

Academy for  
**Sustainable  
Futures**



Canterbury  
Christ Church  
University

2022-2023

# An Introduction to Education for Sustainability

WITH SUGGESTED RESOURCES FOR YOUR TEACHING

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## What is Sustainability and how is it understood?

Sustainability is a central challenge of our times. As we become more aware of the interdependence between people, environment and all aspects of society the future brings both challenges and opportunities. To choose a future where we may thrive we must consider the value of diverse voices and solutions, our place as part of nature and planet, and sharing one common future. Sustainability is often placed at the intersection of key aspects of our shared life in a planet of limited resources. Here are some frameworks to help us understand its scope:

According to [The Earth Charter](#) 'We must join together to bring forth a sustainable global society founded on respect for nature, universal human rights, economic justice, and a culture of peace' which depends on 'our responsibility to one another, to the greater community of life, and to future generations.'

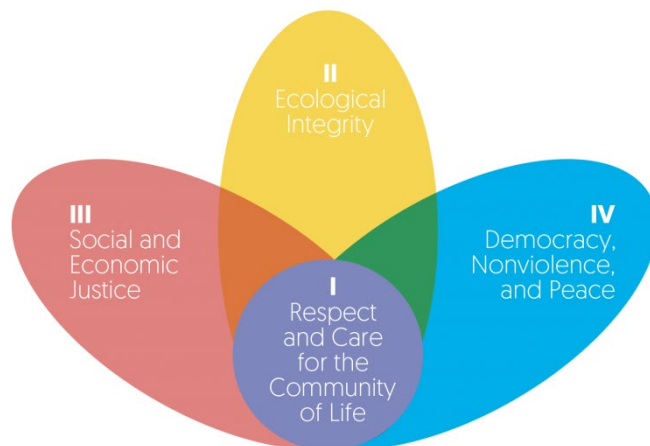


Figure 1: The Earth Charter 4 pillars of sustainability

[The United Nations Sustainable Development Goals \(SDGs\)](#) have been devised as a 'call to action to end poverty, protect the planet, and ensure that by 2030 all people enjoy peace and prosperity.' It's based on a need to 'balance social, economic and environmental sustainability' and on the interconnectivity of solutions, as 'action in one area will affect outcomes in others.'

Figure 2: The 17 integrated SDGs



Kate Raworth [Doughnut Economics](#) sees living sustainably as 'meeting the needs of all within the means of the planet.' It draws on two fundamental concepts - the notion of *needs* and the notion of *limitations*. Striking a balance between these two concepts raises questions about justice and equity and reveals some of the hidden tensions and contradictions that lie beneath the sustainability agenda.

