used by programme teams to support curriculum innovation and development not to 'account' for or 'rate' academic practice. We are keen to avoid making this an additional 'tick box' exercise or one that highlights areas of poor practice. The *Futures Initiative* team runs staff development exercises to support modules and programmes' directors using the curriculum review tool, and have taken part in faculty meetings to introduce the tool and discuss ways its use may be most beneficial.

The tool comprises a simple spreadsheet-based scoring system, along with support materials, which facilitates a review of coverage of the four themes within programmes, modules, documentation and publicity, along with the identification of opportunities for and barriers to enhancement. It is accompanied by a user guide and list of resources to support its usage. However, it is only intended to:

- support the development of a broader understanding of sustainability principles
- assist with identifying where these are already covered within the curricula, and
- help identify opportunities for further inclusion and alignment, if and as appropriate.

After being piloted within several programmes in 2015, it has been used as part of a developmental process by diverse programmes across faculties. Avoiding a prescriptive approach, the *Futures Initiative* team continue to offer support beyond the review process to make the most of the identified opportunities for change.

## A Framework for Sustainability

During 2014-15 a Framework for Sustainability was developed in response to the University Strategic Framework cross-cutting theme for sustainability. This was heavily influenced by the work of the *Futures Initiative*, its approach and continues to recognise the complexities and barriers that beset the integration of sustainability within the academic fabric of the University. Whilst the ESD theme continues to provide a focus for the *Futures Initiative*, it is clear that the other three theme areas of RKE, Student & Staff experience, and Our environment, will be influenced either directly or indirectly. A 2020 target for ESD has been established that places responsibility to respond to theme within each academic area. It states that:

*“By 2020 all Schools and Faculties will have developed a response to ESD such that every student will have had the opportunity to learn about sustainability in the context of their chosen discipline and field of work”.*

Each Faculty and School may take its own strategic approach, or develop in line with university academic processes, such as validation and annual programme review.

## 5. CASE STUDIES

Some of the more recent *Futures Initiative* projects are included here as examples of the breadth and depth of these activities. These include the integration of sustainability into the formal curriculum, a personal journey, an example of influencing internationally, a whole university provocation and an example of student research as part of a wider heritage project.

### **The psychology of sustainability: research and a new module**

*Ana Fernandez is Programme Director of MSc Psychology and Senior Lecturer in Psychology at the School of Psychology, Politics and Sociology.*

The new Level 6 module Psychology of Sustainability, provided Dr Ana Fernandez with the perfect opportunity to combine her passion with her research and teaching.

“The project is a multi-disciplinary study looking at attitudes towards reintroduction of native carnivores and biodiversity in the UK. It involves one of my psychology colleagues, Dennis Nigbur, Alan Bainbridge from Education, and last but not least Adriana Consorte-McCrea from Life Sciences and FI. It’s great because it looks at challenges, knowledge, barriers and facilitators of reintroduction initiatives across a number of species, settings and human groups. A perfect example for my students of the real-life application of psychology to sustainability issues!

Did it develop as I expected? Not really. The research has encountered a number of stumbling blocks, which is actually quite good for teaching purposes; it shows the fluid nature of research and how the road from initial design to final outcomes is not a smooth one. But we’re getting there! We experienced the usual problems with applied research; building links takes time; and recruiting participants is not always straight-forward... But we are progressing and I think it’s great that future cohorts on the module will get to see the project developing and maturing. It will also provide opportunities for more students to get actively engaged, if they wish to.

It’s been one of those truly amazing experiences. Until now, I hadn’t been involved in cross-disciplinary research. Although it comes with its own issues, I thoroughly recommend it! As researchers, we can become a bit too insular. Expanding our connections and collaborations really enriches the experience and the work itself – it’s not just an extra pair of eyes but a number of different outlooks and approaches! I think it’s also valuable to my students because it really illustrates the importance of collaboration if we are going to solve any of the problems we are facing in this world of ours...

One of the Life Science students helped with data collection and a couple have done some of the background research on the species. I'm now hoping to get some of my psychology students working on the next phase of the project; luckily, some of them have a keen interest in conservation!

The Psychology of Sustainable Living module that was partly informed by this project has just under 120 students on it. They engaged with the project from a research point of view; as we used this as an example of real-life application and potential for intervention of psychology models and theories.

A lot of the students on the module were quite sceptical at first, to put it mildly! But slowly, some at least came to realise that sustainability is not just about going green or recycling. It is so much further reaching and it really touches on all those 'bigger issues' that they really care about, like social justice, food production and distribution, building communities... As part of the assessment, I asked them to keep a diary of 'take-home messages' after each session and it was really touching to read some of their entries; I'm really proud that this module has had such an effect on some of them.

For example, one student wrote:

*"When I chose the module psychology of sustainable living I thought it would be all about the environment, global warming and recycling. I was pleasantly surprised to find the first session dedicated to challenging our views (or prejudices) of what sustainability was. My group thought about the five words we used to describe sustainability and purposely tried to avoid any that only produced images of eco-friendly living although that is obviously a part of a sustainable lifestyle. Sustainability can also be applied to society, economics, diet, mental health, relationships, businesses and government. If these things are not sustainable then there is some sort of negative consequence which should encourage us to consider sustainability in all aspects of life."*



Figure 3: Students of Psychology of Sustainability at Sustainability Fair

It is also amazing to see the quality of interventions that they came up with! And a lot of them enjoyed our 'Sustainability Fair', where they got the chance to exhibit their interventions and even chat to some of the members of the *Futures Initiative* team. Both the research and the module are work in progress but I have a solid base to work from!

This has been a truly rewarding experience. I never imagined the impact this module would have in raising some students' awareness. I particularly remember one of them commenting on how surprised she was at the effect this module had on her, especially how much more careful and aware she was when shopping for food! It was such a

fantastic moment because this is the sort of transformative experience you hope for in your students but don't often get to see first-hand."

The Carnivores and Biodiversity research has completed phase 1 of case studies, it has resulted in presentations at local and international meetings and publications, and it continues to build partnerships with zoos and research organizations across the UK. While recognising that the Futures Initiative has been great in providing the chance to access funding for the project, Ana would like to see more opportunities to get together with others to discuss and share practice and has just joined the Future Leaders programme!

