# Growing Food in Schools

Growing food in schools provides opportunities relating to Curriculum for Excellence and several key policy drivers. While this pack is designed to support you in actively growing food locally and eating healthily it could provide a practical element and starting point for learning in many areas of the curriculum e.g.

- nutrition
- safety and hygiene
- consumerism
- biodiversity and interdependence
- inheritance
- materials
- environment, land use and sustainability
- food preparation
- impact of technologies on society and the environment

It could also provide opportunities for young people to:

- learn and achieve through high quality learning experiences
- develop skills for learning, life and work
- get involved in partnerships
- learn for sustainability
  - o learn about social justice, sustainability and equity
  - o work with others in the school community
  - o learn about sustainable development
  - o learn outdoors
  - o create rewarding and impactful learning experiences

The following pages contain excerpts from policy drivers which seem to be a good fit with learning stemming from participation in food growing in school.

## How good is our school? (4th Edition)

How good is our school? (4th Edition) is a key aspect of the Scottish approach to school improvement, designed to be used to support self-evaluation and reflection by practitioners at all levels.

'As a framework that underpins effective self-evaluation, How good is our school? (4th edition) will support practitioners and school leaders at all levels to:

- ensure educational outcomes for all learners are improving;
- address the impact of inequity on wellbeing, learning and achievement;
- consistently deliver high-quality learning experiences;
- embed progression in skills for learning, life and work from 3-18;
- further strengthen school leadership at all levels;
- improve the quality and impact of career-long professional learning;
- extend and deepen partnerships to improve outcomes for all learners;
- increase learning for sustainability; and
- tackle unnecessary bureaucracy.'

'Learning for Sustainability (LfS) is an approach to life and learning which enables learners, educators, schools and their wider communities to build a socially-just, sustainable and equitable society. An effective whole school and community approach to LfS weaves together global citizenship, sustainable development education, outdoor learning and children's rights to create coherent, rewarding and transformative learning experiences.'

How good is our school? - HGIOS 4 | Self-evaluation | National Improvement Hub (education.gov.scot).

## Learning for Sustainability

'Learning for Sustainability is an entitlement for all learners within Scotland's curriculum. It weaves together global citizenship, sustainable development education, and outdoor learning to enable learners, educators, schools and their wider communities to build a socially-just, sustainable and equitable society. It supports the development of knowledge, skills and values at the heart of the curriculum's four capacities, helping to nurture learners as responsible citizens and effective contributors.'

'Scotland's ambition is that all learners receive their entitlement to Learning for Sustainability. This requires all settings to develop an effective whole-school and community approach. This is supported by a strong focus on Learning for Sustainability within the GTCS Professional Standards and within Scotland's approach to self-evaluation.'

'Learning for Sustainability facilitates the delivery of a wide range of related policy commitments including:

- Scotland's commitment to the United Nation Sustainable Development Goals as outlined in the National Performance Framework
- Scotland's climate change targets and commitment to become a Net Zero Nation.'

<u>Learning for Sustainability | Policy drivers | Policy for Scottish education | Scottish education system | Education Scotland</u>

Learning for sustainability is a key theme of The General Teaching Council for Scotland professional standards.

'Learning for Sustainability is an international and national priority in education.

In Scotland, the Professional Standards for Teachers are underpinned by Learning for Sustainability as a key cross-cutting theme; interdependent with the other key cross-cutting themes of Values and Leadership.'

Learning for Sustainability - The General Teaching Council for Scotland (gtcs.org.uk)

'We live in a turbulent, interdependent and rapidly changing world, with a complex range of social, cultural, political, ecological and economic challenges shaping our future – locally, nationally and globally. Learning for Sustainability is about knowing and understanding the world as it is, and equipping educators and learners with the confidence, values, knowledge, attitudes, capabilities and skills that will enable us to contribute effectively to making a better world. In Scotland, Learning for Sustainability is an entitlement of all learners and the responsibility of all teachers as part of a whole learning community approach.'

professional-guide-learning-for-sustainabilty.pdf (gtcs.org.uk)

## Sustainable Development Goals

'The 2030 Agenda for Sustainable Development, adopted by all United Nations Member States in 2015, provides a shared blueprint for peace and prosperity for people and the planet, now and into the future. At its heart are the 17 Sustainable Development Goals (SDGs), which are an urgent call for action by all countries - developed and developing - in a global partnership. They recognize that ending poverty and other deprivations must go hand-in-hand with strategies that improve health and education, reduce inequality, and spur economic growth – all while tackling climate change and working to preserve our oceans and forests.'