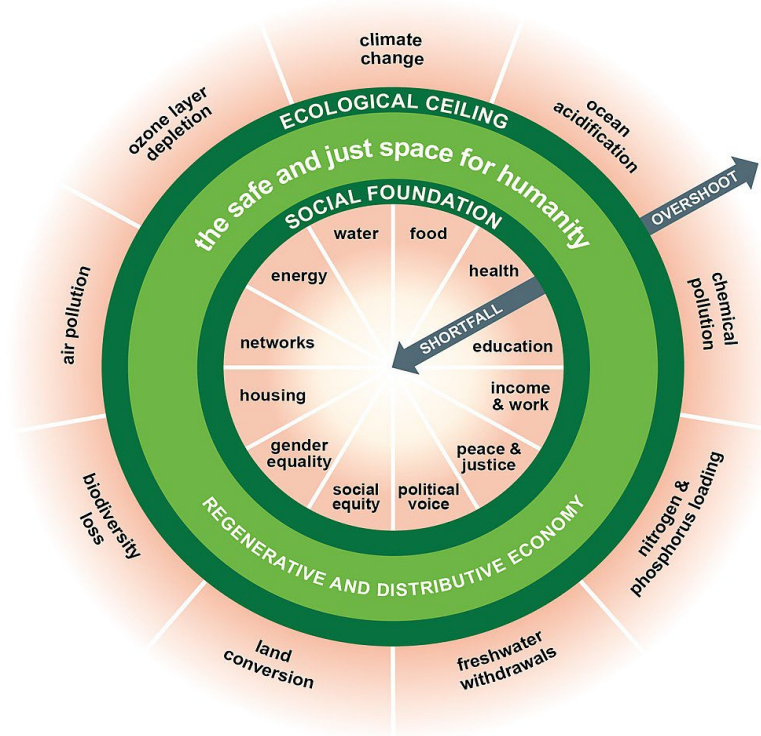


Figure 3: Doughnut Economics

Universities are in a key position to develop a principled response to current issues and to support the development of a hopeful future in uncertain times.

Sustainability is sometimes seen as being limited to a few specific subject disciplines such as science, geography, and citizenship. There are also those who are weary of the sustainability debate and find it dull and repetitive, but imaginative approaches which harness students' creative responses have the potential to reverse this mindset.

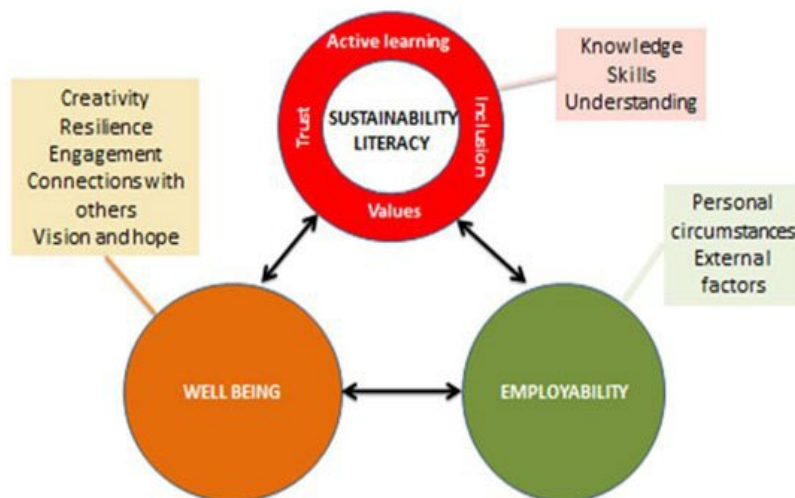
## How is Education for Sustainability defined?

Often referred to as Education for Sustainable Development (ESD), [Education for Sustainability \(Efs\)](#) is a dimension to learning rather than a traditional subject discipline. What unites sustainability education is a commitment to understanding more about how best to sustain life on Earth in all its different aspects and forms. It favours participatory approaches to learning as opposed to knowledge transmission.

Working co-operatively with others, helps students to develop personal and social skills and to understand that sustainability problems have many dimensions. One such dimension is that education institutions are part of wider systems that have caused the present climate crisis. Efs must therefore ask "what social ecological systems are important to conserve? What are we trying to sustain and why?"

Critical engagement with sustainability helps to guard learners against tokenism and bias whilst creative engagement has a key role in harnessing motivation. Combined, criticality and creativity have the potential to allow new ideas to flourish - see Figure 4. This opens alternative spaces away from a sense of doom and hopelessness that can create paralysis rather than motivate action.

Figure 4: Links between sustainability literacy, wellbeing and employability in a business context (Tan 2013<sup>1</sup>)



Here at Christ Church, [our Efs aims are](#) to prepare our students for the complexities ahead of them, by fostering the development of a commitment to a sustainable future. While promoting these changes through questioning, challenging and transformation, we cultivate a sense of belonging and celebrate diversity.