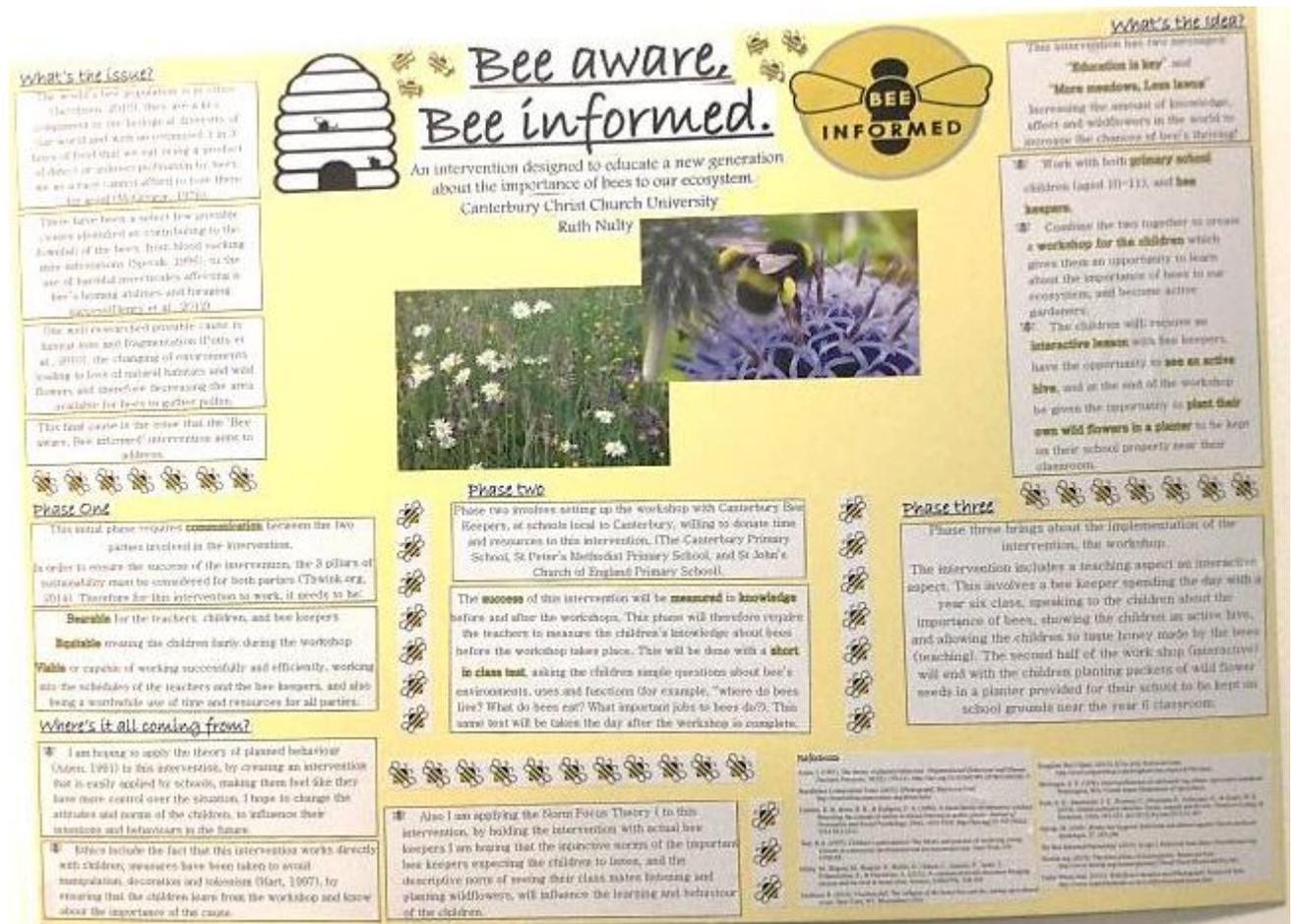


Figure 4: Poster by student Ruth Nulty

## What a difference a year makes: a personal journey

Chloe Griggs is a Future Leader for Sustainability and Senior Lecturer in the Faculty of Health and Wellbeing

In April 2015 I was called to a meeting in the Dean's office to assess Sustainability within the Foundation Degree in Health and Social Care. The programme had been selected as a pilot for the faculty and the purpose was to undertake a mapping exercise to see where sustainability featured within the curriculum. I went into the meeting not knowing much at all about sustainability and how it related to education. Tasked with the mapping exercise I left feeling a little overwhelmed, the mapping tool looked complicated and time

consuming. However, my initial scepticism was quickly replaced with a sense of optimism as the mapping process unearthed a whole host of sustainability related topics that were implicit within the programme.

I'm not sure what the turning point was for me, and I guess it will be different for everyone, but it seemed as though all of a sudden sustainability was a priority. This wasn't because I was being instructed by the Dean but because I felt a sense of duty. It may have been the Future Leaders event in August that converted me. Future Leaders from across the University attended the Earth Craft Forest School in beautiful and historic woodland within the grounds of Mount Ephraim. During the day we discussed a range of issues relating to sustainability and we were also introduced to the Whole Earth? exhibition which was not only thought provoking but motivating.

A trip to Copenhagen was probably the crescendo that provoked me to change. I witnessed a city of people who care about their environment, from their green spaces to air quality, infrastructure to transportation. I saw small children in a forest school connecting with nature and a general sense that the Danes care about their future. Within one month of returning, I had bought an electric car, switched my domestic energy to 100% renewable sources and reconstructed my kitchen to become a super-efficient recycling hub.



Figure 5: Chloe Griggs at EarthCraftuk, Future Leaders.

Once involved with this subject it seems to raise questions on all kinds of obscure aspects of life from my own carbon footprint to my purchasing habits as a consumer. As soon as you make one change there is another issue or debate waiting for you. I started to think about the power of education and my role as a Programme Director in influencing the health and social care workforce. In essence these thoughts became the 'seed' for a bigger life changing event ... a PhD. Being a nurse by trade I am very action orientated and started to think about action research within the NHS, I had visions of grandeur around changing perceptions and behaviours in the NHS. However, during some downtime over Christmas, when I had the time and energy to think, I

realised that I didn't know what NHS staff thought about sustainability and climate change. There is no research and no theory providing such information.

Therefore, my thoughts started to develop; it is not possible to change something I do not understand. And so the PhD was born. A research project that seeks to explore the reality of environmental sustainability for nurses, a project that seeks to frame values, perceptions and behaviours. It is fascinating that so much policy exists to influence behaviour yet we have no way of establishing if it is framed in the right way to appeal to Nurses values and perceptions. I am now a year on from that meeting with the Dean, it feels like so much has happened within that time. I feel I have gained such a strong sense of purpose; a moral obligation to add to knowledge within this field; and a realignment of personal values.

## Working internationally

*Jonathan Barnes is a Visiting Research Fellow at the Faculty of Education*

The *Futures Initiative* has been helping to develop sustainability perspectives, not only in conjunction with the local community, but also with partners overseas. The Teach for Malaysia programme for 'high flying' postgraduates, has resulted in a number of outstanding projects including a study of the effects of palm oil and other effluents on local rivers.

It is hoped that education for sustainable development promotes students to think globally besides learning what is in the textbook. In other words, through ESD students will be taught how to see the bigger picture which subsequently leads to problem solving. With this vision, Dr Jonathan Barnes has been using his annual Creativity in Education course in Malaysia to persuade new teachers to take a sustainability focus in their work in Malaysian secondary schools, as part of the Teach for Malaysia programme. The focus of his teaching about creativity was its importance to the wider issue of sustainability. He says:

*"Sustainability is defined very broadly. It is not a word that simply applies to environmental or wildlife decisions. The concept can be applied to our jobs and lifestyles too. To sustain literally means to hold, maintain, support or endure. Sustainability in the environmental and resources context should of course be central to*

Figure 6: Soonufat, a teacher working in Kedah started a recycling art workshop in his area, 'Be your own superhero and save the environment'



*any 21<sup>st</sup> century curriculum, but sustaining the best of oneself and such aspects of life that are worth preserving is also important. It can easily be argued that cultural, spiritual, psychological, intellectual and social environments are every bit as much under threat as the physical and natural environment. In this century all require serious thought about sustainability. “*

In Jonathan’s approach to education, *“sustainability involves activities and approaches designed positively to hold, support and engage the child and teacher over time without compromising other needs or the needs of others. A sustainable approach in these positive terms contributes to the development of resilience in the face of the inevitable negatives of life. Sustaining what is good about the life of an institution, culture or classroom is an important route towards teacher retention and pupil mental health.”*

After completing the project in both Sarawak on the island of Borneo and Malaysia’s northern state Kedah in 2015, Jonathan is now collecting students’ responses to the course by keeping in touch with them via Facebook. The following vignettes are just a sample of the responses to his arguments and illustrate how this project truly affected the participants and their practice:



Figure 7: Each origami turtle represents a real turtle egg that the children in Azimi’s class are looking after. Shortly they will hatch and be set free in the sea.

*“Azimi, a student from two years ago remains passionate about saving the lives and habitats of the giant leatherback turtles in his area. With his classes he emphasises one of the UN Global Goals (number 12) - Responsible Consumption. His Facebook posting says:*

*It is my personal mission that I remind the students that we only have one home, one earth. This is why I teach for Malaysia.*

*...we did an activity regarding the consequences of overfishing.*

*In the first round, I explained to the students (from a coastal community in Peninsular Malaysia) that some treats I had for them represented the number of catch they would get per fishing trip. The students realized the number of catch decreased as the more trips they did until there was none.*

*In the second round, I repeated the same process with one additional rule, the*

*students could choose to eat those treats or choose not to eat them. This led to a few groups to strategize and collaborate among themselves on whether to consume or not. At the end, I made sure that the total of catch was good enough for each student to get two treats. As a reward, the group (only to those that had enough to have a pair of treats per member) got additional treats to show that the reward they received depended on their decision to let their catch to be able to grow in population. The moral of the lesson was that they learned that to consume responsibly will bring more good for every person and the environment. (November 2015)”*

Victor Lam a Chinese Malaysian is teaching in Sarawak too. He has been teaching for only a year but has made a confident intervention into the normal curriculum of his school – The Genius Hour’. The Genius Hour is based on Google’s 20% Time, where Google employees take 20% of their official working time to work on ideas or problems that they are passionate about, hence increasing their productivity at work. This is what he says:

*“If our Malaysian students are to thrive in the 21st century of limitless boundaries and unpredictable scenarios, then creativity in their learning and our teaching is absolute key.*

*“As of now, my students are in the early stages of brainstorming. Some ideas that they have come up with includes learning new languages so that they may travel the world, learning how to be a top chef with local delicacies, learning how to open a local pub, designing traditional costumes with a modern twist and body building exercise for improving sporting ability.*

*A goal of every teacher should be to create lifelong learners. Genius hour projects are a huge step towards that goal.” (February 2016)*

## Whole Earth?

Whole Earth? has had a really big impact at Canterbury Christ Church University. We launched the exhibition last September with a visit and open lecture by the author Michael Morpurgo who captivated his audience by reading selections from his children’s stories to make some really meaningful points about current environmental challenges. At the same time a dedicated edition of the University magazine ‘Inspire’ was circulated to all staff and external stakeholders. This proved an excellent way to involve colleagues at the start of the academic year, including those from the support services who began to engage with the sustainability agenda with real enthusiasm.

