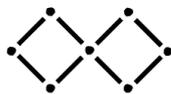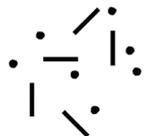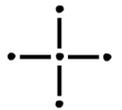# FUSION SKILLS

Education for Sustainable Development Toolkit

For education professionals to better understand their current Education for Sustainable Development (ESD) practice as well as the opportunities to further promote and embed ESD in teaching and work.

Written by

eauc
The Alliance for Sustainability
Leadership in Education
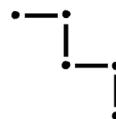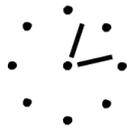
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FOREWORD

It is not too late - that is what we have to believe. If we are going to save this planet, the only planet that we know with certainty can sustain life, we have to believe that it is not too late. As educators we are natural optimists. We think people can change. And we help people to bring about change in themselves, transform their lives for the better and so enable them to flourish through new skills, new knowledge and new understanding. And right now, the most important transformation that we can help bring about is an understanding of the climate crisis, and what we, as teachers and students, can do to halt and even reverse this crisis. This toolkit, funded through the Department for Education's Strategic Development Fund, is designed to help us, in local authorities, colleges, and schools, to bring about that transformation. We can do so through developing and delivering in every subject the skills that will help us address this impending catastrophe and save our planet. Because it is not too late.

Gerald Jones
Director of Community Learning
Morley College London

SECTION 1: INTRODUCTION

In this toolkit, we'll provide information, tools, signposts and reflective exercises to help you understand your current ESD practice as well as identify opportunities to further promote and embed Education for Sustainable Development (ESD) in your teaching and work.

This is in response to individual skills providers pushing forward with sustainability, the Climate Commission for UK Higher and Further Education's Climate Action Roadmap for FE Colleges (2020). and the professional standards for the FE and training sector (Education and Training Foundation (ETF), 2022) which recognise this as part of the attributes teachers and educators are expected to develop, maintain and improve throughout their teaching career

PROFESSIONAL STANDARD 2

"Promote and embed education for sustainable development (ESD) across learning and working practices".

What is ESD?

Education for sustainable development (ESD) is by no means a new concept, but it is one that is increasingly recognised as a critical part of quality education that's relevant to all learners.

UNESCO, 2022

"[empowering] learners to take informed decisions and responsible actions for environmental integrity, economic viability and a just society, for present and future generations, while respecting cultural diversity. It is about lifelong learning, and is an integral part of quality education.".

ESD is fundamentally about our learners. Yes, the bins and the lightbulbs are important (more on those in section 4) but we should be asking ourselves: "**How are we equipping our learners with the knowledge, skills and behaviours they need to contribute positively to sustainability in their lives and careers?**"

Core concepts of sustainability

What this toolkit does not set out to be, is a guide to introduce you to the core concepts of sustainability. If you'd like to build your knowledge about sustainability issues, we've included various signposts and resources to support you in Section 6. We will, however, regularly reference the UN's sustainable development goals, or SDGs, throughout the guide (United Nations, 2015).

Although the SDGs aren't without criticism they're widely used to demonstrate the breadth of sustainability spanning social, environmental and economic goals that all members of the UN have committed to achieving by 2030.

UN SDG logo [1]

All the goals are interconnected – improvements in one area can help others or have knock-on negative impacts for other goals.

Overview of the 17 Sustainable Development Goals or SDGs of the UN Agenda 2030 [2]
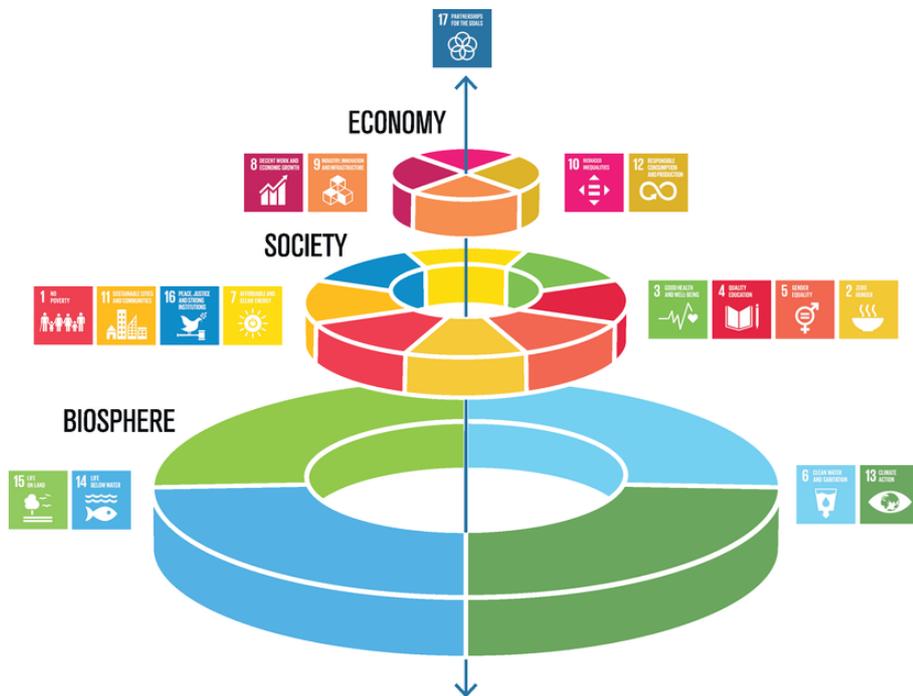
The SDG Wedding Cake [3]

Sustainability skills

For learners to contribute to a sustainable future, they will need to develop sustainable knowledge, skills and behaviours. It vital these are developed in a way that's relevant to the core subjects learners are studying – research consistently shows that learners don't want to learn about their subject and sustainability separately but instead want to develop their understanding about how their subject contributes to sustainability challenges and solutions.

