Frome Vale Academy Eco-school Strategy Pre thinking
11th October 2024

Summary

This document lays out a high level strategy and makes some suggestion for including in the action plan.

The high level strategy incorporates FVA's aims, vision and ethos. It will rely on FVA's existing governance arrangements and follows the Six C's principles.

The suggestions and options that need to be decided on detailed within this plan include:

- Decide on which national and international initiatives FVA will aim to align with;
- Select whom of the FVA stakeholders will lead the implementation of this plan;
- Identify what software tools are available to implement the work;
- Facilitate a baseline audit of the school's existing sustainability credentials;
- Determine which targets the school will aim to achieve;
- Identify which, if any, reporting mechanisms need to be followed;
- Select from the suggestions within this report, which initiatives from across the six C's are to be adopted;

Introduction

FVA primary school in suburbs of the city of Bristol. It is a one form entry school set in some stunning grounds which strives for and achieves some of the most successful results in the region and often out-performs the national average on key measures.

They are a part of the Cabot Learning Federation (CLF) family that comprises 35 schools in the South West of the UK.

Their aim is:
To develop citizens of the world by providing opportunities to embrace diversity, develop positive values, teach life skills and love learning, to enable personal achievement.

Achieved by:

- developing a clear understanding of pupil's place in a multicultural and diverse world, respecting differences and similarities.
- developing environmentally conscious citizens.
- developing an understanding of personal well-being, healthy living, personal safety and safe relationships.
- developing critical thinkers, who are able to articulate their ideas in a confident manner.
- developing a sense of responsibility.
- Developing curriculum specific skills to enable children to understand what it means to be a mathematician, writer, geographer etc.

This vision and ethos is intended to be achieved through the lens of the British Values of: democracy, the rule of law, individual liberty and mutual respect & tolerance.

Requirement

The Department for Eduction (DfE) have recently issued a directive stating all schools (primary, secondary, further education and higher education inclusive) are to:
FVA intends to embrace this challenge in a manner that aligns with its vision and ethos and is inclusive of all pupils, staff and volunteers e.g. academy council.

FVA will decide to align with one or several of the following national and international initiatives:

- UN Sustainable Development Goals
- Paris agreement
- Glasgow climate pact
- UK Net Zero by 2050
- Environmental Act 2021 and
- Cross-government 25 year environmental plan

Governance

The school governance operates at 2 levels, at CLF trust level and a localised Academy Council. The Academy Councils are responsible for holding Principals and their leadership teams to account for quality and effectiveness of the experience of the students. They monitor and respond to risk and oversee systems and processes for safeguarding, health, safety and wellbeing of pupils and staff [11].

The approach to achieving this requirement will require a 'whole school approach' which considers the following 'Six Cs' principle :

Culture	Curriculum	Community	Campus	Careers	CPD
The way things are done	Teaching and learning	Working together inside and outside school	Buildings, energy and grounds	Qualifications and work	Staff and governing board knowledge

To implement a suitable plan which achieves a whole school approach, suitable individuals needs to lead from the top, with an eye on integrating change at every level. This should combine efforts from senior leadership, the academy council, teachers, school staff, pupils and parents.

This is to be implemented within the time afforded by the different stakeholders involved. Other factors include the level of relevant training and experience held by the stakeholders.

Additional resource may be acquired through various charities providing volunteer support for these initiatives in schools e.g. Lets Go Zero

There are a plethora of online resources and e-courses available to enable stakeholders to up-skill to rise to the challenge.

Regarding any costs incurred for implementing any physical changes e.g. technological or infrastructure solutions, these will be limited to the capacity of school budgets and revenues e.g. Parent Teacher Association (PTA) fundraising.

The Academy Council will nominate an individual to act as the sustainability lead and will provide input to and approve the required climate action plan.

The software tools available to conduct these tasks include MS Office Word, Excel, Powerpoint, PowerBI and Teams. In the course of the delivery of the plan there may be utility in adopting a 3rd party software tool/ application e.g. for carbon accounting.

Objectives

The plan's objectives include:

1. To conduct an initial baseline audit to form an understanding of the sustainability credentials of the school.
2. To determine a set of targets for the school to aspire to e.g.

