

Embedding Sustainability

A Support Guide for BTEC Nationals



Contents

Introduction3
Sustainability education4
The three key areas to embed in BTEC Nationals6
Embedding sustainability mindset7
Embedding sustainability skills	...14
Embedding sustainability practices	...21
Developing sustainability 'thinking'	...23
What further resource is out there?	...26
Appendices	...27

Introduction

Everyone today has a heavy obligation to both current and future generations - to ensure that our world is one of abundance not scarcity...the potential for engaging humanity in creating better futures together has never been greater. - UNESCO, 2021

Sustainability is a term that is used in many different contexts by multiple different organisations to describe approaches to living, doing business, and treating people that are fair, future minded and do good instead of harm. Often, this is done with a commercial motive, which can lead to questions about the trustworthiness of the claims and the effectiveness of the suggested courses of action. In turn, this can lead to confusion and to people not being clear about what sustainable behaviours are, the true meaning of sustainability and whether sustainability can even be achieved.

There is no doubt that our climate is changing, our world is becoming smaller due to increasing population size across the world, resources are becoming scarcer, and inequalities are getting more pronounced between rich and poor nations. The global pandemic has exacerbated these problems and added further ones. Organisations and Governments around the world have agreed that we must do all we can to ensure a sustainable future. We have been inspired to act by the plans that have been agreed by the most powerful and influential organisations in the world, including the [‘17 Sustainable Development Goals’](#) put forward by the United Nations, the Government’s [‘Net Zero: Build back greener’](#) strategy, and, most importantly for our College and School partners, the Department for Education’s [‘Sustainability and Climate Change’](#) strategy from April 2022.

In addition to Pearson’s own three sustainability pillars of Products, People and Planet, we are supporting the mission of colleges and schools to achieve their own sustainability targets. In this guide we provide a framework for sustainable education and hints and tips of how you can seamlessly implement this in your teaching practice without any significant impact on preparation and delivery time. There are exercises and activities for you to undertake with students, case studies to explore and examples of where sustainability can be embedded into lessons, helping learners to understand how they can make a real impact in ensuring a sustainable future. This guide may become part of your current plans as a part of your sustainability goals, or it may sit alongside them as a supplement.

Sustainability Education

What is sustainability?

Sustainability is the ability to maintain or support a process over time. Therefore, it is a concept that is fundamentally linked with resource use, the environment, economy and society and it has become very popular because of the climate crisis, and rising poverty and inequality. The term is used to think about the sustainability of resources, behaviours, and practices over time.

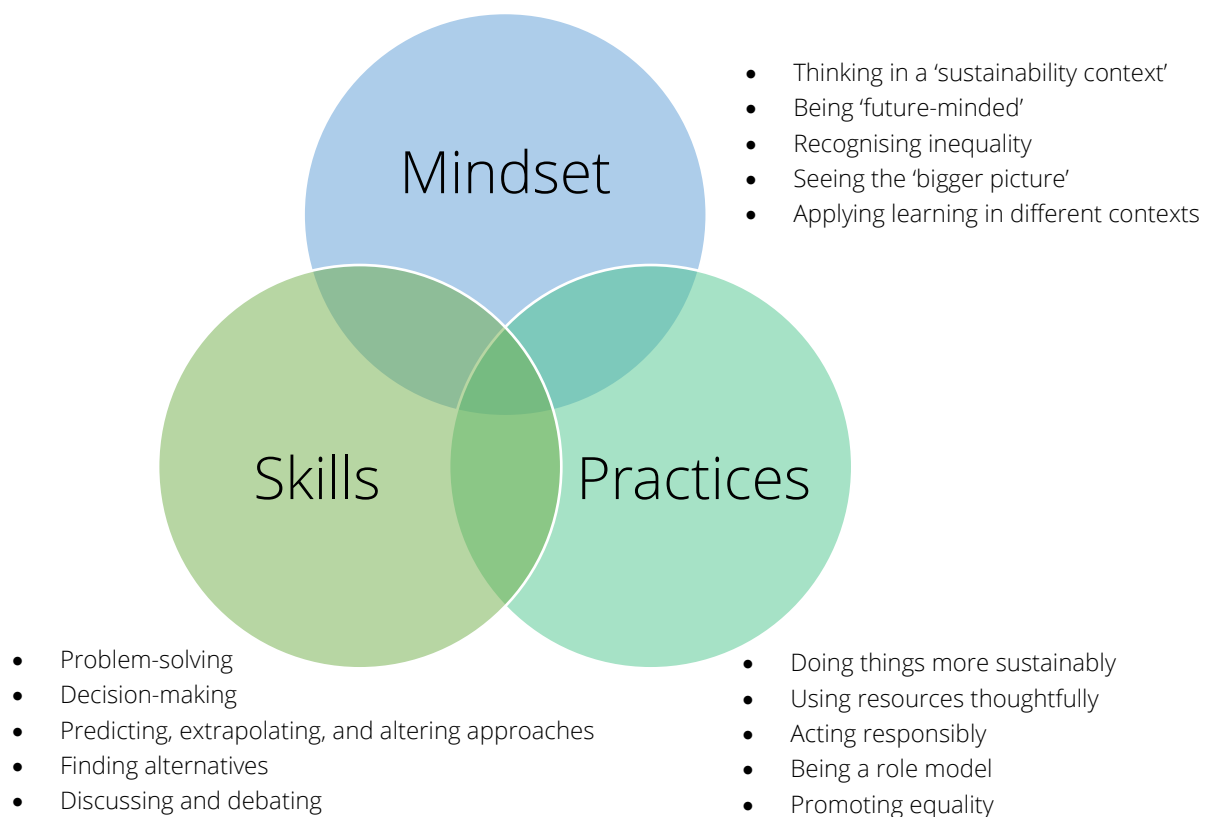
A 'sustainable' resource is one that can be used indefinitely without the danger of it running out or damaging those who use it or those who are affected by it. Put simply, if a resource or action is 'sustainable', it must be repeatable in the long-term and the cost-benefits of any damage it does through its use must be stacked in favour of doing more good than harm. The [2030 Agenda for Sustainable Development](#), adopted by all United Nations Member States in 2015, provided a blueprint for peace, prosperity, people and the planet. At the centre of this are the [17 Sustainable Development Goals \(SDGs\)](#) which are a united urgent call for global action. The SDGs recognise sustainability as a multifaceted idea which includes aspects of poverty, resource acquisition, inequality, and social responsibility. Therefore, in order to successfully implement the 2030 Agenda, the 17 SDGs must translate as the key stones in sustainability education.