Some skills are universally applicable, other elements are subject or vocation specific. The framework on the following page (adapted from (Kwauk & Casey, 2021) may be helpful for you to think about the kinds of skills your learners need to develop.

This also aligns with UNESCO's key competencies for sustainability, which can be summarised by helping learners develop competencies that enable them to contribute to sustainability outcomes through their "thinking, doing, being" (UNESCO, 2017).

SKILLS FOR GREEN JOBS

Aimed at fulfilling the requirements of green jobs and supporting the transition to a low-carbon green economy

Specific capacities

GREEN LIFE SKILLS

Cross-cutting skills that help learners develop and practice sustainable behaviours and habits

Green capacities

SKILLS FOR A GREEN TRANSFORMATION

Change making skills that help learners transform unjust and unsustainable structures

Transformative capacities

Fusion skills

Fusion[4] is a concept developed by The City of London Corporation who wanted to collectively define the skills needed for the future and enhance these skills within an ethical context of social mobility and sustainability. It's a person-centric approach towards the skills necessary to succeed and flourish now and into the future.

Fusion Skills logo [4]

Fusion is not just a set of qualities or outcomes but is importantly process led. Fusion skills combine education, arts, design, technology and business, reflecting how life is transformed by the fusion of these disciplines, generating opportunities for new learning, businesses, products and services.

Fusion creates the context to raise significant questions and engender transformation. Fusion Skills are the key to success for individuals and for society.

[4] Fusion Skills (2023). https://fusionskills.org/

After extensive research with NESTA and other relevant bodies, the following **12 skills** were identified to be fundamental to the future world of work. Collectively these are known as the Fusion skills. These are:

	1	Oral communication/presentation skills
	2	Collaboration and teamwork
	3	Initiative
	4	Problem solving
	5	Organisational skills (planning, time management, prioritisation, multi-tasking)
	6	Adaptability/flexibility
	7	Written communication
	8	Independent working/autonomy
	9	Critical thinking
	10	Resilience
	11	Creativity
	12	Analysis and evaluation skills

The 12 Fusion Skills [5]

As you can see, there's significant synergies between sustainability skills and fusion skills. The aim of this toolkit is to support you, so that your ESD work will **develop learner's fusion skills** as well as their sustainability knowledge, skills, behaviours and values.

[5] Fusion Skills (2023). https://fusionskills.org/

This is particularly important as currently both learners going into the workplace for the first time, and employers recruiting them, are reporting a lack in workplace readiness in terms of confidence and skills needed to succeed.

There's also been much discussion about the opportunities presented by 'green jobs'. There's more information about this in Section 5 of this toolkit. 'Green jobs' are increasingly being recognised as being crucial to our country meeting our net zero goals, broader sustainability commitments, achieving food and energy security and for our post-Brexit, post-Covid economic recovery. Green skills and jobs are the focus of many policy briefings, sector events and opinion pieces.

Different sources quantify the opportunity differently – but the Government has committed to 480,000 skilled green jobs by 2030 (Department for Business, Energy and Industial Strategy et al, 2022), and recognises that 'green jobs will not be niche… sustainability and climate change will touch every career' (Department for Education, 2021). Fusion skills and the attributes developed through ESD are well suited to the skillsets being cited as valuable for 'green jobs'.

Many of those using this toolkit will already be developing these skills with your learners and students. This is where it becomes vital to introduce an explicit narrative about sustainability outcomes – helping learners understand how they can apply their skills and articulate what their capabilities are.

YOUR REFLECTION

What skills do your learners need to be able to contribute to a sustainable future? Consider both their everyday life and their job.

Where are the links between your work and the aims of the UN Sustainable Development Goals?

Take this page and fill in your response!

SECTION 2: ESD IN TEACHING AND LEARNING

ESD, fusion skills and your subject

Sustainability and ESD are not yet explicit within many of the systems and frameworks within which our sector operates. Fusion skills often are, but rarely named as such.

Data from 2021 shows that fewer than 1 in 200 learners in the FE and training sector in England were enrolled on courses that contained explicit sustainability content (Education and Training Foundation, 2021). This is starting to change as awarding organisations respond to industry, learner and educator demand. Fusions skills are often part of qualification specifications but may not be described as such.

TOP TIP

If there isn't explicit ESD content within the qualification specifications you use, ask a relevant colleague to discuss this with the awarding organisation's relationship manager next time they meet.

There are different ways to develop learners' knowledge, skills, behaviours and values:

- Through the **formal curriculum** – what's taught through course content

- Through the **informal or co-curriculum** – what's taught through activities undertaken in parallel with courses such as clubs, societies, volunteering or tutorials

- Through the **hidden or subliminal curriculum** – what's taught through the culture and norms within an organisation that learners adapt to.

Therefore, there's multiple opportunities to embed ESD and develop fusion skills within your curricula. There is opportunity through adapting existing curricula as well as developing transformative curricula.

Political impartiality

Historically there has been concern that ESD may constitute a political issue. The Department for Education's Sustainability and climate change strategy provides explicit clarification: "Teaching about climate change, and the scientific facts and evidence behind this, does not constitute teaching about a political issue and schools do not need to present misinformation or unsubstantiated claims to provide balance" (Department for Education, 2021).