During the autumn the exhibition was displayed at campuses in other parts of Kent. Cohorts of students from a range of disciplines studied the banners as part of their courses. Individual staff ranging from support assistants to a Pro Vice Chancellor, also engaged with it in considerable depth. This has given a very significant boost to the work of the Sustainability Office and done much to promote a culture in which sustainability is visibly part of our academic endeavours, pushing it higher up the agenda. Additionally, the Inter Faith Council organised a special debate in which speakers from four major world religions outlined their particular beliefs and attitudes towards the environment. We felt that, as a Church of England foundation, Christ Church might have a special contribution to make in this respect.



Figure 8: PGCE CCCU student speaking about sustainability at a joint conference with the University of Kerala, January 2016.

Since the start of 2016 we have begun to use the exhibition in different ways. In January the banners were shipped to India where we organised an international symposium with the University of Kerala – one of our partner universities. The exhibition is now being exhibited in around half a dozen educational institutions in Kerala and is clearly generating considerable interest. For example, the Deputy Vice Chancellor of the University of Kerala personally opened the exhibition in January and is taking a personal interest in its progress.

Back in Canterbury, Whole Earth? was the focus of a special event organised jointly by the Women’s Staff network and student Feminist Society in March. This involved a creative writing workshop and resulted in a composite poem called A Wonder-Web of Life’. The poem is now being used to generate a long lasting legacy artwork that will provide tangible evidence of the power of collaborative working. Artistic and creative responses seem to be particularly effective ways of using the banners. We are also beginning to involve local schools and introduce the banners to teachers and pupils from partnership schools.

The value of Whole Earth? lies not only in the questions and issues that are raised in the banners. It has also served as a catalyst and provocation which has galvanised staff and students in unexpected ways. There is no single route for creating the conditions for cultural change. Whole Earth? has proved an unexpected and very welcome addition to the *Futures Initiative* programme. It has also linked CCCU with other universities in and beyond the UK who have also displayed the banners resulting in valuable networking.



Figure 9: Poetic response workshop facilitated by Victoria Field



Figure 10: The WHOLE EARTH? exhibition on Anselm lawn at Canterbury campus

## Green Chapel Ale: research and a sense of place

*Lee Byrne is a Senior Lecturer at the School of Human and Life Sciences*

As part of the Edible Campus sustainability project, a collaborative proposal was put forward for a Beer, Bread and Honey project to highlight the links to the monastic heritage of the Canterbury Campus. My involvement in the FI project was to isolate wild yeast strains from around the Canterbury Christ Church campus to be used with the CCCU grown hops and other raw components in producing the University's own *Green Chapel Ale*. Several tree, plant and soil samples were taken from around the campus and yeast strains isolated by growth on media selective for fermentative yeasts. The yeast strains isolated were subsequently identified by molecular methods involving DNA extraction, PCR amplification and DNA sequencing. Five of the yeast strains were scaled up to produce inoculating cultures for 45 litre pilot brews at our commercial partner's premises (Canterbury Brewers). These brews will be used to assess the flavours and fermentation potential imparted by each particular wild yeast strain.

This has been an extremely fun and exciting project to participate in and has created a buzz across the Life Science student cohort. The project has raised the Section of Life Science's visibility both internally and externally to the University and created new collaborations, particularly with a commercial brewing partner (Canterbury Brewers). Both myself and the students involved in carrying out the project have gained new knowledge and experience in isolating and culturing wild yeasts and their exploitation in the commercial brewing process.

The only barrier we experienced was in the time that I and the students could devote to the project within our busy timetable. This was mostly because laboratory work requires training in the methods used and students require constant supervision within the laboratories, which meant that project could only be run when all of us were available. This means that the project did not progress as quickly as hoped post-summer break.

New links have been created with both local businesses and other colleagues from other departments across the university. Personally, I have gained new knowledge in the isolation and characterisation of wild yeasts and have learned a lot about the brewing process and yeast strain influence on taste. It is apparent that five strains of wild yeast, is a fairly limited number and that brewers often have tried hundreds of strains to get the taste just right. These, of course, have been selected over centuries of brewing to obtain desired strains that produce beer of good quality. I have also formed new collaborations and links with colleagues from all over the university, from the chaplaincy to the sustainability team. I have also been impressed with the student volunteers' commitment and passion



Figure 11: Final year undergraduate student Alex Neale isolating wild yeast strains in the laboratory

Five undergraduates and one PhD student have been involved in the project since it was started. Students have been involved in all areas of the project from collecting plant samples to extracting genomic DNA for yeast strain identification. Their commitment and enthusiasm has been heightened by the prospect of potentially producing a viable commercial product and, of course, tasting it! Additionally, the students now possess an increased appreciation of the natural biological resources available within their local environment and have directly benefitted by developing new laboratory skills, laboratory experience, as well as new knowledge of yeast and of commercial microbiology.

The ultimate project outcome is to produce a drinkable beer using a yeast strain isolated from this campus. Currently only one of the five strains isolated and tested by our collaborating brewery produced a drinkable beer, but was not the best at fermentation. Currently we are

investigating what type of yeast this strain was and the ideal growth conditions and alcohol tolerance.

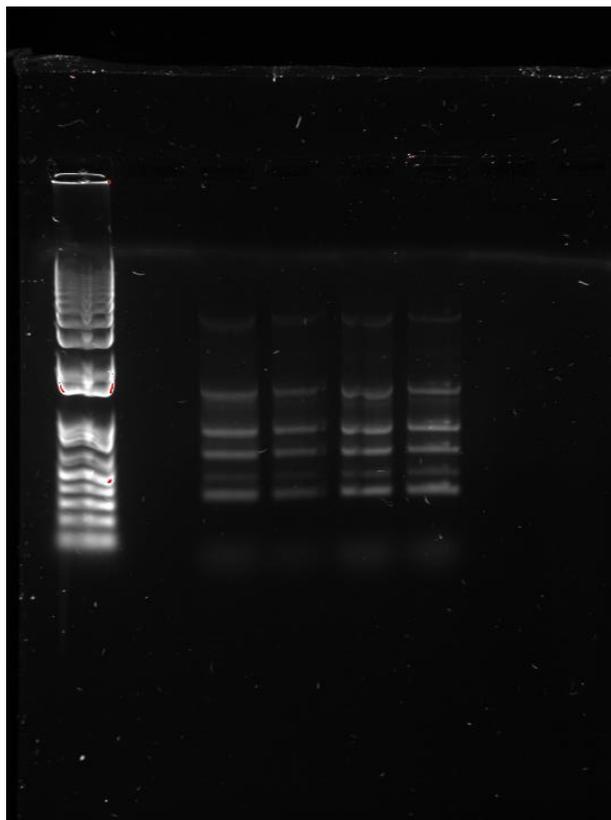
We would like to try and isolate further yeast strains in an attempt to identify a good brewing variety and continue our investigations into optimising the growth and alcohol production conditions for our single yeast strain that shows some success.

This quote came from Jon the manager of the Canterbury Brewers that piloted our isolated yeast strains:

*"We tasted the results from the fermenters Friday. They ranged from weird to offensive, apart from one that tasted of beer, yes beer!"*

The project provided an excellent opportunity to make students aware of the sustainable biological resources available to them in their local environment and their subsequent use in producing basic foodstuffs. The resulting beer and bread products have the potential to be marketed and act as excellent tangible products of the *Bioversity* project and will thus engage members of the public, students and staff.