As the 17SDGs demonstrate sustainability as a concept, is complex, and this can often lead to reticence in broaching the subject. Through this guide we aim to make conversations about sustainability easier. We consider sustainability to be a critical part of education and critical to the wider context of each of our qualifications. In some cases, sustainability might be easily and immediately recognisable as related to the subject area. In others, it may take more searching to see the opportunities to embed sustainability. However, it is absolutely the case that students studying any of our qualifications will require awareness and skills intimately related to sustainability concepts to progress in the wider world of work.

Embedding Sustainability

A Support Guide for BTEC Nationals

We see sustainability education as a combination of 3 main elements:



The three key areas to embed in BTEC Nationals

We see sustainability in the context of our qualifications and how we can embed sustainability in a meaningful and pragmatic way, in three distinct areas: mindset, skills and practices.

In the following sections, we will explore ideas around how we might encourage students of our qualifications to develop a mindset, hone their skills and put into practice their new knowledge of sustainability in the context of their qualifications.

This will require a subtle shift in your approach to delivery in order to capitalise on the naturally occurring opportunities to embed sustainability in the curriculum and to create opportunities where none might naturally exist. The idea of this guide is that this is as easy as possible.

Embedding sustainability mindset

Throughout the delivery of our BTEC Nationals, there are many opportunities to discuss sustainability topics with students in the context of their qualification. However, whilst discussing individual topics is a great start, we hope that by following this guide we can get students to consider sustainability without having to have specific topics to refer to – i.e., that they will develop a sustainability ‘mindset’ that allows them to see the links to sustainability without you having to point them out. As you embed sustainability, you will begin to see this naturally occur with fewer and fewer explicit prompts. Through the following techniques and tasks, by the end of their studies, students should have developed this mindset and see things from a sustainability ‘perspective’.

Thinking in a ‘sustainability context’

A Sustainability ‘mindset’ means that students will ask the question of every topic, ‘How is this sustainable?’ or ‘How does this affect people, the planet, and my future?’ The question for us is, ‘how do we get them there?’

Topics you could address in the ‘sustainability mindset’

- Energy usage.
- Pollution.
- Climate impact.
- Human resources involved.
- The global context.

Starting simple:

- When introducing topics, simply ask your students what relation it has to issues of sustainability?
- Relate the topic to current events, making discussion points of inequalities, challenges faced by people, resource shortages or changes in the future of the topic due to sustainability issues.

Embedding Sustainability

A Support Guide for BTEC Nationals

Adding further challenge:

- Set a debating challenge – ask students to see two sides of a topic, one where behaviours remain as they are today, another side where behaviours are altered to accept that the world is changing, and we need to think more sustainably. Can they predict what might happen in either circumstance?
- Give learning a skills focus – ask students to explore the changing skill demands of their chosen subject considering the pursuance of sustainable practices.

In assessment:

- Ask students to submit assignment work electronically to save paper resources.
- Ask students to consider how many times they print resources.
- If using textbooks to inform assignments, think of how these can be shared or recycled by different year groups.