However, it's important that when we are exploring the solutions to climate change and broader sustainability issues we do so in a balanced manner without promoting any particular political viewpoint. This should not prevent teachers expressing their own views nor from criticising other perspectives, so long as this they aren't promoting partisan political views to pupils.

The Secretary of State for Education who launched the strategy in 2021 said in his speech that students should see themselves as agents of change with hope in their capacities (Zahawi, 2022). Teachers and educators can therefore take confidence in encouraging learners to voice their own perspectives on sustainability solutions, the future they want to see whilst also developing their capabilities to effect change.

Embedding ESD in your curriculum

In this section we'll introduce three activities you can undertake, either alone or with colleagues, to identify the opportunities to embed ESD content within your curriculum.

ESD is not just what you teach but the way it's taught, too. Bear in mind these three principles:

- **Make it relevant** – so learners are able to identify the links between their core subject and sustainability

- **Make sustainability explicit** – so learners understand how their knowledge and attributes can contribute to sustainable development

- **Solutions focus** – so learners are encouraged to be active change agents.

Curricula should be regularly reviewed and revised to maximise use of data and insights to enhance learner outcomes. ESD can be used as a lens in this cycle to maximise sustainability outcomes too.

Recognising curriculum review is a cyclical, rather than linear process and presents opportunities to enhance ESD and fusion skills development - regardless of where you currently are at in the curriculum revision cycle. You don't need to wait for the beginning or end of a course or academic year.

Below we illustrate what a cyclical approach to curriculum review could look like.

CONSULTING KEY
PLAYERS AND
RESEARCH

DECIDING LEARNING
OBJECTIVES FOR ESD

REFLECTION,
EVALUATION
AND LEARNING

DESIGNING
ASSESSMENT AND
LEARNING
ACTIVITIES:

USING LEARNING
ENVIRONMENTS
TO SUPPORT ESD
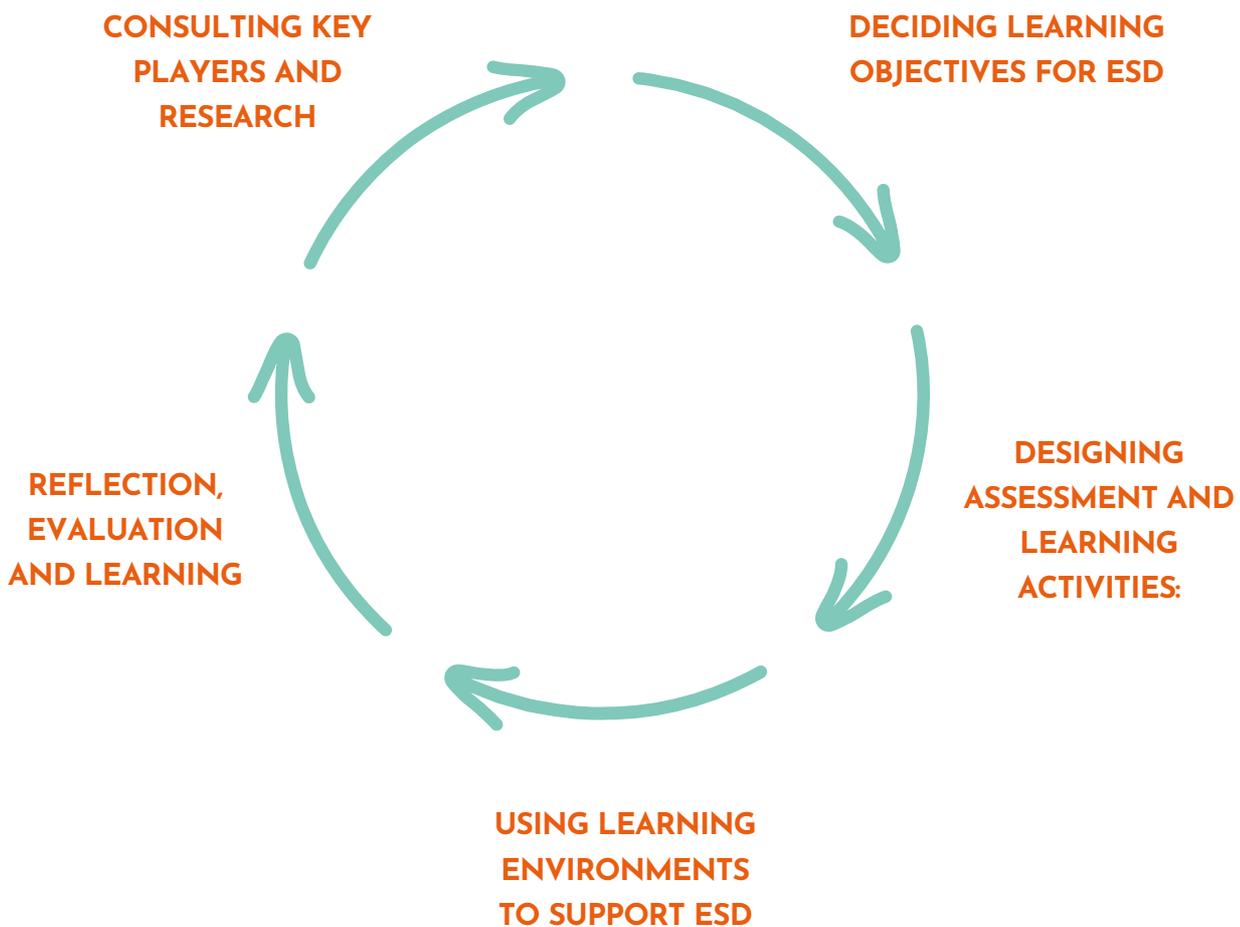
It may be that the organisation you work for uses a different curriculum revision cycle, and may have tools and templates to help you with your review and planning. This activity provides guidance for useful points in the curriculum revision cycle where you can apply an ESD lens to enhance your learning about what works well and what helps your learners best engage.