<sup>1</sup> Tan, Y. E. (2013) *The Futures Initiative: The first two years* p 21

## What's the Christ Church approach to it?

A report by Universities UK ([Universities UK 2022](#)) shows a growing commitment to 'climate literacy by embedding sustainability and climate justice in the curriculum for students and encouraging students and staff to understand their own behaviours and challenge others within the wider context of the United Nations' Sustainable Development Goals'. Higher Education institutions are responding to the Climate Emergency in many ways. Christ Church has put Sustainability at the foreground of its Strategic Plan [Vision 2030 \(canterbury.ac.uk\)](#), which carries a clear statement of intent to drive curriculum content: *"Embed sustainability in every subject area, taught through collaborative, transdisciplinary approaches as a distinctive aspect of our curriculum to ensure we are developing creative, empowered graduates who are ready to solve global challenges and shape sustainable futures."*

The [Academy for Sustainable Futures \(ASF\)](#) was launched in March 2022 to advocate for and influence our sustainable futures following more than a decade of work in sustainability at Christ Church. The Academy is responsible for driving our University Framework for Sustainability and supporting its delivery across the four theme areas of [Sustainable Communities](#), [Research](#), [Education](#) and [Environment](#).

We have signed the [Sustainable Development Goals \(SDG\) Accord](#), declared a Climate Emergency and signed the [SDG Accord Global Climate Letter](#) committing to collectively step up to the challenge by supporting a three-point plan and publishing a high level [response to the Climate Emergency](#):

- Mobilising more resources for action-oriented climate change research and skills creation;
- Pledging to reach net-zero by 2030 or 2050 at the very latest;
- Increasing the delivery of environmental and sustainability education across curriculum, campus and community outreach programmes.

Therefore, our response to the Climate Emergency is not just about cutting carbon emissions: the University has clear responsibilities and unique opportunities as a values-led organisation, an educator, a knowledge agent, and as an anchor institution in the region.

## What do I need to know to embed Sustainability in my module/programme?

Sustainability education is significantly different to other areas of the curriculum, as there is no established body of knowledge to master, the boundaries are difficult to define, and progression and attainment are hard to identify.

A core element of the work of The Academy for Sustainable Futures is [to support curriculum development](#) in various ways.

Sustainability is also not an 'add-on' to be shoehorned into any given discipline; instead, it promotes systems thinking highlighting the connections between living organisms, the natural and the built environment, and human constructs. It invites considerations for the historical context in which the discipline has been developed, and the present and future effects of the knowledge and resources produced by it, in the wider world.

Embedding sustainability into the curriculum opens opportunities for contextualising environmental and social issues in real-world scenarios, in meaningful and practical ways that students can investigate first hand.

Sustainability pedagogies favour the use of an inclusive curriculum that draws on diverse sources and knowledge systems, promoting representation and highlighting global voices. It supports strategies to eliminate attainment gaps for students of different ethnicities, promoting a sense of belonging, supporting student retention, enhanced student engagement and academic success.

*University is not simply about seeking common answers. It's about understanding the diversity of questions. Understanding, in the variety of enterprises and disciplines that go on in a university, just what it is for intelligence itself to be shaped by diversity, by conversation, and interaction. Cross-disciplinary awareness and cross-disciplinary conversation become absolutely crucial to the life of a university in this sense. One of the saddest things that can happen in the world of higher education is when people lose sight of or lose touch with that sense of cross-disciplinary cross-fertilisation.*

*Rowan Williams*

*Former Archbishop of Canterbury*

## Why is student engagement so important?



Increasingly reports on sustainability in education show that students and staff in Higher Education demand 'mandatory action on sustainability in UK and Ireland universities and colleges' (<https://sustainability.nus.org.uk/research/sustainability-state-of-the-sector>). They make it clear that acquiring the skills and knowledge necessary to face sustainability challenges is seen as a very important part of university education.

Students Organised for Sustainability (SOS) UK publishes research reports on sustainability and social responsibility in higher and further education, which can be found here <https://sustainability.nus.org.uk/research>

Many industries and services now demand their employees have some understanding of sustainability issues and approaches. It is likely that sustainability solutions will be more and more sought after for the development of green technologies, energy, waste disposal and compostable materials, food production, addressing the effects of climate change in health and wellbeing, land and biodiversity management, environmental and socially responsible business, migration and international relations studies, law enforcement and justice, NGOs and the charity sector, for example.