Figure 12: PCR analysis of genomic DNA from wild yeast strains, performed by Science Foundation students



## 6. THE NEXT FOUR YEARS 2016-20: DELIVERING THE FRAMEWORK

Over the last 5 years, the *Futures Initiative* has developed significantly and this report showcases some of the many successful outcomes. As well as facilitating grass-roots curriculum innovation from staff and students, it has influenced the University's strategic agenda and now supports the delivery of a significant proportion of the Framework for Sustainability. Its fundamental purpose going forward, is to facilitate and support achievement of the ESD and RKE themes within the Framework; and many of its activities will influence the other two themes (Our environment; Student and Staff Experience).

Introducing ESD perspectives in higher education institutions is a major challenge which involves negotiating multiple, complex, conflicting agendas. One of the strengths of the *Futures Initiative* is that it has emerged from a detailed review of current practices in ESD and is informed by both theoretical knowledge and practical experience. We recognise that there are no quick fixes and barriers whether explicit and implicit need to be acknowledged. In particular, we have done our best to address the following:

### Tokenism

Issues to do with sustainability and the environment are complicated and involve many links and connections. Small scale behaviour changes such as recycling litter, turning off lights or reducing water consumption are promoted by environmental campaigners but can all too easily be ridiculed as ineffective, insincere or counter-productive. As well as guarding against simplistic responses to complex issues, it is important to acknowledge the sense of authenticity and integrity that stems from action. Problem solving and creative engagement have the potential to counter feelings of helpless and disempowerment and thus have an important place in the *Futures Initiative*.

### Hidden messages

The way the university estate is managed contains many 'hidden messages' whether in the selection and siting of commercial vending machines or the range of facilities for cyclists. The structure of the curriculum also implies a particular view of knowledge. Environmental perspectives tend to question the assumptions which underpin our everyday lives. Thinking about the future has the potential to re-invigorate current practices which may have become stale or entrenched. Shifting attitudes takes time but new perspectives may come in a flash. One Business Studies student reported after hearing a talk on the state of the environment. '*I suddenly got it. I realised the impact MY plastic, MY meat, MY waste paper was having on the planet that is keeping me alive*'. She then proceeded to outline some of the changes she intended to make to her life.

### Bias

Concerns about the environment have their historical roots in the campaigns and activities of pressure groups and are still seen by some as tainted with activism and doctrine. Educationalists have a deep-seated unease about being drawn into politics and are wary of charges of bias. Colleagues have raised this issue with the ESD committee in the past when it led to a lively email debate. There have even been charges from an American association that sustainability is the new fundamentalism (National Association of Scholars 2015). Placing these concerns in a wider debate about the purpose of education in the twenty first century seems a constructive way forward.

### Curriculum relevance

Sustainability and the environment sometimes tend to be viewed as belonging predominantly to particular disciplines such as geography, environmental science or, in a school context, citizenship. The implication is that they will be covered in programmes from these curriculum areas and can therefore be legitimately left out of others. For example, one Education student spoke for quite a few others when they wrote '*Do we really need to know this?*' in their end of course evaluation. This is a restricted view which misses the point about the integrative and holistic nature of sustainability education and its impact on pedagogy. The *Futures Initiative* is aimed at colleagues from across the university in the belief that sustainability has the potential to permeate all subject areas.

### Holistic learning

There are considerable advantages in taking a holistic approach to students' learning. While validated course work is undoubtedly crucial, there are many other experiences which help students develop their thinking. Some students find that international travel, volunteering or work experience are transformative experiences. Informal conversations with friends are also a powerful way of consolidating new ideas. In addition to the *Futures Initiative*, the University has developed a Christ Church Extra Award, which provides a formal way of celebrating students' extra-curricular activities and contributes to the Higher Education Achievement Record (HEAR).

### Recognising achievement

There is a wide consensus that ESD is not primarily about the transmission of knowledge from tutor to student. Rather, it involves the exploration of complicated issues which are necessarily messy and have no clear-cut answers. Learning in this context is much more likely to be interactive and involve group work and problem solving. First hand experiences and activities have an important role. Reframing the curriculum in ways that make it more porous and flexible is one of the objectives of the *Futures Initiative* and entirely compatible with associative, non-linear ways of thinking.

### Eco-guilt

Those of who live in the West today tend to find themselves trapped in high consumption, high mobility life styles. This way of living can be difficult to reconcile with the principles of environmental responsibility. In promoting an environmental ethic, it is important not to leave students in an ambiguous position and permeated by a sense of eco-guilt. It is common for students to ask what they can do after a hard-hitting lecture. Looking towards to future is liberating as it has the potential to shift the focus towards what is possible rather than what seems fixed and immutable.

### Values

Any discussion about sustainability and the environment ultimately raises questions about values. Some of the questions which arise include: What responsibilities do we have towards other people and communities? Is it fair that we should deprive future generations of the resources we have inherited? What right do we have to destroy other forms of life? Colleagues who are dubious about exploring such issues and who question the importance of principles such as global equity, justice and the rights of future generations might want to side-step this debate. However, the fact that millions of people around the world are already affected by environmental degradation places ESD at the centre of the debate about inclusion. By facing up to hard realities the *Futures Initiative* has the potential to promote healthy discussion of fundamental issues concerning how people live their lives.

## 7. CONCLUSIONS

Looking forward beyond this report, it is important to recognise the potential impact of internal and external drivers of change. Of particular relevance is the recently published White Paper; *Success as a Knowledge Economy: Teaching Excellence, Social Mobility and Student Choice* (DfE 2016), which will see the government monitoring and assessing the quality of teaching in England's universities through the Teaching Excellence Framework. Also proposed are the opening up of the Higher Education market and a redoubling of efforts to widen participation. These proposals create both challenges and opportunities for Universities.

The experience of the *Futures Initiative* in developing and delivering ESD may prove to be valuable in this regard. ESD demands that we question the nature and purpose of education and challenge its systems and practices. Through the *Futures Initiative*, this University is already engaged in exploring what good education might mean in the 21st century. As articulated in the Framework, our vision for sustainability is to develop environments in which people can explore more sustainable ways of living in the 21st Century.

Our proposed approach is to continue to support the development of expertise within discipline, whilst recognising that interdisciplinary approaches are needed to help develop broader perspective within the student body. This is an evolving process, which is necessarily responsive and developmental. With very limited central resource, it is critical that we continue to develop partnership with Schools and Faculties, and work with existing and developing academic infrastructure; e.g. with Academic Development and the Directors of Quality and Learning & Teaching. We also recognise that there may be other pathways and opportunities, which are yet to be explored, and are therefore open to suggestions and collaborations.

## 8. APPENDICES

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APPENDIX I - *Futures Initiative Bid Projects*

	<b>2011 – 2012 FUTURES INITIATIVE BID PROJECTS</b>	<b>STAFF LEAD</b>	<b>FACULTY</b>	<b>BID AMOUNT</b>
1	Development and Underpinning of work- related learning elements and employability threads in BA Media and Communications	Joanne Woodman	ARTS AND HUMANITIES	£1780
2	Pulling Out The Plug: New Experiences Through Old Ways Of Seeing	Karen Shepherdson	ARTS AND HUMANITIES	£2000
3	There is a future in history!	Jackie Eales/Andy Seaman	ARTS AND HUMANITIES	£2000
4	Engaging with nature: Forest School	Alan Pagden	EDUCATION	£1780
5	Designing a sustainable curriculum for teaching and learning in primary schools in 2025	Paula Stone	EDUCATION	£2500
6	Introducing a global dimension in primary initial teacher education: A case study of inhibitors	Stephen Scoffham	EDUCATION	£2000
7	Perspectives of Public Health: the development of teaching resources to strengthen students’ knowledge and understanding of sustainability literacy in terms of the impact of place on health and well-being within the formal curriculum	Jane Arnott	HEALTH AND WELLBEING	£3000
8	Development and pilot of audit/screening tool to identify where sustainability in the curriculum exists in validated programmes	Jill Gower/Kate Springett	HEALTH AND WELLBEING	£3000
9	Digital Storytelling for Developing Professional Practice	Curie Scott	HEALTH AND WELLBEING	£3000
10	Curriculum Development for Level 6 Module on Environmental Politics	Soeren Keil	SOCIAL AND APPLIED SCIENCES	£3000
11	Communities Partnership	Sarah Cant	SOCIAL AND APPLIED SCIENCES	£3000
12	Social media for business development, marketing, professional and personal use.	Kristen Pole	SOCIAL AND APPLIED SCIENCES	£3000