- **Consulting key players and research:** This helps you ensure your curriculum is fit-for-purpose and meeting various stakeholders needs. Learners, employers, local funders, staff, specialists, professional bodies, and local community organisations can be consulted and labour market insights used to shape your work.

- **Deciding learning objectives for ESD:** Where there are no course, module, or qualification level learning objectives that are relevant to sustainable development, you should look for learning objectives that interconnect subject-specific knowledge, skills, and attributes with ESD competencies and fusion skills. This is about realigning existing learning objectives, not re-writing them or going off specification. Learning outcomes can still incorporate a sustainable development focus whilst aligning to course-level outcomes too.

- **Designing assessment and learning activities:** These should both stimulate learning and provide feedback. You'll need to provide experiences that develop the competencies outlined in Section 2. The developmental nature of ESD competencies and fusion skills mean that appropriate assessment strategies often incorporate self and/or peer assessment, synoptic assessment, and assessment for and as learning. Teaching practices may include collaborative learning, enquiry-based learning, play-based learning, learning through storytelling or problem-based learning. Learners will need opportunities to hear alternative viewpoints, reflect on experiences and address real-world challenges.

EXAMPLE LEARNING OBJECTIVES

By the end of the course/module/lesson, learners should be able to:

- Describe the basic premise of climate change and the role of the food industry in contributing towards it (in catering)

- Identify opportunities for making a building more sustainable and inclusive (construction)

- Promote sustainable production patterns (in marketing)

- Analyse the impact and long-term effects of big energy projects and energy related policies on different stakeholder groups (in engineering)

- Debate local and global issues of peace, justice, inclusion and strong institutions (in law)

- Implement a green laboratory assessment using a recognised audit tool (in chemistry)

- Using learning environments to support ESD: You can take advantage of the teaching, learning and assessment opportunities presented by your estate, local community and online environments. The environment you use and create should be inclusive and accessible for all and wherever possible role model sustainable practices and learning. Learning spaces including your estate and outdoor environments can also be utilised to develop ESD competencies and fusion skills. Your local environment can provide a 'living lab' – providing learners with opportunities for real life learning, innovation, co-creation and research.

- Reflection, evaluation and learning: It's well recognised that reflective practice is essential for teachers because it enables them to evaluate and improve their teaching practices continually, enhance self-awareness, and promote personal and professional development. It can also lead to improved student outcomes and better relationships with students. Therefore, regularly reflecting on your ESD practice will help inform your next steps and develop your own ESD and teaching competencies.

TOP TIP

Reflect upon sustainability challenges and how they relate to your subject area. Consider how you can broaden the inputs and resources you use to include diverse voices and perspectives from underrepresented communities.

Developing and using quality resources

Plentiful ESD resources exist, of varying quality. Good ESD practice relies on reliable sources of information as well as use of resources that are pedagogically sound. Identifying reliable sources of information is a critical ESD skill for educators. You can find a collection of some quality resources in Section 6.

TOP TIP

Look for resources that use data that comes from UN and Government agencies, academic institutions or research that's well cited and independently funded

We'll now introduce two activities you can undertake, either alone or with colleagues, to identify opportunities to embed ESD content within your curriculum.

Activity 1: Curriculum mapping

This activity helps you reflect upon the sustainability content within your teaching and learning practice, plan future changes, and monitor this change. We suggest using the Education and Training Foundation's Curriculum Mapping Tool, available at www.et-foundation.co.uk/resources/esd/esd-resources/map-the-curriculum-tool/.

The tool itself contains comprehensive instructions of how to use it. Mapping can be done across a whole organisation, across a department or function, or across a specific course. There's enough flexibility built in so that it can be useful to individual practitioners as well as teams and organisational leaders.

TOP TIP

Undertake this activity with colleagues and learners to identify different perspectives and assess any differences between your teaching intent and impact.

Activity 2: The four R model

This activity works on a curriculum level but can be applied to other resources, documents and activities too. It's taken from (Sterling, 2012). First choose what you're going to assess and evaluate possible changes that would help maximise ESD outcomes. Then ask yourself the questions on the left to help decide what within the curriculum (or otherwise) to retain, revise, reject or review.

WHAT IS OF VALUE OF THAT WE NEED TO KEEP?   **RETAIN**

WHAT MIGHT NEED MODIFICATION?   **REVISE**

WHAT, IF ANYTHING, MIGHT WE NEED TO ABANDON?   **REJECT**

WHAT NEW IDEAS, CONCEPTS, PRICNIPLES, METHODOLOGIES, WORKING METHODS, PEDAGOGIES ETC. ARE NEEDED?   **RENEW**

YOUR REFLECTION

Reflect on the qualification specifications you use, do they contain explicit ESD content? If so, what does this entail?

Who are the key players for your curriculum and how will you engage them?

What are your next steps for embedding ESD in your curriculum?

Take this page and fill in your response!

SECTION 3: TEACHING ACTIVITIES TO ADOPT AND ADAPT

This section will include a 'how to' for five different teaching activities that can be used in any subject area to help develop learners' competencies and fusion skills relating to sustainability. Each 'how to' provide indications of the time needed to develop and deliver the activities for learners, instructions, and examples of how they can be used.