# How can my students get involved in extra-curricular sustainability-related activity?

[The Student Green Office \(SGO\)](#) comprise a small number of students employed on a part-time basis by the Academy for Sustainable Futures. Their remit is to provide student-led engagement, education and events for students. Over the last few years, we have developed a collaborative working partnership with our Students' Union for sustainability, which is now part of Students' Union policy and practice.

Students 4 Activism is a diverse and inclusive society that consisting of undergraduate students with a passion for social justice and making a positive change. There are also several other student societies active within our Students' Union centred around aspects of social sustainability, such as representation, advocacy, equality and healthy community.

[Us in the World - Canterbury Christ Church University](#) is an umbrella that brings together many groups and promote events. Check out the page for new events, including Project 93, Carbon Literacy Training, FRESK, and pop-up Climate Cafes, all with a sustainability flavour.

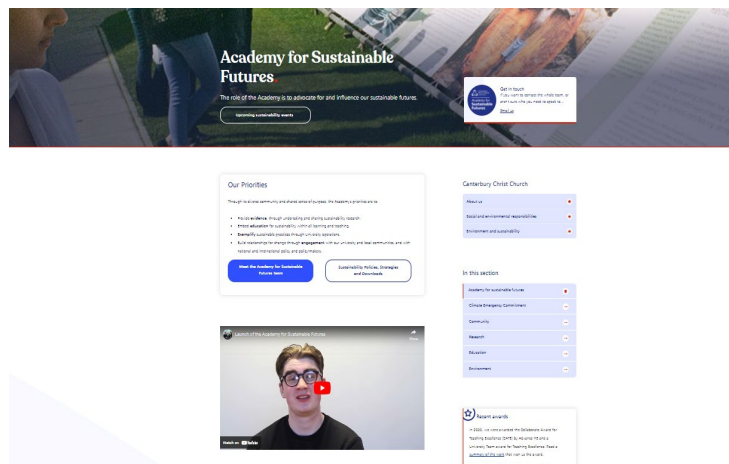


# Where can I find more resources to use in my teaching?

Looking for resources and/or navigating the University's website can be time-consuming, so for ease of reference we've picked out some of the main resources we'd recommend on the following pages.

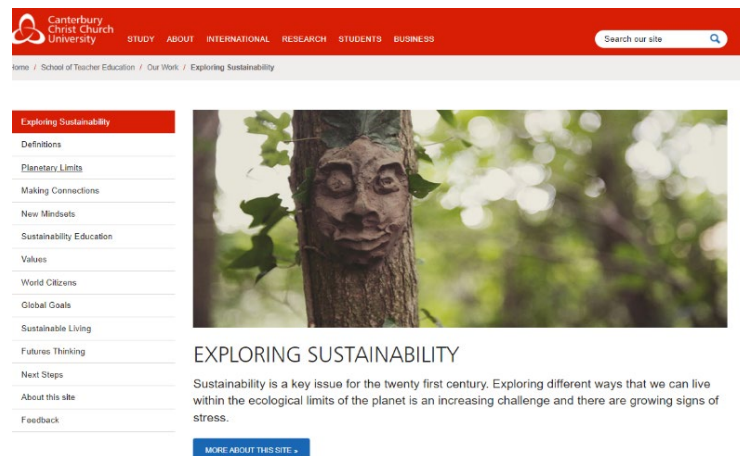
## THE ACADEMY FOR SUSTAINABLE FUTURES WEBPAGES

See the **Education** section of [ASF's webpages](#) where you can access links to resources to support the integration of relevant sustainability themes within your programmes.