Being ‘future-minded’

Being ‘future-minded’ means that students can look beyond their immediate learning to see how the topic they are studying might develop and change because of the influences of the outside world.

They will be able to better predict change, prepare themselves more adequately for an uncertain future and be able to extrapolate from data and learning to see how things might be dependent upon variables. This makes being sustainable and developing sustainable practices and skills easier.

Topics you could address in the context of being ‘future-minded’

- Government plans such as all electric cars by 2030, or Carbon net-zero by 2050.
- The aggregation of small changes over time.
- Long-term climate impacts

Starting simple:

- Ask students to consider how the topic might look in five- or ten-years’ time – or how they feel it might have to be taught to future generations.

Embedding Sustainability

A Support Guide for BTEC Nationals

- In a paired or group activity, ask students to come up with a range of events or circumstances that could have an impact on their topic of study. Give them hints to focus on, for example, the availability of resources, climate change, or another global pandemic.

Adding further challenge:

- Share data on population growth and ask students to predict what will happen to their chosen careers if the population keeps growing. There is not a sector served by one of our BTEC Nationals that will not be affected by unchecked population increases.
- Base a session around the history of your topic – set a research task for students to examine what a particular aspect of the topic being studied was like twenty years ago, prompting them to comment on what has changed and why it had to.

Assessment:

- When discussing assessment work, make sure students are fully aware of the skills they are developing and how these will benefit them in future.
- Ask students to review the assignments you have set after they have completed them, looking at how ‘future-proof’ they are and whether they recognise the future careers or sustainability issues you have raised during teaching.

Recognising inequality

Students who can recognise inequality are more apt to do something about it and therefore we should make it a priority in our sustainability drive to ensure students are able to understand privilege, inequality and injustice related, however tenuously, to their field of study.

Topics you could address in the context of inequality:

- Global inequalities.
- Less economically developed nations.
- Gender pay gap.
- Access to education and healthcare.

Embedding Sustainability

A Support Guide for BTEC Nationals

- Gendered jobs, careers, and opportunities with reference to countries with poor records of supporting women into careers.
- Modern slavery and the demand for cheaper goods.
- Waste disposal – wealthy countries ‘selling’ their waste to poor countries.

Starting simple:

- Ask students to consider how a particular aspect of a topic may affect different types of people from different backgrounds in the UK.
- As a group activity, ask students to consider what factors would have been taken into account if they were looking at their topic from a global perspective.

Adding further challenge:

- Set the group the challenge of spotting the hidden inequalities in their chosen sector. You may wish to give them starting points such as, gender pay gaps, glass ceilings, or stereotyping in job roles.
- Encourage students to focus on the social responsibility of companies or businesses in their chosen sector. What are they doing to address inequality and make the services they provide or their employment policies more equitable and sustainable?

Assessment:

- Review your assessment materials to ensure that you have not unconsciously biased the assessment towards a particular gender or ethnicity.
- Ask for students’ opinions on the assessment – does it inadvertently further inequalities?

Seeing the ‘bigger picture’

Students should be able to see their chosen subject in the context of the wider world, especially in terms of its impact on people, the planet, and the economy. Students who can take this ‘macro’ view, will be better able to see the connections between their industry and others in its supply chain and will therefore be better able to see all the impacts of chosen paths.

Embedding Sustainability

A Support Guide for BTEC Nationals

Topics you could address in the context of the 'bigger picture':

- Impacts of global events on people, planet, and economy.
- The circular economy.
- Global trade.
- The location of vital resources.

Starting simple:

- Encourage students to work out the interconnectedness of their chosen topic. Ask students to consider the 'degrees of separation' between their chosen career and a wholly unsustainable one. You might give examples of; modern slavery or slave labour to create products used in different industries, highlighting the need for sustainable thinking throughout supply chains; or the carbon footprint of supply chains despite an industry having a relatively small carbon footprint itself.
- Working in pairs or small groups, ask students to investigate the supply chains of their chosen sector. Who else is involved and how do we know they are following sustainable practices?

Adding further challenge:

- Set students the challenge of writing a blog piece about how their chosen industry may not be as sustainable as it first appears due to the wider connections it has.
- Deliver a session on the global impacts of outsourced production and the measures that could be taken to minimise environment and social damage done by favouring cheap supplies. Ask students then to use their reductive reasoning to identify the causal issue – population growth and demand on resources.

Assessment:

- Review with students how their assignments fit within the 'bigger picture' of their qualification. Use this as a starting point for discussion about sustainability issues.

Embedding Sustainability

A Support Guide for BTEC Nationals

Applying learning in different contexts

A key skill for students to develop as they progress through their education is being able to use knowledge outside the context in which they first learned it. This application is generally reserved for technical or academic skills that have been taught in one context but then are used by the agile learner in other contexts to solve problems or complete tasks. In terms of developing a sustainability 'mindset' this is no different.