Activity 1: Sustainability starts

Activity 2: Value ranking

Activity 3: Academic controversy

Activity 4: Identifying learner values

Activity 5: Learner-led projects

Activity 1: Sustainability starts

DEMAND	RATING
Time required	● ● ● ● ●
Adaptation required	● ● ● ● ●
Resources required	● ● ● ● ●

Skills and competencies that could be developed by this activity:

- Fusion skills: oral communication/presentation skills, collaboration and teamwork, problem solving, independent working/autonomy, critical thinking, analysis and evaluation skills.
- ESD skills: understanding the core concepts of sustainability.

The Sustainability Starts are a simple activity to build understanding about each of the SDGs. For each goal, there are three ideas for activities you can use to raise awareness of sustainable development issues and actions with adult learners. The activities are intended as a starting point for learning and discussion about a complex and sensitive range of issues, that will enable learners to share and extend their knowledge around these issues, as well as promote and develop critical thinking skills and identify things everyone can do to support the goals.

These activities were commissioned by the ETF, delivered by HOLEX and developed and tested by Manchester Adult Education Service, Idea Store at Tower Hamlets Council and Westminster Adult Education Service. Although they were developed for use with ESOL learners within adult education settings, it's possible to 'adapt and adopt' them to your context particularly as they're a flexible resource which can be used in a variety of ways. For example, they can be used as warmer or filler activities or as introductions to topics that can be developed further into a whole class discussion or a guided debate. They're available in both digital and printable formats so can be used online, in the classroom, or in blended formats. Sustainability starts are available at: https://www.et-foundation.co.uk/resources/esd/esd-resources-for-esol-practitioners/

Activity 2: Value Ranking

DEMAND	RATING
Time required	● ○ ○ ○ ○
Adaptation required	● ● ● ○ ○
Resources required	● ○ ○ ○ ○

Skills and competencies that could be developed by this activity:

- Fusion skills: oral communication/presentation skills, collaboration and teamwork, problem solving, independent working/autonomy, critical thinking, analysis and evaluation skills
- ESD skills: understanding the core concepts of sustainability, skills for green jobs (such as data analysis, ecosystem management), green life skills (such as collaborative thinking, higher order thinking skills, open mindedness), skills for a green transformation (such as systems thinking, future and anticipatory thinking).

ESD goes beyond cognitive learning and seeks to develop values and attitudes. This is known as the affective domain and can help develop learners' empathy with others; positive attitude to sustainability at work; and intrinsic motivation. This activity, as well as Activity 3 in this toolkit, work in the affective domain and are taken from the work of Geoff Petty (Petty, 2023). This activity encourages learners to assess how important sustainability is to them, and choices they may make.

STEP 1

Choose four options for your learners to consider. This should be specific to your course. Some examples would be:

- Four different types of loft insulation (in construction)
- Four menu options (in catering)
- Four approaches to consultation (in public services)
- Four audit tools (in business).

STEP 2

Students, either alone or in small groups, are then asked to rank these cards several times, each time prioritising a different factor. These factors will vary depending on the options you've chosen but could include up-front cost, long-term running costs, resources required, time needed, ease, customer need etc. Sustainability (or elements of sustainability) should always be at least one of the factors.

Use real life contexts to frame the ranking, for example: "which of these options would you advise your customer to choose" or "which one of these options would result in the best outcome for the business?"

STEP 3

There will inevitably be clashes and compromises to be made. Reflect on these before reinforcing that sustainability needs to be considered as a lens to most, if not all, decision making.

Encourage your learners to reflect on the elements that are more important to them, those they may work with, and to how their decisions impact sustainability outcomes.

Activity 3: Academic controversy

DEMAND	RATING
Time required	●●○○○
Adaptation required	●●●○○
Resources required	●○○○○

Skills and competencies that could be developed by this activity:

- Fusion skills: oral communication/presentation skills, collaboration and teamwor,k problem solving, independent working/autonomy, critical thinking, analysis and evaluation skills, adaptability/flexibility
- ESD skills: understanding the core concepts of sustainability, skills for green jobs (such as data analysis, ecosystem management), green life skills (such as collaborative thinking, higher order thinking skills, open mindedness), skills for a green transformation (such as systems thinking, respecting diverse viewpoints)

This activity aims to help learners understand the inherent complexity of many sustainability issues, gain exposure to different viewpoints and help them articulate their own perspectives relating to sustainability and their core subject. This is done through a group exercise where you give learners a side of an argument that they have to argue for, following debate, they then combine their ideas.

STEP 1

Find a controversial statement – something that has polarised alternative viewpoints.

Some examples might include "environmentally friendly buildings are only for the rich" or "vegan diets are the answer to carbon reduction" or "greater regulation is the only way to drive sustainability action".

STEP 2

Allocate your learners as being either 'for' or 'against' the viewpoint (regardless of their personal opinions).

STEP 3

Give them time to research and develop their case either individually or in pairs.

STEP 4

Opposing students are paired up (or put in groups of four). Give them time to take turns to present their prepared cases uninterrupted followed by some time for debate and (good natured) argument.

STEP 5

The students are asked to drop their allocated viewpoint, and adopt their own opinion. Collectively through discussion they agree points for and against the controversial statement.

STEP 6

You can improve upon the perspectives shared and finish on a reflection on the way they worked and the impact of the activity on their learning, opinions, values and behaviours.

Activity 4: Identifying learner values

DEMAND	RATING
Time required	● ● ● ● ●
Adaptation required	● ● ● ● ●
Resources required	● ● ● ● ●

Skills and competencies that could be developed by this activity:
- Fusion skills: independent working/autonomy, resilience, analysis and evaluation skills
- ESD skills: green life skills (such as empathy, growth mindset and open mindedness)

This activity helps learners identify and articulate their core values. This process can be used to then inform decision making and progression routes as well as to help them demonstrate their competences and capabilities to future employers and education providers.