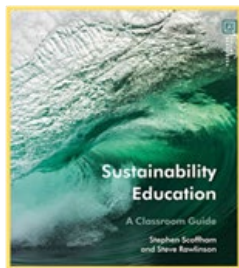
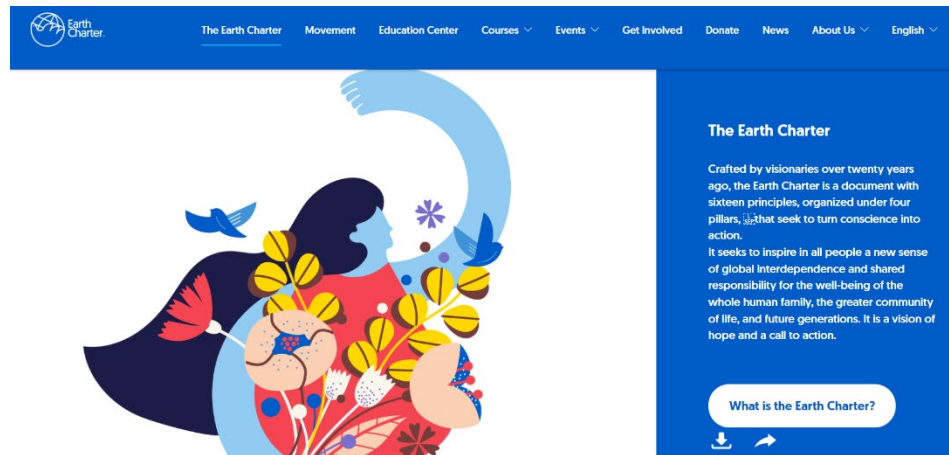
## EXPLORING SUSTAINABILITY WEBSITE

Created by Dr Stephen Scoffham, (Visiting Reader in Sustainability and Education), who is a member of the ASF team, [this website](#) explores sustainability through various themes.



## THE EARTH CHARTER

[The Earth Charter](#) is a document with sixteen principles powering a global movement. It is an ethical foundation for actions to build a more just, sustainable, and peaceful global society in the 21st century.



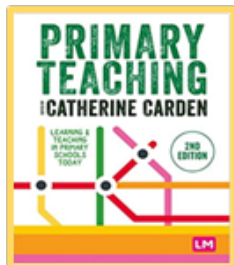
### Sustainability Education: A Classroom Guide

Co-authored by Dr Stephen Scoffham and Steve Rawlinson.

*NB: There are 5 hard copies of this book in Augustine House Library, and it is also available as an e-book via Library Search.*

[Link to more info.](#)

**Classmark: 372.357 SCO**



### Primary Teaching - Chapter 27: *What is sustainability, why is it important and what does it mean for my teaching?*

Co-authored by Drs Nicola Kemp and Stephen Scoffham. Although primary focused, Chapter 27 provides a useful, general approach.

*NB: There are 12 copies of this book (2<sup>nd</sup> edition) in Augustine House Library.*

**Classmark: 372.1102 CAR**



### QAA and Advance HE Education for Sustainable Development Guidance

[This guidance](#) is primarily aimed at staff involved in curriculum design and course management and delivery, to support them in designing ESD into their courses. However, it is also likely to be of value to senior management teams, those with responsibility for quality assurance and enhancement, and staff involved in directing teaching and learning. It may also prove useful to staff responsible for extracurricular activities.

# TEACHING RESOURCES FOR SUSTAINABILITY ON BLACKBOARD

Here you will find a range of resources to assist with teaching and learning about sustainability, which broadly, is split into faculty subject areas.

*NB: This resource is in the process of being updated and kept up to date! We can always do with new contributions...*

To find Teaching Resources for Sustainability, go to the Blackboard landing page, scroll down, and all Teaching Resources are at the base of the page – as per the image included here below.

The screenshot displays a list of teaching resources categorized by faculty area. Each category includes a folder icon, a title, a brief description, and a representative image.