THE 17 GOALS | Sustainable Development (un.org)

'Scotland Curriculum for Excellence (CfE) supports four capacities including 'Responsible citizens' and 'Effective contributors'. Global Citizenship is a cross-cutting theme in the CfE –many Experiences and Outcomes refer to SDG themes – and interdisciplinary work is encouraged. The SDGs provide rich, real-world contexts for the priority areas of Literacy, Numeracy and Health and Wellbeing. The Scottish government entitles all pupils to Learning for Sustainability, which aligns with the SDGs, encompassing GCE, sustainable development education and outdoor learning. Learning for Sustainability is embedded across the Professional Standards of the General Teaching Council Scotland as one of three core themes. 'Getting it Right for Every Child' (GIRFEC) requires all education delivery to be rights-based.'

'The SDGs offer numerous, diverse opportunities for real-life learning in all subject areas, enabling young people to learn and think about global issues and to take action on them. Here are just a few practical ideas to provide some inspiration. Many of these examples could be easily adapted for younger or older learners.'

#### 'Design and Technology

Analyse ethical and sustainability issues in food systems, and social, economic, environmental and political factors affecting nutrition. (SDG 2)'

The Sustainable Development Goals: A Guide for Teachers (openrepository.com)

## Curriculum for Excellence Experiences and Outcomes

#### 'Broad general education

Curriculum for Excellence is divided into two phases: the broad general education and the senior phase. The broad general education begins in early learning and childcare and continues to the end of S3 (the third year of secondary school). Its purpose is to develop the knowledge, skills, attributes and capabilities of the four capacities of Curriculum for Excellence:

- Successful learners
- Confident individuals
- Responsible citizens
- Effective contributors'

'It is designed to provide the breadth and depth of education to develop flexible and adaptable young people with the knowledge and skills they will need to thrive now and in the future. It aims to support young people in achieving and attaining the best they possibly can.'

'Curriculum is defined as the totality of all that is planned for children and young people from early learning and childcare, through school and beyond. Children's and young people's learning should be planned for and experienced across the four contexts.'

'During the broad general education, children and young people should:

- achieve the highest possible levels of literacy, numeracy and cognitive skills;
- develop skills for learning, skills for life and skills for work;
- develop knowledge and understanding of society, the world and Scotland's place in it, much
  of which is now included in Learning for Sustainability;
- experience challenge and success so that they can develop well-informed views and the four capacities.'

#### Learning in the broad general education phase

'There are eight curriculum areas: expressive arts, health and wellbeing, languages (including English, Gàidhlig and Gaelic learners and modern languages), mathematics, religious and moral studies, sciences, social studies and technologies.'

'Each curriculum area is planned using experiences and outcomes. These describe the knowledge, skills, attributes and capabilities of the four capacities that young people are expected to develop.'

'Curriculum for Excellence Benchmarks set out clear statements about what learners need to know and be able to do to achieve a level across all curriculum areas.'

'Learning in the broad general education may often span a number of curriculum areas (for example, a literacy project planned around science and technology might include outdoor learning experiences, research and the use of ICT). This is likely to be in the form of themed or project learning which provides children and young people opportunities to show how skills and knowledge can be applied in interesting contexts. The term often used for this is interdisciplinary learning.'

Broad general education | Scottish education system | Education Scotland

The following pages suggest **Experiences and Outcomes** that could be related to growing food in schools. Others may be covered e.g. writing or presenting about the project could linked to literacy experiences and outcomes, working out areas for planting could be linked to numeracy.

Health and wellbeing	Early	First	Second	Third	Fourth
Nutrition	I enjoy eating a diversity	of foods in a range of socia		WB 1-29a / HWB 2-29a /	HWB 3-29a / HWB 4-29a
	Together we enjoy handling, tasting, talking and learning about different foods, discovering ways in which eating and drinking may help us to grow and keep healthy.  HWB 0-30a	By investigating the range of foods available I can discuss how they contribute to a healthy diet.  HWB 1-30a  I experience a sense of enjoyment and achievement when preparing simple healthy foods and drinks.  HWB 1-30b	By applying my knowledge and understanding of current healthy eating advice I can contribute to a healthy eating plan.  HWB 2-30a	By taking part in practical food activities and taking account of current healthy eating advice, I can prepare healthy foods to meet identified needs.  HWB 3-30a	Having researched food and health policy, and dietary legislation, I can explain how this impacts on individuals, the community and the world of work.  HWB 4-30a