STEP 1

First start by sharing a list or image of different values with your learners.

We like the values map from The Common Cause Handbook (Holmes, Blackmore, Hawkins, & Wakeford, 2012, p. 12).

Values Map [7]

STEP 2

Give learners 3-5 minutes to create a list of values that they identify with – there should be approximately 20 values listed.

STEP 3

Then ask them to group the values into five lists – where values on each list are connected to one another in some way. It's not a science and there are no right answers.

Encourage them to simply group what feels connected.

STEP 4

Finally, ask learners to choose one work that summarises each of the five lists they've created. These are their five core values

You may decide to follow this activity with one of reflection and sharing.

Activity 5: Learner-led projects

DEMAND	RATING
Time required	● ● ● ● ●
Adaptation required	● ● ● ● ○
Resources required	● ● ● ○ ○

Skills and competencies that could be developed by this activity:
- All fusion skills
- ESD skills: skills for green jobs (such a as project management, research skills), green life skills (such as decision making and interpersonal competence), skills for a green transformation (such as reflexivity and working within complexity)

Learner-led projects can increase engagement and motivation whilst also developing ESD competencies and fusion skills such as critical thinking, problem-solving, and communication skills. They're time intensive and often conducted over a period of considerable time – weeks to terms. You may have requirements for a learner-led project as part of your qualification, this may be embedded within your existing course, or it may be something that you establish as a co-curricular activity.

Because learner-led projects take many guises, we haven't created a 'how to' for this activity but instead share some guiding principles and tips which will help the success of your learner-led projects.

Sustainability isn't explicit in all of these these principles but your learner-led projects should be framed to ensure learners develop a better understand of sustainability challenges and solutions, or that they'll work to affect a positive sustainability change through their project. This should be explicit throughout.

1   Define the project's purpose and goals: Before starting a learner-led project, it's important to define its purpose and goals. What is the project intended to accomplish? What are the learning objectives? Clarifying the project's purpose and goals will help learners stay focused and motivated throughout the process. You may want to map these (at an individual or class level) against the SDGs so it's explicit for learners how their projects relate to the global goals.

2   Establish clear guidelines and expectations: Learners need to know what is expected of them. Establish clear guidelines for project timelines, deliverables, and grading criteria. This will help learners stay on track and ensure that they meet the project's goals. You, or indeed your learners, may benefit from using Ministry of Eco's project planning template.

3   Encourage collaboration: Learner-led projects can benefit from collaboration and teamwork. Encourage students to work together in groups to develop and implement their projects. This will help students develop important interpersonal skills and enhance their problem-solving abilities. Identify partners within and outside of your organisation that can help guide, coach, mentor or provide opportunities for learner led projects to be applied in 'real life' settings.

4   Provide guidance and support: While learners should take ownership of their projects, educators should provide guidance and support throughout the process. Educators can help learners identify resources, troubleshoot problems, and provide feedback on project deliverables.

5   Foster a culture of innovation and creativity: Learner led projects can be an opportunity for learners to explore new ideas and approaches. Encourage students to think creatively and push boundaries in their projects.

6   Ensure accessibility and inclusivity: When designing learner led projects consider accessibility from the beginning. Will involvement be available to all your learners? What adjustments and support will learners need to fully participate? Not all learners may be able to nor feel comfortable to participate in the same way.

7   Encourage reflection and iterative learning: Learners should be encouraged to think critically about what they have learned, what they could have done differently, what the sustainability impacts (positive or negative, intended or unintended) have been, and how they might apply what they have learned in the future. This could be done through journaling or storytelling, peer feedback, self-assessment or group reflection.

EXAMPLE LEARNER-LED PROJECTS

Journalism students could be asked to make a documentary about a sustainability issue of their choosing

Apprentices could use their project to create a sustainability improvement for their employer

Maths students could use data from your organisation to predict utility costs and create a business plan to suggest future efficiency methods

Creative arts students could make a collection using materials that are upcycled, or circular in their use

Public health students could design an awareness campaign to engage historically marginalised members of the community in sustainability action

Construction students could design and build a new outdoor learning space for other subject areas to use, considering sustainability and accessibility in their work

For more ideas we recommend ETF's subject specialism guide.

SECTION 4: ESD IN YOUR ORGANISATION

Although this toolkit has largely focussed on things that you can do to enhance ESD provision, sustainability is not just an individual responsibility, but a collective one that requires systemic change. By involving all stakeholders in the process of change, organisations can create a culture of sustainability that is grounded in the principles of social responsibility, environmental stewardship, and economic viability. This is an approach that isn't limited to ESD but is a good way to achieve change in other fields as well. Whole organisation approaches maximise opportunities for learners to engage with sustainability and produce multiple co-benefits for FE and training providers.

The four Cs model

A useful way to conceptualise whole organisation approaches is using the four Cs model:

CAMPUS

CULTURE

CURRICULUM

COMMUNITY

The curriculum is an education providers core business or "product". Unless sustainability is embedded within your organisation's curriculum provision, it's missing its biggest potential impact – ensuring learners gain knowledge, skills, behaviours and agency for sustainable outcomes that are relevant to their aspirations and goals. This toolkit largely focusses on this area.

Campus is how sustainability is embedded in the infrastructure, systems and processes that exist for your organisation (even if you don't call your estate a 'campus'). There are opportunities for buildings and the way they are operated to complement and enhance teaching and learning.