Our attempts here are to ensure that knowledge, understanding and awareness of sustainability 'sticks' and can be applied in different context through the student's life.

These techniques and activities should be attempted towards the end of your students' course.

Topics you could address to allow application of learning in broader contexts:

- New careers in the sustainability field that relate to their area of study.
- The rapid development of 'green' technology.
- The demand for all companies and businesses to be more sustainable.
- The benefits for businesses and their customers.

Starting simple:

- Pose a case study question using an unfamiliar scenario linked to one of the topics studied during the delivery of the course. Give students 10 minutes to highlight all the sustainability issues they can associate with the case study.
- Ask students to find a current news story that links to their subject area. Then ask them to describe why they picked it and how it links to sustainability.

Adding further challenge:

- Ask students to concentrate on sustainability and list all the factors they can remember from their year they should be considered when discussing sustainability. Then ask them to link each of these factors to a topic area from the qualification, explaining each in turn.
- Challenge students to consider their chosen career (linked to their field of study) and how changes to sustainability practices would impact on employees, employers, and customers/service users.



Embedding Sustainability

A Support Guide for BTEC Nationals

Assessment:

- After assessment, ask student to discuss how they will use the knowledge and skills they developed whilst completing the assignment for future benefit.

Embedding sustainability skills

Any successful qualification teaches students knowledge, skills and behaviours associated with a particular topic but often it is the transferrable skills that students learn that end up having the most value in the long-term. Whilst we feel that a sustainability 'mindset' is vitally important to students recognising and being able to think sustainably in the long-term, we feel that the embedding of sustainability skills is equally important because it means that they will be able to 'do' something about the issue they identify through their new-found awareness of sustainability. The skills we are advocating are complementary to the skills they will develop as a matter of course on their BTEC National qualification but in this context, are given a new focus and importance.

In this section we suggest further topics to relate skills development to and some lower and higher order activities and exercise you may wish to try with your students.

Problem Solving

Problem solving is a key transferrable skill that students can take into any career and find use for. The reason problem solving is such a powerful and sought-after skill is that it requires students to understand the context and conditions of the problem and then can change tactics and adapt to variables that have a bearing on the outcome. It necessitates a full appreciation of the wider contexts of the problem and therefore is based in 'praxis' – the marriage of theory and practice. This is where sustainability begins to 'come to life'.

Topics you could address in the context of the problem solving:

- Carbon net zero.
- World hunger/food production.
- Affordable housing.
- Finite resources/reliance on fossil fuels.

Starting simple:

- Ask students to work together on a hypothetical solution to a sustainability issue related to their area of study. For example, 'When tendering and estimating for a

Embedding Sustainability

A Support Guide for BTEC Nationals

construction contract, what materials should be quoted for? Sustainable materials or traditional? How would you raise this with a client who was not sustainably minded and still win the contract?’ (Unit 3, Tendering and Estimating, BTEC National Extended Diploma in Construction and the Built Environment)

- Ask students to work in small groups to examine how their chosen industry could contribute to solving a sustainability problem.

Adding further challenge:

- Pose a whole-class problem connected to an imaginary organisation linked to the area of study and ask students to work together to present a plan to address the organisation’s approach to sustainability. For example, ‘How might ‘Little Adventurers Daytime Nursery’ improve its sustainability to reassure parents and investors it is doing all it can to reduce its negative impact and secure a better future for its children?’ (Unit 8, Working with Parents, and others in Early Years, BTEC National Diploma in Children’s Play, Learning and Development (Early Years Educator))
- Challenge students to solve a sustainability problem in their chosen field by inventing or suggesting a product, app, or technology that could address it.

Assessment:

- Ask students to consider how they might change the submission of assignment work to become net-zero. Can they find a greener alternative to the method your centre uses?

Decision making

The ability to reach rounded and well-informed decisions based upon the best information available is the critical counterfoil to ‘fake news’.

Students need to develop independence of thought and confidence in their own powers of deduction, research, and assimilation of information in order that they can make important decisions about their life without succumbing to or being persuaded by dubious sources of information. This sustainability skill is about being able to use information wisely and being able to cross-examine information before being swayed by it.

Embedding Sustainability

A Support Guide for BTEC Nationals

Much as Greta Thunberg has begged people not to listen to her, but 'to listen to the science' behind climate change, this skill will teach students to weigh up the evidence before making decisions.

Topics you could address in the context of decision making:

- Fake news.
- Climate change opposition.
- Views of inequality in developing nations.
- Lobbyists and industry groups (e.g., Vegans vs. Farmers).
- Commerce and ulterior motive.