13	Foundations of Management: exploring the links between module knowledge, sustainability literacy and employability in the formal curriculum.	Tan Yoke Eng	SOCIAL AND APPLIED SCIENCES	£3000
14	Trees and Woodland for Community: Sustaining education, health and wellbeing	Peter Vujakovic	SOCIAL AND APPLIED SCIENCES	£2000
15	The Skills Award: recognising learning from the wider student experience	Rebecca Douglas	PROFESSIONAL SERVICES: CAREER DEVELOPMENT	£3000
	<b>Number of bids which were actioned = 15</b>	<b>TOTAL SPEND ALLOCATED =</b>		<b>£38,060</b>
	<b>Number of bids which did not proceed = 0</b>			
	<b>2012- 2013 FUTURES INITIATIVE BID PROJECTS</b>	<b>STAFF LEAD</b>	<b>FACULTY</b>	<b>BID AMOUNT</b>
16	Digital Media as a tool for communication and sustainability	Tim Long	ARTS AND HUMANITIES	£982
17	Sustainability through multi-platform content creation	Ken Fox	ARTS AND HUMANITIES	£3000
18	Senior Lecturers, English & Language Studies	Kevin Balchin/Antonia Linehan	ARTS AND HUMANITIES	£1000
19	Enhancing Sustainability through Student Work-based Placements	Andy Seaman/Jackie Eales	ARTS AND HUMANITIES	£1200
20	<b>Continuation</b> Pulling Out The Plug Phase II	Karen Shepherdson	ARTS AND HUMANITIES	£750
21	Developing a degree in Location Management for the Creative Industries	Jane Lovell/Ken Fox	ARTS AND HUMANITIES	£2100
22	Quality or Quantity? Measuring the impact on children's attitudes and actions of Global Citizenship activities	Terry Whyte	EDUCATION	£500
23	Developing innovative curriculum resources to be used to sustain virtual learning	Kristy Howells	EDUCATION	£1950
24	FI Symposium December 2012	Stephen Scoffham	EDUCATION	£802
25	Connecting children and nature: An outdoor conference	Nicola Kemp	EDUCATION	£2000
26	1 <sup>st</sup> CCCU Spring Festival	Jane Lovell/Paula Stone	EDUCATION	£2000

27	Sustainability, climate change, health and education.	Nerys Brick	HEALTH AND WELLBEING	£1000
28	Wildlife and Society Conference	Adriana Consorte-McCrea	SOCIAL AND APPLIED SCIENCES	£1360
29	Embedding the ethos of sustainability into a core module: Transforming minds, changing future	Tan Yoke Eng	SOCIAL AND APPLIED SCIENCES	£1000
30	Monitoring temperature in lecture rooms on North Holmes campus.	Chris Harvey	SOCIAL AND APPLIED SCIENCES	£500
31	Education for Sustainability: Living and Learning from experience – A pilot study	Tan Yoke Eng	SOCIAL AND APPLIED SCIENCES	£2000
32	The “Person Power Project”.	Natalie Goldring	PROFESSIONAL SERVICES: SPORTS CENTRE	£1000
33	Intercultural Communication Training for Graduate Plus portfolio	Chris Trillo/Libby Peatman/Nettie Amorati	PROFESSIONAL SERVICES: LEARNING & TEACHING	£2000
34	The Growing Group	Sustainability team/Philippa Mills	PROFESSIONAL SERVICES: SUSTAINABILITY TEAM	£500
<b>Number of bids which were actioned = 17</b>		<b>TOTAL SPEND ALLOCATED =</b>		<b>£25,644</b>
<b>Number of bids which did not proceed = 2</b>				
<b>2013 – 2014 FUTURES INITIATIVE BID PROJECTS</b>		<b>STAFF LEAD</b>	<b>FACULTY</b>	<b>BID AMOUNT</b>
35	Sustaining creatively	Jonathan Barnes	EDUCATION	£1250
36	Sound Garden project	David Wheway	EDUCATION	£2000
37	Exploring Sustainability website	Stephen Scoffham	EDUCATION	£4000
38	Education Studies for Sustainability	Yvonne Stewart	EDUCATION	£1000
39	Developing curriculum resources to support professional development for leading a Future Thinking school	Fiona Stephens	EDUCATION	£932
40	Finding and using sustainable spaces for staff development	Alan Bainbridge	EDUCATION	£2055

41	<b>Continuation</b> Connecting Children and Nature: Project Wild Thing screening Phase II	Nicola Kemp	EDUCATION	£2000
42	<b>Continuation</b> Monitoring temp in lecture rooms on NHR campus Phase II	Chris Harvey	SOCIAL AND APPLIED SCIENCES	£500
43	Criminology for Just Society	Katja Hallenberg	SOCIAL AND APPLIED SCIENCES	£1000
44	Building Community Events for Sandwich	Kris Pole	SOCIAL AND APPLIED SCIENCES	£1000
45	2 <sup>nd</sup> CCCU Spring Festival	Jane Lovell	SOCIAL AND APPLIED SCIENCES	£1000
46	Biochar production and Biochar Day at Hall Place.	Hannah Scott/Dave Ponsonby	SOCIAL AND APPLIED SCIENCES	£1520
47	Canterbury Business Network	Alin Marinescu (Student)	SOCIAL AND APPLIED SCIENCES	£500
48	Sustainable Conservation - Understanding insect biology and the importance, economic constraints and practice of insect conservation through the use of insect hotels.	Joe Burman	SOCIAL AND APPLIED SCIENCES	£699
49	<b>Continuation</b> Intercultural Communication for Christ Church extra Award Phase II	Chris Trillo/Nettie Amorati	PROFESSIONAL SERVICES: LEARNING & TEACHING	£1000
50	<b>Continuation</b> Person Power Project Phase II	Natalie Goldring	PROFESSIONAL SERVICES: SPORTS CENTRE	£2400
51	<b>Ongoing</b> Edible Campus (has taken over The Growing Group)	Alex Metcalfe	PROFESSIONAL SERVICES: SUSTAINABILITY TEAM	£2000
52	The Thinking Space (Yurt)	Sustainability team	PROFESSIONAL SERVICES: SUSTAINABILITY TEAM	£3500
53	Student Rep 'Training' and the Student Green Office (SGO)	Peter Rands/Silvia Rasca/Students' Union	PROFESSIONAL SERVICES: SUSTAINABILITY TEAM & STUDENTS' UNION	£2000
<b>Number of bids which were actioned = 15</b>		<b>TOTAL SPEND ALLOCATED =</b>		<b>£30,356</b>
<b>Number of bids which did not proceed = 4</b>				
<b>2014- 2015 FUTURES INITIATIVE BID PROJECTS</b>		<b>STAFF LEAD</b>	<b>FACULTY</b>	<b>BID AMOUNT</b>

54	Sustainability briefs	Joanne Woodman	ARTS AND HUMANITIES	£500
<b>55</b>	<b>Continuation</b> Sustaining Creatively in Malaysia Phase II	Jonathan Barnes	EDUCATION	£500
56	Future Leaders	Nicola Kemp	EDUCATION	£6000
57	Student Green Office (SGO)	Peter Rands	PROFESSIONAL SERVICES: SUSTAINABILITY TEAM & STUDENTS' UNION	£5000
58	Forest School training	Alan Pagden	EDUCATION	£500
59	Re-enchanting the Academy conference	Angela Voss	EDUCATION	£500
60	Zodiac Walk	Angela Voss/Judith Way (student)	EDUCATION	£500
61	Future Thinking School Leaders II – Post Graduate Conference 13 <sup>th</sup> June 2015	Fiona Stephens	EDUCATION	£500
62	Public debate on fracking in the UK at CCCU	Matt Ogilvie	SOCIAL AND APPLIED SCIENCES	£1000
63	Energy and Governance Workshop: EU- Russia Energy Governance: Iconic or Laconic?	Amelia Hadfield	SOCIAL AND APPLIED SCIENCES	£1000
64	How Fossil Fuel Consumption Shapes the Lives Communities Lead	Simon Pirani	SOCIAL AND APPLIED SCIENCES	£1000
65	3 <sup>rd</sup> CCCU Spring Festival	Jane Lovell	SOCIAL AND APPLIED SCIENCES	£500
66	Developing an interdisciplinary module for teaching Sustainability issues in southern India	Joe Burman/Patrick Meehan	CROSS FACULTY: EDUCATION & SOCIAL AND APPLIED SCIENCES	£2360
67	Carnivores and Biodiversity Project	Ana Fernandez;/Adriana Consorte-McCrea/Alan Bainbridge/Dennis Nigbur	CROSS FACULTY: EDUCATION & SOCIAL AND APPLIED SCIENCES	£1000
<b>68</b>	<b>Ongoing</b> Edible Campus	Alex Metcalfe	PROFESSIONAL SERVICES: SUSTAINABILITY TEAM	£500
69	Books for Living - Developing a Sustainability Timeline	Sustainability team	PROFESSIONAL SERVICES: SUSTAINABILITY TEAM	£500