Community is all about developing and sustaining ongoing community partnerships that promote sustainability and ESD. These relationships are vital to connecting the curriculum to relevant, real-world issues, building effective pipelines to work and for providing social value to local communities.

Culture is about supporting all staff, learners and other stakeholders to understand the collective responsibility in promoting, and taking action for, sustainability.

There are opportunities for learning not just through your formal curriculum, but also through the co-curricular, through initiatives such as careers, clubs, societies, events and volunteering, and the hidden curriculum which learners use to inform their understanding of norms and priorities. Therefore all elements of your organisation's activities that are visible to learners, help shape their education.

Educators can play a crucial role in engaging others within their organisation to promote the adoption of whole organisation approaches to sustainability. This could be through engaging with leaders, collaborating with others to create sustainability action groups, adding ESD or sustainability to the agendas of meetings you attend, sharing stories about successes and lessons learned to normalise sustainability action and building sustainability into your relationships with awarding organisations, employers and other partners.

TOP TIP

Ask open questions such as "how does this affect our sustainability work?" or "how can we maximise the ESD opportunities here?" in meetings with colleagues – the discussions can help disseminate action for ESD and create a groundswell of activity contributing to whole organisation approaches.

YOUR REFLECTION

What ESD activity is already taking place in your organisation?

What organisational projects could learners be engaged with at your provider?

Who are the key influencers within your organisation? How can you talk to them about enhancing ESD provision?

Take this page and fill in your response!

SECTION 5: LEARNER PROGRESSION

The UK labour market is changing as a result of increased demand for specialist sustainability roles as well as more generalist sustainability skills. This will of course impact and inform your learners' progression decisions and options.

Various data sources exist which can inform your ESD provision and regional data will become increasingly important to inform Local Skills Improvement Plans (LSIPs) (Department for Education, 2022).

Resources to identify sustainability related national and regional labour market trends:

- PWC's Green Jobs Barometer. Available from: https://www.pwc.co.uk/who-we-are/our-purpose/building-trust-in-the-climate-transition/supporting-a-fair-transition/green-jobs-barometer.html
- Deloitte and IEMA. 2022. Greening your organisation: A blueprint for a green workforce transformation. Available at: https://www.iema.net/all-jobs-greener.

As well as employer needs, there's also clear demand from learners when it comes to their expectations of both their education providers and their future employers. Longitudinal data suggests that learners both expect their colleges and universities to be sustainable in their practices as well as equipping them for their futures through ESD (Students Organising for Sustainability UK, 2015-22).

Similarly, young people regularly report they want to work for organisations who align with their values, with a survey of over 18,000 millennials and Gen-Zs showing that they prioritise working for organisations that align with their values and have a clear sense of purpose (Deloitte, 2020).

Learners need to be able to articulate their competencies and values (see activity 4 in Section 4) not just for their personal development but so they can build a strong foundation for future success. Regardless of the sustainability agenda, learners should be clear about how to achieve their educational and occupational aspirations. Providing early – and consistent – careers education, information and guidance (CEIAG) for your learners is critical. CEIAG must support learners and their parents, carers or guardians to make informed, realistic choices about where the learner wants to go and the steps required to get there. All of the above should be achieved through close teamwork, supported by effective data management and individualised learning plans (ILPs).

We've seen that community engagement is part of a whole organisation approach. Having positive relationships with local employers can provide brilliant opportunities to enhance your learners' decisions and progress in relation to work. Similarly proactive planning and community engagement is vital to ensure a just transition whereby no one is left behind in the move to sustainable jobs as a result of their existing role.

TOP TIP

Reach out to your local LEP, chamber of commerce or local authority to explore ways they can support your learners' progression either through providing labour market insights, hosting learners, providing coaching sessions or giving careers talks.

YOUR REFLECTION

List three typical jobs your learners tend to progress onto after their studies in your subject. What are the sustainability challenges and opportunities facing those professions?

Who do you work with to support your learners' progression options? How can you build sustainability into your partnership and collaborative work?

Take this page and fill in your response!

SECTION 6: FURTHER INFORMATION AND EXPLORATION

This toolkit is by no means exhaustive. There's plenty of information, resources and support available to you to further develop your and your colleagues' engagement with ESD and fusion skills.

Discovering sustainability and ESD

- UNESCO convene and promote ESD internationally. Information about their work is available at https://www.unesco.org/en/education-sustainable-development. Their Learning Objectives document frames ESD with reference to the delivery of the UN SDGs, while exploring learning objectives in relation to the SDGs and the integration of ESD principles in curricula. Similarly, the SDG Academy (www.unsdsn.org/sdg-academy) provides educational content on critical sustainability issues, including free online courses and a resource library.

- EAUC – the alliance for sustainability leadership in education are a not-for-profit, membership charity. They help people that work in the post-16 sector to further their sustainability action. They host multiple communities of practice and networking opportunities, create new tools to help drive sustainability and advocate on behalf of the sector to create a more enabling environment for sustainability work. For support for teaching practitioners, see the ESD Topic Support Network for networking and knowledge exchange, as well as the Realigning Curricula for the Future series for subject specific support, from arts to hair and beauty and theology. Find out if your organisation is a member here.

- Carbon Literacy Training develops 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 Association of Colleges have also worked with the Carbon Literacy Project to develop a training curriculum specifically for those who work or study in Further Education colleges.

- SOS-UK supports students to learn, act and lead for sustainability and highlights that thousands of students across the UK are taking action on sustainability across their curricula, campuses and communities. They also undertake research where different education provider types can access insights into their own learners' experiences and perceptions as well as national trends.

- <u>Change Agents UK</u> offer training and resources as well as recruitment services for both individuals and organisations to help create a sustainability literate workforce and support sustainability action.