Health and wellbeing	Early	First	Second	Third	Fourth
Nutrition (continued)	I know that people need different kinds of food to keep them healthy.  HWB 0-32a	I am beginning to understand that nutritional needs change at different stages of life, for example the role of breastfeeding in infant nutrition.  HWB 1-32a	I understand that people at different life stages have differing nutritional needs and that some people may eat or avoid certain foods.  HWB 2-32a	I am developing my understanding of the nutritional needs of people who have different conditions and requirements.  HWB 3-32a	Having identified dietrelated conditions, I can adapt and cook recipes to suit individual needs.  HWB 4-32a  Having assessed how lifestyle or life stages can impact on people's nutritional needs, I can explain how these needs are met.  HWB 4-32b
Safe and hygienic practices	I am becoming aware of how cleanliness, hygiene and safety can affect health and wellbeing and I apply this knowledge in my everyday routines such as taking care of my teeth.  HWB 0-33a / HWB 1-33a		Having learned about cleanliness, hygiene and safety, I can apply these principles to my everyday routines, understanding their importance to health and wellbeing.  HWB 2-33a	I can apply food safety principles when buying, storing, preparing, cooking and consuming food.  HWB 3-33a	Having explored the conditions for bacterial growth, I can use this knowledge to inform my practice and control food safety risks.  HWB 4-33a

Health and wellbeing	Early	First	Second	Third	Fourth
Food and the consumer		Through exploration and discussion, I can understand that food practices and preferences are influenced by factors such as food sources, finance, culture and religion.		Having explored a range affect food choice, I can o impact on the individual's	discuss how this could
	I explore and discover where foods come from as I choose, prepare and taste different foods.  HWB 0-35a	When preparing and coo am becoming aware of the make from source to con their local availability and	ne journeys which foods sumer, their seasonality,		Having investigated the effects of food processing on the nutritional value of foods, I can critically assess the place of processed foods in a healthy balanced diet.  HWB 4-35a
		I am discovering the different ways that advertising and the media can affect my choices.  HWB 1-37a	I can understand how advertising and the media are used to influence consumers. HWB 2-37a		By investigating different influences on the consumer, I can discuss how consumers can be influenced by external sources.  HWB 4-37a

Science	Early	First	Second	Third	Fourth
Planet Earth  Biodiversity and interdependence	I have observed living things in the environment over time and am becoming aware of how they depend on each other.  SCN 0-01a	I can distinguish between living and non living things. I can sort living things into groups and explain my decisions.  SCN 1-01a	I can identify and classify examples of living things, past and present, to help me appreciate their diversity. I can relate physical and behavioural characteristics to their survival or extinction.  SCN 2-01a	I can sample and identify living things from different habitats to compare their biodiversity and can suggest reasons for their distribution.	I understand how animal and plant species depend on each other and how living things are adapted for survival. I can predict the impact of population growth and natural hazards on biodiversity.  SCN 4-01a
		I can explore examples of food chains and show an appreciation of how animals and plants depend on each other for food. SCN 1-02a	I can use my knowledge of the interactions and energy flow between plants and animals in ecosystems, food chains and webs. I have contributed to the design or conservation of a wildlife area.  SCN 2-02a	I have collaborated on investigations into the process of photosynthesis and I can demonstrate my understanding of why plants are vital to sustaining life on Earth.  SCN 3-02a	I have propagated and grown plants using a variety of different methods. I can compare these methods and develop my understanding of their commercial use.  SCN 4-02a
			Through carrying out practical activities and investigations, I can show how plants have benefited society.  SCN 2-02b		I can contribute to the design of an investigation to show the effects of different factors on the rate of aerobic respiration and explain my findings.  SCN 4-02b

Science	Early	First	Second	Third	Fourth
Planet Earth  Biodiversity and interdependence (continued)	I have helped to grow plants and can name their basic parts. I can talk about how they grow and what I need to do to look after them.  SCN 0-03a	I can help to design experiments to find out what plants need in order to grow and develop. I can observe and record my findings and from what I have learned I can grow healthy plants in school.  SCN 1-03a	I have collaborated in the design of an investigation into the effects of fertilisers on the growth of plants. I can express an informed view of the risks and benefits of their use.  SCN 2-03a	Through investigations and based on experimental evidence, I can explain the use of different types of chemicals in agriculture and their alternatives and can evaluate their potential impact on the world's food production.  SCN 3-03a	Through investigating the nitrogen cycle and evaluating results from practical experiments, I can suggest a design for a fertiliser, taking account of its environmental impact.  SCN 4-03a