Starting simple:

- Give students the example of a well-known company or brand related to their area of study. Ask them then to work in opposing groups to offer reasons why it both would and would not be in the company/brand's interest to become more sustainable.
- Ask your students to research the carbon emissions of the industry associated with their area of study. Ask them to try to find three different sources of information. Discuss with them the reasons they think there might be discrepancies between the data sets.

Adding further challenge:

- Challenge your students to review and analyse the Government's Carbon Net-Zero 2050 plan (https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1033990/net-zero-strategy-beis.pdf) and decide which parts of the plan will have the biggest impact on their chosen industry.
- Ask students to review the main sustainability plans from their chosen industry and decide whether the suggested actions are realistic given what they know about the sector.

Embedding Sustainability

A Support Guide for BTEC Nationals

Assessment:

- Challenge your students to really review the sources of information they use in their assignments and discuss with them the ulterior motives that may have driven some authors. Engage them in questioning and verifying sources before using them.

Predicting, extrapolating, and altering approaches

When a student engages their sustainability 'mindset' they should be able to see the bigger picture and be future focused. However, what they must then do is develop skills in predicting, extrapolating, and altering approaches, each of which links to the information they have and the decisions about that information they have made. In these topics and activities, we can allow students to be free in their responses because there is no right or wrong – the process they go through is much more important here than the outcome.

Topics you could address to allow skill development in this area:

- Population growth.
- Gender equality.
- The future of developing nations.
- The fight for diminishing resources.

Starting simple:

- Ask students to predict the impact of moves to green technology in their chosen field. Give them things to consider such as, changes in required skills, economic changes and challenges, changes in the focus of the industry/sector.
- Ask students to review <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationprojections/bulletins/nationalpopulationprojections/2020basedinterim> and extrapolate what they think the impact of population growth of the sustainability of their area of study.

Embedding Sustainability

A Support Guide for BTEC Nationals

Adding further challenge:

- Encourage students to reflect on the environmental impacts associated with their chosen sector to date. Ask them to research the history of these impacts and to predict what impacts there might be in future if sustainability is not addressed.
- Present student with this quote, 'For all its promise, technological change tends to create winners and losers...' (taken from <https://www.un.org/development/desa/dspd/wp-content/uploads/sites/22/2020/01/World-Social-Report-2020-FullReport.pdf>) and ask them in the context of their chosen field of study, to identify who those winners and losers are, why this drives inequality, and what could be done to change the situation.

Assessment:

- After completion ask students to consider the manner in which they think assessment of learning might be done in future and how this would benefit sustainability. Could they think of any better, more sustainable ways to evidence learning?

Finding alternatives

The very essence of sustainability is in finding alternatives to unsustainable resources or practices. Students should have the opportunity to develop the skills that will help them in their lives and careers when they have to find suitable alternatives to actions or resources that may no longer be available, be cost effective or be morally correct. We can begin helping students to develop this skill by encouraging them to think laterally about situations related to their chosen field of study.

Topics you could address in the context of alternative practice:

- Fossil fuel driven energy.
- Plastics.
- Industrial agriculture.

Embedding Sustainability

A Support Guide for BTEC Nationals

Starting simple:

- Given students a scenario related to their chosen subject that connects to transport (getting the workforce to work), energy (heating and lighting premises) or food (feeding the workforce). Ask students to assess the current situation, predict what might happen if these do not change and then suggest alternative that are more sustainable in the long-term.
- Discuss with students a long-established business practice associated with their chosen career. Ask them to think of a way it could be made more sustainable by finding an alternative approach.

Adding further challenge:

- Ask students to consider this definition of Pro-Poor and Inclusive Innovation*
 - Then ask them to consider what innovations are in place in their chosen field that are 'Pro-Poor' and 'Inclusive'.
- Review the UN's 17 Goals for Sustainable Development (<https://sdgs.un.org/goals>) with your students. Ask them to consider which of them relate to their chosen subject and what the sector could do to help meet the goals.

* 'Approaches to innovation that are concerned with extending the number of beneficiaries, also referred to as pro-poor and inclusive innovation, aim to actively include and involve poor people in mainstream processes of technology-related development, either as consumers in new product and service markets or, more ambitiously, as participants in innovation processes themselves,' taken from the [United Nations Conference on Trade and Development's 2017 report New Innovation Approaches To Support The Implementation Of The Sustainable Development Goals](#)

Assessment:

- You may wish to give students the opportunity to think of a different way of submitting their work if your subject allows this kind of flexibility. For example, if they feel like a presentation is more suited to the subject matter than a report.

Discussing and debating

Students must develop the ability to rationally discuss and cogently argue their point of view by interpreting information and forming an opinion. In order to support students in developing these skills in a sustainability context, we must provide challenges that engage and enthuse them, forcing them to carefully consider their standpoint on

Embedding Sustainability

A Support Guide for BTEC Nationals

certain issues. This may entail you having to play 'the critic' and presenting contentious information for them to challenge.