- Why does Sustainability Matter? A+**  
Essential information for all.  
Image: Earth from space.
- Faculty of Arts, Humanities and Education A+**  
Resources primarily aimed at Arts, Humanities and Education teaching.  
Image: Students in a classroom and a building.
- Faculty of Medicine, Health and Social Care A+**  
Resources primarily aimed at Medicine, Health and Social Care teaching.  
Image: Medical professionals and students.
- Faculty of Science, Engineering and Social Sciences A+**  
Resources primarily aimed at Science, Engineering and Social Science teaching.  
Image: Students in a laboratory setting.
- Community A+**  
Information about our community building events.  
Image: Students participating in an outdoor event.
- Environment A+**  
Information relating to our environmental projects.  
Image: Various environmental scenes including plants and people working in a field.

Teaching Resources	
Closing Our Gap	Student Retention and Success: Transition, Orientation and Induction
Curriculum Design For Transformation	<a href="#">Teaching Resources for Sustainability</a>
Digital Learning Thresholds	Technology Enhanced Assessment
Flipped Classroom	
Inclusive Learning and Teaching Resources	

# SHORT FILMS ABOUT SUSTAINABILITY (featuring Christ Church staff & students)

We have produced a series of [short films on YouTube](#) of staff and students who are answering key questions about sustainability. NB: See page below on 'Case Studies' for a list of the key questions posed to the interviewees in these films.

The screenshot shows the YouTube channel page for 'CCCU Sustainability' (@cccusustainability7463), which has 14 subscribers. The channel is categorized under 'PLAYLISTS'. A 'Subscribe' button is visible in the top right corner. Below the navigation bar, the 'Created playlists' section is displayed, featuring a 'Sort by' dropdown menu. There are seven playlists listed, each with a video thumbnail, a title, and a 'View full playlist' link. The playlists are: 'Academy for Sustainable Futures Launch' (8 videos), 'The SDGs Explained' (6 videos), 'Longer Q&A Videos' (13 videos), 'One minute answers to Sustainability Questions.' (10 videos), 'Tiktoks' (14 videos), 'Sustainability Spaces at Christ Church' (43 videos), and 'Cycling for Wellbeing and Sustainability' (10 videos).

CCCU Sustainability  
@cccusustainability7463  
14 subscribers

HOME VIDEOS SHORTS **PLAYLISTS** COMMUNITY CHANNELS ABOUT

Subscribe

Created playlists Sort by

- Academy for Sustainable Futures Launch  
View full playlist
- The SDGs Explained  
View full playlist
- Longer Q&A Videos  
View full playlist
- One minute answers to Sustainability Questions.  
View full playlist
- Tiktoks  
View full playlist
- Sustainability Spaces at Christ Church  
View full playlist
- Cycling for Wellbeing and Sustainability  
View full playlist

## CASE STUDIES

We have created seventeen A4 pdf case studies to showcase many of the activities of The Academy for Sustainable Futures. The example below shows the format, and here below are hyperlinks to them **ALL**, with an example pictured beneath:

[Case Study: Carbon Literacy Training](#)

[Case Study: Core sustainability modules in the Faculty of Education](#)

[Case Study: Events Management module collaboration](#)

[Case Study: Introduction to Sustainability Q&A videos](#)

[Case Study: Launch of the Sustainability Special Collection](#)

[Case Study: 10 Years of the Student Green Office](#)

[Case Study: Bee-bombing for Pollinators](#)

[Case Study: Canterbury District Biodiversity Network](#)

[Case Study: Climate Action Day Conference](#)

[Case Study: Connect to Wildwood](#)

[Case Study: Craftivism Workshops](#)

[Case Study: International Forest Planting](#)

[Case Study: Johnson Wellbeing Garden](#)

[Case Study: Jubilee Garden Redevelopment](#)

[Case Study: Pack for Good](#)

[Case Study: Queen's Green Canopy](#)

[Case Study: Students 4 Activism Society](#)

### Carbon Literacy Training : the first year, in summary

Across the 2021-22 academic year, groups of staff and students have been engaging with Carbon Literacy Taster Workshops and certified Carbon Literacy Training through the Academy for Sustainable Futures.