Science	Early	First	Second	Third	Fourth
Biological systems Inheritance		By comparing generations of families of humans, plants and animals, I can begin to understand how characteristics are	By investigating the lifecycles of plants and animals, I can recognise the different stages of their development.  SCN 2-14a	I understand the processes of fertilisation and embryonic development and can discuss possible risks to the embryo.  SCN 3-14a	Through investigation, I can compare and contrast how different organisms grow and develop.  SCN 4-14a
		inherited. SCN 1-14a	By exploring the characteristics offspring inherit when living things reproduce, I can distinguish between inherited and non-inherited characteristics.  SCN 2-14b	I have extracted DNA and understand its function. I can express an informed view of the risks and benefits of DNA profiling.  SCN 3-14b	Through evaluation of a range of data, I can compare sexual and asexual reproduction and explain their importance for survival of species.  SCN 4-14b
					I can use my understanding of how characteristics are inherited to solve simple genetic problems and relate this to my understanding of DNA, genes and chromosomes.  SCN 4-14c

Science	Early	First	Second	Third	Fourth
Materials  Earth's materials		Throughout all my learning, I take appropriate action to ensure conservation of materials and resources, considering the impact of my actions on the environment.  TCH 1-02a	Having explored the substances that make up Earth's surface, I can compare some of their characteristics and uses.  SCN 2-17a	Through evaluation of a range of data, I can describe the formation, characteristics and uses of soils, minerals and basic types of rocks.  SCN 3-17a  I can participate in practical activities to extract useful substances from natural resources.  SCN 3-17b	

Social studies	Early	First	Second	Third	Fourth
People, place and environment	I explore and appreciate the wonder of nature within different environments and have played a part in caring for the environment.  SOC 0-08a	I can consider ways of looking after my school or community and can encourage others to care for their environment.  SOC 1-08a	I can discuss the environmental impact of human activity and suggest ways in which we can live in a more environmentally-responsible way.  SOC 2-08a  I can consider the advantages and disadvantages of a proposed land use development and discuss the impact this may have on the community.  SOC 2-08b	I can identify the possible consequences of an environmental issue and make informed suggestions about ways to manage the impact.  SOC 3-08a	I can discuss the sustainability of key natural resources and analyse the possible implications for human activity.  SOC 4-08a
	I explore and discover where foods come from as I choose, prepare and taste different foods.  HWB 0-35a	Having explored the variety of foods produced in Scotland, I can discuss the importance of different types of agriculture in the production of these foods.  SOC 1-09a			Having evaluated the role of agriculture in the production of food and raw material, I can draw reasoned conclusions about the environmental impacts and sustainability.  SOC 4-09a

Technologies	Early	First	Second	Third	Fourth
Food and Textile Technology	I enjoy exploring and working with foods in different contexts.  TCH 0-04a	I can use a range of simple food preparation techniques when working with food.  TCH 1-04a  I am developing and using problem solving strategies to meet challenges with a food or textile focus.  TCH 1-04c	I am developing dexterity, creativity and confidence when preparing and cooking food.  TCH 2-04a  I can extend and explore problem solving strategies to meet increasingly difficult challenges with a food or textile focus.  TCH 2-04c	I am gaining confidence and dexterity in the use of ingredients and equipment and can apply specialist skills in preparing food.  TCH 3-04a  By using problemsolving strategies and showing creativity in a design challenge, I can plan, develop, make and evaluate food or textile items which meet needs at home or in the world of work.  TCH 3-04c	I can explore the properties and functionality of ingredients, textiles and equipment to establish their suitability for a task at home or in the world of work.  TCH 4-04a  I can confidently apply preparation techniques and processes to make food and textile items using specialist skills, materials, equipment in my place of learning, at home or in the world of work.  TCH 4-04b
Impact, contribution, and relationship of technologies on business, the economy, politics, and the environment.	To help care for the environment, I reduce, re-use and recycle the resources I use.  TCH 0-06a	I can take appropriate action to ensure conservation of materials and resources, considering the impact of my actions on the environment.  TCH 1-06a	I can analyse how lifestyles can impact on the environment and Earth's resources and can make suggestions about how to live in a more sustainable way. TCH 2-06a	I can evaluate the implications for individuals and societies of the ethical issues arising from technological developments.  TCH 3-06a	I can examine a range of materials, processes or designs in my local community to consider their environmental, social and economic impact.  TCH 4-06a