70	Green spaces and mental wellbeing conference	Eleni Hatzidimitriadou	HEALTH AND WELLBEING	£1335
71	Ongoing Beer, Bread and Honey a)	Alex Metcalfe	PROFESSIONAL SERVICES: SUSTAINABILITY TEAM	£1000
72	BB&H Yeast Isolation b)	Lee Byrne	SOCIAL AND APPLIED SCIENCES	£1000
73	CCCU Bioblitz	Rodrigo Vega	SOCIAL AND APPLIED SCIENCES	£1000
<b>Number of bids which were actioned = 18</b>		<b>TOTAL SPEND ALLOCATED =</b>		<b>£24,195</b>
<b>Number of bids which did not proceed = 0</b>				
<b>2015- 2016 FUTURES INITIATIVE BID PROJECTS</b>		<b>STAFF LEAD</b>	<b>FACULTY</b>	<b>BID AMOUNT</b>
74	<b>Continuation:</b> Research output-Embedding sustainability and Measuring impact on Graduate learning outcomes: Case Study	Joanne Woodman/Ken Powell	ARTS AND HUMANITIES	£2070
75	Student Green Office (SGO)	Peter Rands	PROFESSIONAL SERVICES: SUSTAINABILITY TEAM & STUDENTS' UNION	£6000
76	Engaging with Whole Earth? – reflections & responses to Mark Edwards' Whole Earth exhibition/installation	Karen Shepherdson	ARTS AND HUMANITIES	£1000
77	Walk Ways	Sonia Overall	ARTS AND HUMANITIES	£1000
78	Whole Earth? : Developing an early childhood response for sustainability	Polly Bolshaw	EDUCATION	£1000
79	A 'dialogue' on teaching, learning, and transforming; does 'sustainability' change everything?	Liz Pichon/Ian Jasper	EDUCATION	£1000
80	Beyond the walls: engaging local communities in the 'public commissioning' of sustainability related 'research involved teaching'	Peter Vujakovic, Naomi Ritoul	SOCIAL AND APPLIED SCIENCES	£1000
81	Criminal Justice Responses to Whole Earth?	Katja Hallenberg/ Maryse Tennant	SOCIAL AND APPLIED SCIENCES	£1000
82	Tradescant 400	Peter Vujakovic/Mat Baldwin	COLLABORATION: SOCIAL AND APPLIED SCIENCES &	£500

			PROFESSIONAL SERVICES: GROUNDS & GARDENS	
83	Whole Earth? – Creating a Poetic Response for International Women’s Day	Toni Wright	RESEARCH CENTRE: CPD	£1000
84	Grounds & Gardens eco mower	Paul Sims	PROFESSIONAL SERVICES: SUSTAINABILITY TEAM	£1500
85	Sustainability conferences-hosted	Peter Rands	PROFESSIONAL SERVICES: SUSTAINABILITY TEAM	£5000
86	Walk Ways	Sonia Overall	ARTA AND HUMANITIES	£1000
87	Summer conference: Sustainability in Higher Education: Challenges and Opportunities	Peter Rands	PROFESSIONAL SERVICES: SUSTAINABILITY TEAM	£5000
88	Research project: A ‘dialogue’ on teaching, learning, and transforming; does ‘sustainability’ change everything?	Liz Pichon/Ian Jasper	EDUCATION	£1000
89	<b>Continuation</b> Physic Garden Phase II	Dawn Evans/Alex Metcalfe	COLLABORATION: SOCIAL AND APPLIED SCIENCES & PROFESSIONAL SERVICES: SUSTAINABILITY TEAM	£500
90	Whole Earth? Many Hands Make a Lighter Future: creating a textile legacy	Adriana Consorte-McCrea/Toni Wright	COLLABORATION: SOCIAL AND APPLIED SCIENCES & PROFESSIONAL SERVICES: SUSTAINABILITY TEAM	£500
<b>Number of bids which were actioned = 11</b>		<b>TOTAL SPEND ALLOCATED =</b>		<b>£32,070</b>
<b>Number of bids which did not proceed = 1</b>				

**NON APPLICATIONS**

NB: Some ideas for projects or activities never quite make it to the stage of application, a total so far of fourteen throughout the history of the *Futures Initiative*. During the academic year 2013-14, nine such ideas were mooted and in 2015-16, there were five.

## APPENDIX II - Examples of *Futures Initiative* Projects- Summaries

### **Amelia Hadfield** (School of Psychology, Politics and Sociology) - **Energy and Governance Workshop: EU-Russia Energy Relations: From Repression to Aggression**

This workshop examined a multitude of areas impacted by the current fallout in Russia - European Union energy security relations. The one-day event supported research inputs and learning outputs on energy security currently being worked on by the Politics team, as well as the variety of research on climate change, environmental policy and sustainable development produced by a wide cross-section of CCCU academics in and beyond the Faculty of SAS. The Workshop welcomed a wide range of students, staff, local civil society groups, external think tank and industry reps, as well as academics from other HEIs in and beyond the UK. The group cultivates a close relationship between its professional team and the student body, promoting student participation.

### **Simon Pirani** (Social and Applied Sciences) - **Seminar: "How Fossil Fuel Consumption Shapes the Lives Communities Lead"**

This seminar aimed to develop public discussion on the way in which consumption of fossil fuels has become embedded in economy, technology and society in the period since the second world war, to inform debates on how communities will be changed in the future as the economy moves away from fossil fuels to sustainable methods of energy provision. It was supported by the Energy and Governance group, held at UCL in London and attended by academic researchers, representatives from NGOs, students and independent scholars. It promoted rich discussions, networking and KE in an engaging atmosphere. Another intended outcome is the development of inter-disciplinary cooperation and relationships for the study of the issues.

### **Matt Ogilvie** (School of Psychology, Politics and Sociology) - **Fracking Debate**

In the autumn of 2014, *Futures Initiative* funding supported a public debate on fracking chaired by the Dean of the Faculty of Social and Applied Sciences. Expert speakers outlined the case for and against fracking and the possible implications for East Kent, to a lively packed audience drawn from both within and beyond the University. This informed a critical public discussion on a major environmental issue, and is an example of how the University is beginning to take a leadership role whilst building a wider reputation for its sustainability activities. The debate brought a new dimension to the University's established public lecture programme and helped to raise the profile of sustainability issues amongst staff and the local community.

### **Jane Lovell and Shola Osinaike** (School of Human and Life Sciences) - **Spring Festival 2015**

During its latest editions, Y2 Events Management students organised the annual CCCU's annual Spring Festival which aims to bring communities together promoting sustainability. The project encourages students to engage as producers or co-creators of knowledge through research-engaged practice. Students, tutors, and facilities staff and security teams worked together to engage different communities. The students make contact with suitable organisations, arrange publicity and marketing and reflect on what they have achieved. They also develop a deeper understanding of the economic and social aspects of sustainability - fair trade, resource procurement and food miles are some of the issues which are highlighted. Planning and running the festival builds students' self-confidence and enhances their employability.

**Rodrigo Vega** (School of Human and Life Sciences) - **BioBlitz, at St. Martin's Church and The Priory**

This 2 days event was promoted by the Ecology Research Group and carried out by staff and students from CCCU, enthusiasts from the general public, and the Management Committee of the Canterbury World Heritage Site. The event aimed to generate a quick inventory, a snapshot, of the variety of life found in an area. The BioBlitz promoted collaboration with other organizations and allowed people to explore natural spaces, discover wildlife and engage with science. Knowing the biological diversity of a place is important for giving it a sense of natural significance and for the general appreciation of nature. World Heritage Sites have special cultural and natural significance that help create a sense of national and local pride. A total of 151 species from 11 major taxonomic groups were identified, including the iconic stag beetles. The biological information generated will raise awareness about the significance of heritage sites and biodiversity conservation.