- The <u>Education and Training Foundation</u> supports teachers and leaders across the Further Education and Training sector to help them achieve their professional development goals. Their ESD resources, research and thought leadership provides advice guidance and practical support.

- <u>QAA and Advance HE</u> have developed guidance to help UK higher education institutions incorporate ESD within their curricula – this may be useful for FE organisations who deliver HE provision. Some universities have used this to create their own toolkits, such as UCL who've created a guide to <u>Embedding Sustainability in your Teaching and Learning</u> much of which is transferable to a FE setting.

Further resource lists have also been developed by <u>Ministry of Eco</u> as well as <u>EAUC Scotland</u>.

Sustainability in the FE and training sector

Climate Action Roadmap for FE Colleges - Developed by the Climate Commission for UK Higher and Further Education and Nous Group, this resource provides clear actions and guidance on how colleges can respond to the climate emergency and advance sustainability. It encourages a strategic, whole-institution approach and would be suitable for many other types of organisation in the sector beyond colleges. Although it's labelled as being for colleges, the principles within it are transferable to other education settings too.

The Institute for Apprenticeships and Technical Education have set out their ambitions for embedding sustainability across their portfolio showing how apprenticeships and technical education will help achieve the UK's climate and sustainability targets. This includes a framework which is being applied to occupational standards.

The Green Gown Awards recognise the exceptional sustainability initiatives being undertaken by post-16 education providers in terms of innovation and impact. The Awards have become established as the most prestigious recognition of best sustainability practice within the further and higher education sector. Inspiration and practice examples are published on their website. The International Green Gown Awards also provide a source of inspiration and a range of resources.

#SustainFE is a community for educators seeking to embed education for sustainable development (ESD) in their teaching and learning practice. They meet online twice per term. Anyone from across the sector is welcome, of all knowledge and experience levels.

National Climate Education Action Plan, convened by the University of Reading, are working across the sector to create an education sector which is well positioned to deliver high quality climate education.

YOUR FINAL REFLECTION

What are my key takeaways from engaging with ESD and fusion skills?

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Where can I achieve greatest impact for my learners?

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What do I need to be successful in this area of work?

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What are my next steps?

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Take this page and fill in your response!

References

All references were last accessed in February 2023

Climate Commission for UK Higher and Further Education. (2020). Climate Action Roadmap for FE Colleges. Retrieved from EAUC: https://www.eauc.org.uk/fe_roadmap

Deloitte. (2020). *The Deloitte Global Millennial Survey.* Retrieved from https://www2.deloitte.com/gr/en/pages/about-deloitte/articles/MillennialSurvey2020.html

Department for Education. (2021). *Policy paper: Sustainability and climate change: a strategy for the education and children's services systems.* Retrieved from gov.uk: https://www.gov.uk/government/publications/sustainability-and-climate-change-strategy/sustainability-and-climate-change-a-strategy-for-the-education-and-childrens-services-systems

Department for Education. (2022). *Policy paper: Local skills improvement plans (LSIPs) and strategic development funding* (SDF). Retrieved from GOV.UK: https://www.gov.uk/government/publications/identifying-and-meeting-local-skills-needs-to-support-growth/local-skills-improvement-plans-lsips-and-strategic-development-funding-sdf

Education and Training Foundation (ETF). *Professional Standards for Teachers and Trainers.* Retrieved February 23, 2023, from Education and Training Foundation: https://www.et-foundation.co.uk/professional-standards/teachers

Education and Training Foundation. *Leadership for Education for Sustainable Development (ESD) in the FE Curriculum.* Retrieved February 23, 2023, from Education and Training Foundation: https://www.et-foundation.co.uk/wp-content/uploads/2021/11/Leadership-for-ESD-in-the-FE-curriculum-report.pdf

Holmes, T., Blackmore, E., Hawkins, R., & Wakeford, T. (2012). *The Common Cause Handbook: A Guide to Values and Frames for Campaigners, Community Organisers, Civil Servants, Fundraisers, Educators, Social Entrepreneurs, Activists, Funders, Politicians, and Everyone in Between.* Public Interest Research Company.

Kwauk, C., & Casey, O. (2021). A new green learning agenda: Approaches to quality education for climate action. Brookings.

Petty, G. (2023). *Improve your teaching and that of your team.* Retrieved from https://geoffpetty.com/

Sterling, S. (2012). *The Future Fit Framework: An introductory guide to teaching and learning for sustainability in HE.* HEA. Retrieved from https://www.sustainabilityexchange.ac.uk/files/future_fit_270412_1435.pdf

Students Organising for Sustainability UK. (2015-22). *Sustainability Skills Survey.* Retrieved from Research reports: https://www.sos-uk.org/research/sustainability-skills-survey

UNESCO. *Education for Sustainable Development Goals: Learning Objectives.* Paris: UNESCO. Retrieved from https://unesdoc.unesco.org/ark:/48223/pf0000247444

UNESCO. *What you need to know about education for sustainable development.* Retrieved February 23, 2023, from UNESCO: https://www.unesco.org/en/education/sustainable-development/need-know

United Nations. *Transforming our world: the 2030 Agenda for Sustainable Development.* Retrieved February 24, 2023, from United Nations Department of Economic and Social Affairs: Sustainable Development: https://sdgs.un.org/2030agenda

Zahawi, N. (2022). *Speech: Education Secretary speech at the Natural History Museum.* Retrieved from GOV.UK: https://www.gov.uk/government/speeches/education-secretary-speech-at-the-natural-history-museum

FUSION SKILLS

Education for Sustainable Development Toolkit