Image: A group of international students in the Wellbeing Garden, following their Carbon Literacy Taster Workshop.

A few participants from the initial pilot of the full Carbon Literacy Training (CLT) process in the spring of 2021 and the first training cycle of the new academic year were keen to be developed as trainers themselves. As a result, a dedicated team of three staff and two students have been delivering the CLT course developed by the Carbon Literacy Project to Christ Church staff and students since autumn '21.

Early on, an additional need for a shorter, introductory workshop was identified and this was swiftly developed and rolled out to increase reach and accessibility, and to drive interest and engagement in the full training programme.

*"A very good session, I learnt a lot and found it very interesting. Was delivered well and very interactive."*  
— Christ Church student participant

*"I found this incredibly helpful. Especially learning about CO2e as I wasn't aware of that. Also found it helpful to figure out my carbon footprint."* — Christ Church staff participant.

The University's Sustainability Framework and strategy document 'Our Response to the Climate Emergency' identifies that one of our key responsibilities with respect to sustainability and climate change is as an educator. As such, our ultimate aim is to be an enabler of change and to develop the next generation of evidence-informed climate advocates.

The training, initially developed by Manchester Metropolitan University, consists of five modules run over eight hours of face-to-face sessions, with additional pre-reading and independent work. Successful completion of the course, including the submission of a short written piece outlining personal and professional commitments to change, results in certification for the participants as 'carbon literate' which the Carbon Literacy Trust defines as having "an awareness of the carbon dioxide costs and impacts of everyday activities, and the ability and motivation to reduce emissions, on an individual, community and organisational basis."

The ambition for 2022 and beyond is to train additional staff and students across Christ Church to deliver introductory workshops and the full Carbon Literacy Training course, to their peers. In the longer term, staff from The Academy for Sustainable Futures will move away from delivering the training to facilitating its roll-out across the University, and perhaps beyond!

**20+**  
students and staff certified by May 2022 with more imminent

**120+**  
staff and students engaged so far with many more signed up

**32,000+**  
people certified across 15 nations by the Carbon Literacy Trust

**Find out more:**  
[www.canterbury.ac.uk/sustainability](http://www.canterbury.ac.uk/sustainability)  
[ccusustainability](#) [ccscs](#)

**Academy for Sustainable Futures**



Canterbury Christ Church University

## CONTACT OR GET HELP FROM THE ASF TEAM

Researchers, both new and established, can get support from both individual members of the [Academy team](#) and its [research networks](#).

Our team is amenable to discussing ideas or suggestions you may have for how our any of our resources or curriculum reviewing tool could better help you to develop sustainability connections across programmes, courses and disciplines.

The [Academy team](#) offers bespoke workshops to support the integration of sustainability into any area within the University. All are welcome to visit the team and our offices!

Our weekly team meetings are held on Wednesday mornings, and you'd be most welcome to join us, if that works for you.

Contact Sustainability Coordinator Maz Hamilton on [sustainability@canterbury.ac.uk](mailto:sustainability@canterbury.ac.uk) for help with setting up a visit, either to a team meeting or an alternative time.

Our offices are In Fleming on North Holmes Road Campus, room nos. Fg10, Fg11 and Fg13.