**Katja Hallenberg and Dr Maryse Tennant** (School of Law, Criminal Justice and Computing) - **Criminology for a Just Society**

The aim of this project was to create a new validated module introducing sustainability through environmental, economic, social and cultural justice. A pilot module which included opportunities for students to volunteer for charitable organisations active in the field was devised with *Futures Initiative* support. The funding has enable staff to attend national conferences and workshops thereby extending their professional networks. The project has also led to new links being forged with colleagues in other departments. Initial responses indicate that the module has had a transforming impact on students who were initially unaware of how sustainability issues related to police work.

**Eleni Hatzidimitriadou** (School of Public Health, Midwifery and Social Work) - **Green Spaces conference**

There is mounting evidence to show that 'green spaces' can contribute to mental and physical health and well-being. This one-day conference in June 2015 was organised by staff from the School of Public Health, Midwifery and Social Work in conjunction with MIND (Bexley) to highlight how current research is being put into practice and to share examples of best practice across a range of agencies. The conference steering group brought together ten academic staff from across the University to create a network. This group now plans to initiate further research and to host a larger national event on this under-researched area of interdisciplinary interest in health and social care.

**Joanne Woodman and Ken Powell** (School of Media, Art and Design) - **Embedding sustainability and Measuring impact on Graduate learning outcomes**

Having delivered the module "Public Relations the Media and Sustainability" for over 2 years the team set up to discover how well student's understandings met the HEA learning outcomes for ESD, to inform any curriculum changes. They identified 12 learning outcomes that related to sustainability issues embedded in their module, out of the 38 presented in the QAA/HEA ESD guidance. A pre and post module survey of understanding showed very promising results: amongst other findings, post module all students demonstrated ability to define and exemplify sustainability; students identified three 'pillars' of sustainability- as: economic, social and

environmental factors. The module was highly commended by the external examiner for its “*clear focus on sustainability and ethics which chartered institute of public relations will love in terms of professionalism*”.

**Nicola Kemp** (School of Childhood and Education Sciences) - **Connecting Children and Nature (CCN) screening of Project Wild Thing**

As a follow on to the CCN lecture by Tim Gill and Forest School activity day events held in the summer of 2013, and to coincide with the release in late October of film maker David Bond’s documentary *Project Wild Thing*, a funny and alarming look at how little time his own children spent outdoors, a free screening for staff and students was organised at Canterbury campus which was well attended.

**Angela Voss and Judith Way** (School of Childhood and Education Sciences) - **Zodiac Walk Phase I**

A student on the MA Myth, Cosmology and the Sacred proposed this bid, the first ever received from a student as opposed to staff. The *Futures Initiative* enabled a group of students and tutors from that programme to spend an immersive two days on a guided walk around Glastonbury, reviving an ancient native tradition of Pilgrimage which is a strong theme in the UK, particularly relevant to studies based in Canterbury. This trip offered the opportunity for experiential learning, bringing the course material into a live and active engagement with the living landscape in a way which encouraged reverence and appreciation for forms of nature. Consideration of how to mindful walks could be applied around Canterbury were a direct consequence of this experience and has led to the creation of a number of campus walks soon to be publicised. It is hoped these walks will provide tutors with opportunities for innovative and different ways through curriculum for their students and for new students and staff, could become an optional part of an established orientation process.

**Angela Voss** (School of Childhood and Education Sciences) - **Re-enchanting the Academy conference**

The MA in Myth, Cosmology and Education is a pioneering course that seeks to integrate critical, imaginative and creative ways of knowing and restore an appropriate relationship between critical and intuitive thinking. It is the context for this two-day conference held in September 2015, which was very well received, a significant number of existing and prospective students attending as well as delegates from the UK and worldwide. The conference provided plenty of opportunity for ‘transformative learning’ within the context of the MA, seeking to instil a deep sense of reflexivity and internalisation of material that pertains to the nature of spirituality, sacred experience and holistic healing. Feedback from those who attended was extremely positive, thereby enhancing the student experience of the MA. The conference also provided an opportunity to raise not only the profile of the MA both to UK and international contacts, but also the *Futures Initiative* and holistic approaches to sustainability issues at CCCU. The link forged with Sustainability at CCCU has subsequently been evaluated by the programme team through seminars and questionnaires with the student body, and discussions are currently being held on future possibilities for research and collaboration.

## APPENDIX III – Significant *Futures Initiative* research-related “milestones”

### 2011-12 FOUNDATIONS

**Scoffham, S., Rands, P. et al. (2011)** ‘A ‘Wicked’ Approach to a ‘Wicked Problem’: Developing ESD in the curriculum at Canterbury Christ Church University’, In Global Vision, Local Action: Education for Sustainable Development and Global Citizenship, Proceedings of Fourth International Conference, Bournemouth University, September

**Vujakovic, P. (2012)** *Christ Church Bioersivity - The Canterbury UNESCO World Heritage Site as a living learning resource for all.* In: The University of Nottingham and the HEA One-Day Conference: Sustainability in Practice, 24th May, University of Nottingham.

### 2012-13 CONSOLIDATION

**Brown, L. (2013)** ‘Realising sustainability commitments: A UK University case study from a ground level perspective’, 16th ERSCP-EMSU Conference: Bridges for a More Sustainable Future – Uniting Continents and Societies, Istanbul, Turkey, 4-9<sup>th</sup> June

**Rands, P. & Haddock-Fraser, J. (2013)** ‘From start to beginning: A Journey from the sustainability wilderness’, EAUC (Environmental Assoc. of Universities and Colleges) Annual Conference, Nottingham Trent University, England, 17-19th April

**Scoffham S., Bracewell, J. & Buckley, J. (2013)** *Building Sustainability Awareness: A collaborative approach to staff sustainability mindsets.* In Best Practice Guide, Teacher Education for Equity and Sustainability Network (TEESNet)

**Scoffham, S. (2013)** ‘Do We Really Need to Know This? The challenge of developing a global learning module for trainee teachers’ International Journal of Development Education and Global Learning 5(3) 28-45

### 2013-15 DISSEMINATION

**Adesina O. O. and Shevchenko, K. (2013)** ‘UK university sustainability agenda: underlying motivations’. Centre for Social and Environmental Accounting (CSEAR) Conference, University of St Andrews, St Andrews, UK, 3<sup>rd</sup> -6<sup>th</sup> September

**Kemp, N. (2014)** ‘Building a Partnership for Change: The Connecting Children and Nature Network’, Copernicus Alliance (European Network on Higher Education for Sustainable Development) Conference, University of Gloucestershire, 9-10<sup>th</sup> January

**Scoffham, S. with Kemp, N. (2014)** *It's Contagious: Developing Sustainability Perspectives in Academic Life at a UK University*, Second World Symposium on Sustainable Development at Universities, Manchester Metropolitan University 3<sup>rd</sup> - 5<sup>th</sup> September

**Scoffham, S. (2014)**

*Exploring Sustainability* website

<http://www.canterbury.ac.uk/exploring-sustainability/>

**Consorte-McCrea, A. & Newing, H., (2015)** 'Creating spaces for interdisciplinary exchange in higher education: a case study.' In *Local Economy*, 0(0) pp 1-15.

**Consorte-McCrea, A. & Rands, P., (2015)** Mapping the Future: the search for alignment between curriculum and the university's Education for Sustainable Futures objectives. Education for Sustainability in Higher Education Conference: Achievements and Prospects, 8th January 2015, Plymouth University.