Topics you could address to allow discussion and debates:

- Commerce vs. The Environment
- Convenience vs. Sustainability
- Fossil fuels vs. Green technology
- Veganism vs. Animal agriculture

Starting simple:

- Relate learning to two opposing sides of an argument about sustainability and ask students to engage in debate about it. For example, when studying the Scope and Provision of the Sports Industry (Unit 3 Professional Development in the Sports Industry from the BTEC L3 National Extended Diploma in Sport), you might ask students to argue both for and against sporting activity being good for the environment.
- Ask students to discuss their personal feelings about a sustainability issue related to their area of study.

Adding further challenge:

- Set up a formal debate for a whole class session linking a topic to a sustainability issue. For example, you might set an overarching question like 'Should Business Decision Making always factor in environmental, social, and economic considerations, or is profit always the main motivator?' (Unit 7 Business Decision Making, BTEC L3 National Extended Diploma in Business)
- Challenge students to find a recent news item that relates to their chosen field of study and sustainability. Ask them to then discuss why they have chosen it and what they feel should happen.

Assessment:

- As students work on the assignment, you may wish to ask them to debate an element of the assessment from a sustainability angle.

Embedding sustainability practices

Less directly linked to the subject of a student's study, sustainability practices are the actions and behaviours that we can encourage students to take and develop that will enhance the sustainability of the course's delivery and their ability to make decisions and take actions that are more sustainable.

This may extend to the way they travel to school/college, the way they submit assignment work, or the way resources are used and respected. In many ways, this is the core of encouraging sustainability awareness because this is where the academic becomes practical as students are encouraged to apply their learning in real-world ways. This aspect should complement the other key areas of sustainability we have already discussed.

Doing things more sustainably

- Walking or cycling to school/college where possible.
- Taking notes electronically rather than on paper, where possible.
- Recycling or buying second-hand textbooks where possible.
- Re-using plastic wallets.

Using resources thoughtfully

- Only printing when necessary.
- Submitting work electronically.
- Sharing class resources equitably.
- Ensuring everyone has equal access to resources.

Acting responsibly

- Championing equality and diversity.
- Looking out for each other and the environment.
- Making healthy choices.
- Being kind.



Embedding Sustainability

A Support Guide for BTEC Nationals

Being a role model

- Respecting others in the class.
- Carefully considering differing viewpoints.
- Standing up for what is right.
- Acting with maturity.

Promoting equality

- Giving everyone a voice.
- Never assuming another person's position, place, or outlook.
- Listening to and supporting those who need it.
- Recognising inequality and pointing it out.

Developing sustainability 'thinking'

As you can see from previous suggestions, embedding sustainability may take several different forms. You may wish to, or have to, do it 'alone' or you may be part of a wider team that also embraces the challenge and recognises the value in contextualising sustainability for learners.

Either way, you may wish to begin here; considering how you might go about helping others to develop 'sustainability thinking' in readiness to begin your journey.

1. In staff and students

Students:

- Work with students in small groups to define sustainability.
- Look at the key topics of their BTEC National with them, then put them in the context of sustainability.
- Consider a 'whatif?' project where students consider what their lives would be like if, a) they had been born in a less economically developed country or, b) they had been born 100 years in the future.
- Ask students to run a sustainability session linked to their qualification, considering sustainability topics.
- Explore local sustainability issues with students before a lesson, asking them to reflect on them as the session progresses.
- Run a charity event that raises awareness of local sustainability issues.

Staff:

- Share the Department for Education's draft strategy 'Sustainability and Climate Change' (April 2022) highlighting the ambition that by 2030, 'England will have the best trained, best supported teachers in the world, teaching a broad and balanced, knowledge-rich curriculum to give all pupils the knowledge and skills needed to build a better and fairer world for future generations.'
- Discuss in staff meetings the responsibility to introduce students to sustainability issues, even if they do not seem immediately relatable.
- Share this guide with colleagues.
- Set up a weekly email declutter/recycle drive in the office to raise awareness of simple sustainability practices that can be adopted.

Embedding Sustainability

A Support Guide for BTEC Nationals

- Ask for support in running a sustainability event either in one curriculum area or across a few.

2. With regards to the resources used to deliver our qualifications

- Consider printing demands for resources and work to develop online resources to replace traditional paper-based resources (whilst maintaining accessibility).
- Minimise waste wherever possible and reuse and recycle.
- Consider the storage of electronic resources – use cloud-based storage where possible.
- Encourage guest-speakers to appear remotely via Zoom/MS Teams to minimise travelling.
- Plan visits or excursions mindfully, considering the cost/benefit of the trip and the affordability for all learners. Also, consider the potential impact of attending. Consider whether there is some offsetting activity you could engage students in to balance the impact of their travel by using a calculator such as https://co2.myclimate.org/en/offset_further_emissions
- Consider the impact of photocopying work for internal and external verification and do only what is absolutely necessary, sharing electronic resources wherever possible.