## OUR SOCIAL MEDIA CHANNELS AND BLOG

Check out these links:

[Socials: Sustainability Facebook Page](#)

[Socials: Student Green Office Instagram](#)

[Socials: Student Green Office Twitter](#)

[Sustainability Blog](#)

**Find out more:**

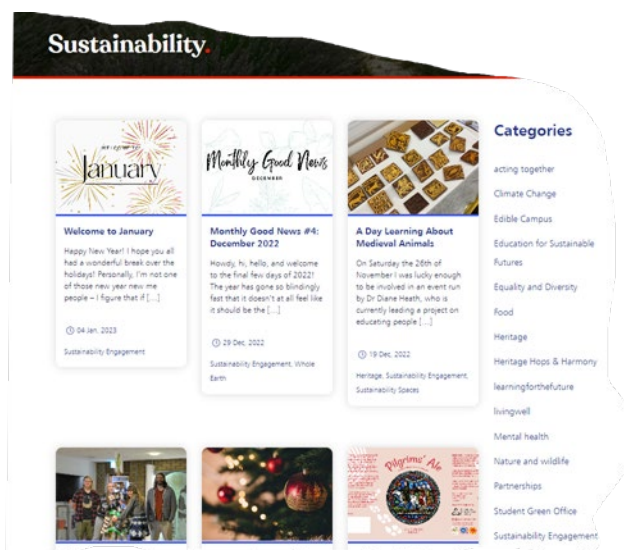
[www.canterbury.ac.uk/sustainability](http://www.canterbury.ac.uk/sustainability)



cccusustainability



cccuscn



# UNIVERSITY OF PLYMOUTH '7 STEP GUIDES'




In addition to the information provided above, it is worth mentioning that the University of Plymouth have produced [a series of downloadable 7 Step Guides](#) on how to plan and teach effectively, two of which specifically refer to sustainability. They are brief and concise, so might be worth a look:

## [7 Steps to: Embedding Sustainability into Student Learning](#)

## [7 Steps to: Using the campus for learning about sustainability](#)

**7 Steps series**  
Easy to download 7 Steps guides to help you plan and teach effectively



These short guides provide knowledge and useful ideas and steps to improve your teaching and learning across a range of topics.

**7 Steps series**

<a href="#">7 Steps to: adopting culturally inclusive teaching practices</a>	<a href="#">7 Steps to: successful journal publications</a>
<a href="#">7 Steps to: effective personal tutoring</a>	<a href="#">7 Steps to: inclusive teaching and learning</a>
<a href="#">7 Steps to: peer and self assessment</a>	<a href="#">7 Steps to: managing (inter) national research</a>
<a href="#">7 Steps to: pedagogic research</a>	<a href="#">7 Steps to: enhancing student employability</a>
<a href="#">7 Steps to: linking research and teaching</a>	<a href="#">7 Steps to: engaging students with their PDP</a>
<a href="#">7 Steps to: giving effective feedback</a>	<a href="#">7 Steps to: engaging alumni in support of employability</a>
<a href="#">7 Steps to: internationalising teaching and learning</a>	<a href="#">7 Steps to: building a research management portfolio</a>
<a href="#">7 Steps to: enhancing large group teaching</a>	<a href="#">7 Steps to: enhancing the employability of students with disabilities</a>
<a href="#">7 Steps to: using group work in your teaching</a>	<a href="#">7 Steps to: getting the most from zoom</a>
<a href="#">7 Steps to: a flipped classroom</a>	<a href="#">7 Steps to: active learning in online environments</a>
<a href="#">7 Steps to: fostering critical thinking</a>	<a href="#">7 Steps to: creating online learning communities</a>
<a href="#">7 Steps to: inclusive assessment</a>	<a href="#">7 Steps to: supporting students in online learning</a>
<a href="#">7 steps to: mitigating unconscious bias in Teaching and Learning</a>	<a href="#">7 Steps to: considering neurodiversity in online learning</a>
<a href="#">7 Steps to: embedding sustainability into student learning</a>	<a href="#">7 Steps to: formative feedback in online learning</a>
<a href="#">7 Steps to: taking an institutional approach to learning about sustainability</a>	<a href="#">7 Steps to: online summative assessment</a>
<a href="#">7 Steps to: delivering an effective immersive module</a>	

[7 Steps to: decolonising assessment \(document opens in SharePoint\)](#)

[7 Steps to: understanding apprenticeships \(document opens in SharePoint\)](#)