**Rands, P. & Haddock-Fraser, J. (2015)** *Sustainability success: Leadership influence or serendipity?* Global Sustainability Institute Seminar Series, Anglia Ruskin University, 10<sup>th</sup> March

**Stephens, F. (2015)** *Developing future thinking school leaders - a professional development initiative in higher education.* Professional Development Today, Issue 17 (3) pp.70-78, May 2015

**2016-17 MOVING FORWARD**

**Scoffham, S. (2016)** 'Grass Roots and Green Shoots: Building ESD Capacity at UK University' in Davim, P. and Leal, W. (eds.) (2016) *Challenges in Higher Education for Sustainability*, London: Springer pp283-297

**Bolshaw, P. & Kemp, N. (2016)** *Whole Earth?: Developing an Early Childhood Education response*, Sustainable Development Research in the United Kingdom Symposium place in Manchester Metropolitan University 5<sup>th</sup> – 6<sup>th</sup> April and OMEP European Conference 2016, Canterbury Christ Church University, 7th May 2016

**Hallenberg, K. & Tennant, M. (2016)** 'Criminology Picks Up the Gauntlet: Responses to the Whole Earth Exhibition'. In Woodfield, K. (ed) *Inspire – teaching and learning in the Social Sciences*. HEA. Available online at: <http://inspiringsocsci.pressbooks.com/chapter/criminology-picks-up-the-gauntlet-responses-to-the-whole-earth-exhibition/>

**Jasper, I. & Pichon, L. (2016)** 'A 'dialogue' on teaching, learning, and transforming; does 'sustainability' change everything?' ESREA (European Society for Research in Education for Adults) Conference, ITLP Network – 'The role, nature and difficulties of dialogue in transformative learning', Athens, Greece 24/26th June 2016

## APPENDIX IV - Resources

### SUSTAINABILITY TEAM RESOURCES

The Sustainability team has in recent years, established a wide range of useful resources for use in curricula and extra-curricula activities. A prime and abiding aim of the *Futures Initiative* is to help build the capacity of staff and students. Making these resources, both educational and experiential, available to anyone who wishes to avail his or herself of them, helps that aim to be realised in a variety of ways. Below is a list of these resources as they appeared or were acquired chronologically:

**The *Exploring Sustainability* website** was devised by Dr Stephen Scoffham to enable staff and students to deepen their understanding of sustainability. The structure of the site is around seven key accessible themes, each explored through an introductory text, readings, website links and quotations. Providing multiple perspectives serves as a provocation for new thinking and helps avoid the danger of presenting a single or limited interpretation of complex sustainability-related issues. Link to website: <http://www.canterbury.ac.uk/exploring-sustainability/>

**Pictures of Success** is an innovative and inspirational engagement tool developed by the Carbonsense Foundation, an independent not-for-profit company set up to create innovative responses to the challenges of climate change and sustainability. Focusing on the core commitments and ethical principles of the UN Earth Charter, they consist of a suite of cards featuring real picture-based stories of businesses that have successfully established businesses sustainably. For more information: <http://www.carbonsense.com/pictures-of-success/> and <http://earthcharter.org/>

**Eco Action Games** is a compendium of fun games such as snakes and ladders, trumps, Twister etc., with an environmental focus aimed at players of all age ranges. <http://ecoactiongames.org.uk>

**The Yurt** was acquired in May 2014 and has since become part of the landscape at the Canterbury campus, being used in a myriad of ways by both staff and students for anything from a team meeting to a music concert. It offers a unique space specific for events, and the door is kept open on a daily basis for people to use it socially. Every now and then, it gets moved around campus depending on the event or activity for which it is required as a focal point. For example, the Yurt has been used by the Chaplaincy for prayer at Christmas and Easter, the Library by students as a 'chill out' zone to relax in during exam time, as an information point for the SGO (Student Green Office) at undergraduate Open Days and for mindfulness sessions at the University's annual Wellbeing Fair.

**The "Barrow of Books"** is a collection of sustainability themed books, so called because they can be 'wheeled out' at events; which reflect the interests of staff across all faculties invited to select them. Among the fifty titles, there are seminal works that tell the 'story of sustainability' from its roots in the niche post-war environmental movement to its current position as a concept with global currency. The books are available as a vital resource for staff seeking to enrich their curriculum with sustainability perspectives. They are also essential for students undertaking the growing number of modules and programmes with an explicit sustainability focus.

**The Whole Earth? exhibition in miniature** has been reproduced from pdfs of the 1m high, sixty metres long outdoor exhibition which, for the duration of the 2015-16 academic year, the University mounted at each of its three campuses: Canterbury, Broadstairs and Medway. Whole Earth? is based on the

premise that the future belongs to today's young people, who have a major role to play in making society more sustainable. As well as exploring a range of solutions to current environmental problems, it challenges students and tutors to think about changing their courses to meet current and future needs. Many staff and students over the year have engaged with the outdoor exhibition through curriculum-based and creative activities, but this smaller version makes it available in perpetuity for use in a classroom setting.

**The Hard Rain Project** was the precursor to Whole Earth? Mark Edwards and Lloyd Timberlake, the creators of both exhibitions used it to highlight the many environmental, political and social challenges we face globally. Inspired by the lyrics of Bob Dylan's '*A Hard Rain's A-Gonna Fall*', Hard Rain reveals in a moving and sometimes shocking way the consequences of exploitation and depletion of our planet's population and natural resources. Copies of the accompanying book and DVDs are available to lend.

**Johnson Garden** is a secluded and sheltered corner of the Canterbury North Holmes Road campus, now co-managed by Sustainability team staff with Grounds and Gardens colleagues to provide a focal point for ESD in an outdoor setting. Formerly the site of a dried up pond, neglected and little used, it now flourishes as an area for biodiversity, with a thriving re-established pond, allotment plots in use by staff and students and a beehive enclosure. The garden provides opportunities for experiential curricular-based activity for Life Sciences students and transformative help with beekeeping sessions. Most recently construction of a mobile clay bread oven has taken place there and staff and students invited to bake their own bread and pizza on the site.

**Community Arts & Education (CAE)** is the 'adult education' arm of the University and new for 2015-16 are a series of workshops and courses specifically on the theme of ecological awareness. Some created and delivered by members of the Sustainability team, they cover a variety of sustainability-related topics, for example, from 'rewilding' to how to build an earth bread oven and are a welcome addition to the CAE Spring/Summer programme.

**The ESD Curriculum Review Tool** is a simple Excel spreadsheet which draws upon the four categories outlined by QAA (details of this publication below) and asks academic staff to review existing programme and module documentation (prospectus, handbooks, and validation documents) to identify: evidence of existing activity; opportunities for further curriculum enhancement and barriers to further progress, in relation to sustainability-related content. The tool is designed to be used by programme teams to support curriculum innovation and development not to 'account' for or 'rate' academic practice, indeed *not* an additional 'tick box' exercise.

**At My Best® Strength Cards** are a recent acquisition. They are a set of 48 cards 'designed to help you bring the best out of yourself and others' by focusing on your strengths and those of your colleagues. Most people find articulating what their strengths are, or showing appreciation of the qualities they value in their colleagues, pretty difficult. Research has proved that doing so, rather than making improvement a continual focal point, brings out the best in individuals and teams. The *At My Best®* Strength Cards provide a simple tool to get conversations started, and help people to flourish.

The 'At my best' strengths cards deck contains 48 individual cards, each with an inspiring photograph on one side and single word strength on the other. Each pack comes with an introductory booklet with exercises to get you started.

Finally, **the Sustainability team itself** is not to be forgotten as a main resource to the University. Its staff make valuable contributions to in house conferences, for example, holding workshops at the annual Learning & Teaching conference; and are amenable to consultation whenever needed. They also provide opportunities for practical involvement in *Edible Campus* activity, such as beekeeping, hop harvesting etc.

## BACKGROUND READING

More information about the aims and objectives of the *Futures Initiative* can be found on the Sustainability webpages <http://www.canterbury.ac.uk/sustainability/projects.aspx>.

**Consorte-McCrea, A. & Rands, P., 2015. Mapping the Future: the search for alignment between curriculum and the university's Education for Sustainable Futures objectives.** In *Education for Sustainable Development: Towards the Sustainable University*, Ed. Lynne Wyness. PedRIO paper 9 (8):27-30. Plymouth University. ISSN: PedRIO paper ISSN 2052-5818  
<http://www1.plymouth.ac.uk/research/pedrio/Documents/PedRIO%20Paper%209%20April%202015.pdf>

**CCCU Strategic Plan 2011-2015.** <https://secure.canterbury.ac.uk/staff/StrategicPlan/index.asp>

**QAA, 2014. Education for sustainable development: Guidance for UK higher education providers. June 2014** <http://www.qaa.ac.uk/en/Publications/Documents/Education-sustainable-development-Guidance-June-14.pdf>

**Sterling, S. 2011. The Future Fit Framework: An introductory guide to teaching and learning for sustainability in HE.** The Higher Education Academy. [PDF].  
[http://www.heacademy.ac.uk/assets/documents/esd/The\\_Future\\_Fit\\_Framework.pdf](http://www.heacademy.ac.uk/assets/documents/esd/The_Future_Fit_Framework.pdf)

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