3. Across the organisation

- Encourage colleagues to consider their energy usage on a day-to-day basis.
- Set up a car-sharing initiative for those travelling from the same area.
- Organise a whole school/college sustainability day.
- Suggest decluttering days for staff development activities.
- Raise the sustainability agenda at team meetings.
- Meet with staff from other departments to share this guide and assess where there might be opportunities to work together.

In the appendices of this guide we have identified some of the topic areas in our BTEC Nationals that lend themselves to the context of sustainable education delivery.

There will clearly be hundreds of other opportunities that we have not highlighted that you will happen upon over the course of delivery. These may link to ongoing news stories, new developments in current affairs or new products or services relating to the



Embedding Sustainability

A Support Guide for BTEC Nationals

core subject. The key is to develop a mindset where you are aware of the opportunities to embed sustainability and then to take them whenever possible.

At Pearson we understand the importance of sustainability education and therefore in order to further develop and enhance the opportunities to embed sustainability into the BTEC National curriculum, we are currently reviewing key content areas in our qualifications where sustainability can be appropriately mapped.

Once the details of this have been finalised, we will be releasing mapping information to assist in the delivery of sustainability within specific qualifications and subject areas. In the future landscape of qualifications, it is anticipated that this mapping procedure will form an integral part of the development process.

What further resource is out there?

The United Nations Education, Scientific and Cultural Organisation (UNESCO) has been a leader on sustainable development in education since 2005 and has recently published their latest guidance, [Reimagining our Futures Together: A new social contract for Education \(2021\)](#), which was shaped by the global pandemic and the need to address growing inequalities and increasing rates of climate change.

The Learning and Skills Council (LSC) has also produced resources to support the Education sector in delivering sustainability as part of its wider curriculum through the [Sustainability Online Resource Toolkit for Education \(SORTED\) website](#).

The Education and Training Foundation have produced resources to support the delivery of sustainability in the education sector, these are accessible via [their website](#).

Embedding Sustainability

A Support Guide for BTEC Nationals

Appendices

Business Studies

Teachers of our BTEC level 3 National Extended Diploma in Business decided to embed our approaches to sustainability throughout Unit 1 Exploring Business over the course of 6 weeks of delivery.

Week	Module Content	Sustainability Topic
1	Features of businesses	Are 'green credentials' important to modern businesses? Could 'sustainable business' become a 'fifth sector'? How are not-for-profit businesses made sustainable?
	Stakeholders and their influence	Who or what puts pressure on businesses to be sustainable? Are stakeholders more likely to support businesses that value sustainability? Imagining businesses that don't value sustainability in the future.
	Effective business communications	How can businesses do business more sustainably
2	Structure and organisation	Equality, pay equality, gender-specific roles and stereotyping. Global access to education, jobs, and social mobility.
	Aims and objectives	Should sustainability be an objective of a modern business? Is sustainability SMART?
3	External environment	Government and trading community pressure – Net Zero 2050, UN 17 Sustainable Development Goals. Public pressure to develop and follow sustainable practices, e.g., IKEA, the circular economy.
	Internal environment	Does sustainability have a role in Corporate Social Responsibility?
	Competitive environment	How far does a sustainability strategy impact on competitive advantage with the public's awareness of sustainability issues?

Embedding Sustainability

A Support Guide for BTEC Nationals

	Situational analysis	Which of the techniques of assessment of the business environment most accurately reflect the impact of sustainability?
4	Different market structures	How does the nature of a product and that product's sustainability make a difference to market entry in today's climate?
	Relationship between demand, supply, and price	Resources, supply, demand, and sustainability. Equality of labour, fair wages, and fair trade. Aspirations of consumers and the impact of socially responsible and sustainable commerce.
	Pricing and output decisions	The impact on sustainability of pricing decisions.
5	Role of innovation and enterprise	Innovation in sustainability impacting on efficiency and turnover. The 'enterprise' opportunities of sustainability – market trends and profits vs. actual corporate conscience.
	Benefits and risks associated with innovation and enterprise	Does sustainable practice really offer a return on investment?

Health and Social Care

Teachers of Health and Social Care decided to embed sustainability skills in the unit Promoting Public Health from our BTEC level 3 National Extended Diploma in Health and Social Care. By leading off with general discussions about sustainability in relation to the sector, they then carefully wove in sustainability topics as they progressed through the unit content.

Week	Module Content	Sustainability Topic
1	The origins and aims of public health policy	Access to healthcare, equality, and the global approach to healthcare. Are inequalities justified?
	Strategies for developing public health policy	Already covered by: <i>Minimising harm of environmental factors, to include recycling, waste management, pollution reduction, ensuring food safety.</i>

Embedding Sustainability

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2	Monitoring the health status of the population	Complexities around visibility of certain groups – inequalities for different demographics.
	Groups that influence public health policy	Un 17 Sustainable Development Goals.
3	Factors affecting health	Climate change, poverty, the global pandemic, and access to healthcare.
	The socio-economic impact of improving health of individuals and the population	Increased demand on resources and the planet of an aging population – how sustainable is prolonging life and is there an ethical debate?
4	The role of health promoters	What is health awareness and how does it link more generally to sustainability? Who benefits from reduced health inequalities
	Approaches to promoting public health and wellbeing	The connection between health, diet, and the environment. The cyclical nature of resource depletion, healthcare, and wellbeing.
5	Approaches to protecting public health and wellbeing	Climate considerations, diet, food production and resource depletion. Global pandemic and sustainable practices worldwide impacting on local health. Global health inequalities as linked to local health impacts.
	Disease prevention and control methods	Sustainability and communicable diseases - what we have learned from the pandemic
6	Features of health promotion campaigns	Visibility and access to information and campaigns by certain groups.
	Barriers to participation and challenging indifference	Already covered by content.
7	Models and theories that justify health behaviour change	Sustainability as a motivator for behavioural change – e.g., veganism for health and environmental impact.
	Approaches to increasing public	The conflation of sustainability and healthcare – UN 17 Sustainable Development Goals.

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	awareness of health promotion	
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Sport

Sports staff were challenged initially to see how sustainability could factor in the delivery of the units they had chosen for the BTEC L3 National Extended Diploma in Sport as much of the content delivery looks at individual performance, programming, and activity. However, on closer investigation and working together it became apparent that there were several opportunities to embed the key areas of sustainability discussed in this guide, specifically through the unit Sports Event Organisation. By asking students to follow sustainable practices, especially cycling to college which improved fitness as well as the environment, students got the benefit of both skills and knowledge around the sustainability agenda.

Week	Module Content	Sustainability Topic
1	Different types of sports events	Equality, accessibility, and the power of sport to bring together communities. Global politics, sustainability, and the need for action. Gender, sport, and equality.
	Planning, promotion, and delivery of sports events	
2	Feasible proposal for a sports event	Designing a sports event within the 12 Principles from basis.org.uk
3	Planning and delivery	Checked against the 12 principles. Accessibility and equality for all sections of society.
	Promotion	Fair access.
5	Review the planning, promotion, and delivery	Carbon impact review. Was the event sustainable? Could it be run again in the same way?
6	Reflect on own performance	What skills had they developed and how are these sustainable?

Construction

In Construction, sustainability principles will be naturally occurring as technical content is delivered. Obvious examples include the relative sustainability of material's properties in unit 1 'Construction Principles' (A2), comparing the embodied energy, carbon footprint and environmental impact of concrete vs timber, or the relative heat

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loss of different buildings that may have greater or lesser insulation treatment, or that use materials with greater thermal conductivity or resistance (C1).

However, there are other units where the relationship to sustainability may not be immediately obvious. The following is an example from unit 8, Building Regulations and Control in Construction, and details areas where tutors may decide to emphasise sustainability context during delivery

Week	Module Content	Sustainability Topic
1	A1 The Building Regulations	Reference the latest update in 2022 particularly Part L applicable from June 2022, which covers improved energy performance of dwellings, calculations of energy rates and emission rate and fabric energy efficiency rates etc. A discussion on why these regulations have been updated and how they might help to improve construction practice for the future.
2	B1 Approved Documents	<p>When examining requirements of the building regs, their coverage and application, tutors could discuss with the students the positive effects and impacts on sustainability, or negative impact if they are not properly adhered to.</p> <p>Instead of simply viewing compliance as a hurdle, bureaucratic or a tick-box exercise, class discussions could focus on energy conservation in Document L, as above, or the sustainability impact of waste disposal and non-compliant or inefficient drainage in Document H, i.e., resource conservation, environmental impact, and pollution), or Effective sanitation and Water efficiency in document G (the human or social impact and conservation of resources)</p>
3	B2 Alternative methods of achieving compliance	When comparing, analysing, or evaluating different methods of compliance, learners could identify elements within the British-, European-, NHBC-, and Competent Person - standards that aim to reduce carbon footprint of construction and how they might help the industry be more sustainable

Embedding Sustainability

A Support Guide for BTEC Nationals

4-6	C Undertake a Building Regulations Application (C1-C3	When choosing a new build residential scenario for which they must complete an application, tutors may select a scenario or plans for a particularly 'green' or sustainable development, including features such as rainwater harvesting systems, modular construction, solar PV and so on. There is opportunity to link to optional unit 39 'Housing Design Project', by taking the scenario used for that project, or ideas arising from the delivery, or unit '41 Renewable Energy for Housing' where they have been introduced to alternative and sustainable energy systems.
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