- a "greener schools index" rating];
- reduced quantities of waste
- carbon dioxide emission reduction; possible methodologies to achieve this include
    - Greenhouse Gas protocol ;
    - Standardised Carbon Emissions Framework (SCEF)

3. Once a set of targets have been agreed upon, various strategies can be decided upon and adopted to improve the sustainability performance of FVA.
4. As these strategies are implemented, or have concluded, routine continuous improvement audits can be scheduled to ensure the progress to, or achievement of the targets are realised.

Reporting

These objectives may feed into wider CLF compliance reporting activities e.g. Streamlined Energy and Carbon Reporting (SECR) [20] or Science Based Targets Initiative (SBTi) [21].

Sustainability strategies

There are many areas in the school environment could benefit from sustainability strategies. Below is a categorised list of possibilities.

Culture

All FVA stakeholders can be a part of this sustainability drive. Their collective behaviours and values form the bedrock culture of the school and by realising the elements of the school's vision and ethos that relate to sustainability (environmentally conscious citizens, understanding of personal well-being, healthy living..., a sense of responsibility) sound results can be achieved and embedded. Some examples of cultural related results include:

- Development of a FVA "Eco-code";
- Individual volunteers to be come "Eco-champions";
- The formation and regular consultation of school sustainability groups;
- The awarding of Eco-prizes for particularly exemplary work;

- Consolation and adoption of ideas generated from parent and pupil voices;
- Recognition of the social value FVA can provide;
- Ideas and activities which will improve the ability of the school to adapt to & be resilient in the face of a climate changed world e.g. flooding, extreme heat, heavier storms etc.

Curriculum

There are a range of sustainability related resources and ideas available to primary schools, which can enrich the existing curriculum. Addressing sustainability topics as part of the curriculum can also improve staff and pupil mental health and wellbeing, by providing an outdoor environmental to learn and play in and addressing things like eco-anxiety.
Some pan-curriculum initiatives include:

- Model United Nations Council ;
- Formation Conference of the Youth (part of the United Nations Climate Change organisation) ;
- National Education Nature Park ;
- Visits to sustainable infrastructure/ initiatives in the local area

The sustainability curriculum does not need to stop at the school gates, there are many transferable skills and benefits from children adopting some of these ideas for use outside of the school environmental, including through the use of remote software tools.

There is a rising interest and need for "Green" Science, Technology, Environmental and Mathematics (STEM) skills. There are various initiatives around the country that aim to encourage enjoyment and participation in these types of actives.
On a national level Engineering UK have produced a report that identifies that there is a need to develop the skills for a Net Zero workforce, starting in the education sector

For the South West region, Graphic Science is the STEM Ambassador organisation which have launched a 'Green Futures' drive to promote Green STEM in schools .
There is also an opportunity to incorporate FVA pupils's learning into the 4 objectives listed above. Specific examples of this are listed in the following sections.

Community

The Cultural elements listed above naturally extends into the community aspect of the school e.g.

Those whom utilise FVA facilities, whether staff, pupils, parents/carers and 3rd party organisations, can all take a stake in making the school sustainable.

For those whom travel to FVA, the school can encourage the adoption of sustainable travel options e.g. walking, cycling/ scooting etc.

They can consider where school materials are purchased from e.g. school uniforms from second hand providers, swap shops and shops that promote sustainable credentials. This avoids issues such as fast fashion and pollution related to manufacturing, shipping and packaging of clothing.

The sustainability efforts of the school and individuals can be promoted on internal, external channels i.e. school newsletter or social media.

Site

The physical site of the school provides many opportunities to study the existing features and consider suggestions for making them more sustainable.

The school grounds feature a nature rich environment of woodland, a stream and grassy fields, which provides the opportunity to learn about flora and fauna habitats and more complex ideas of biodiversity. This could offer natural shade and drainage which can save on energy consumption and flood risks.

When maintaining the ground, green waste e.g. grass cuttings and plant debris, sustainability can be promoted in the forms of composting, rain water harvesting, bugs hotels, no mow May, beehives, nature hunts, butterfly counts, bird spotting etc.
In terms of any pollution generated, a review of drainage routes and any chemicals used e.g. for pesticides on the land or any preservatives used on the wooden equipment, and noise assessments can be conducted.

Some of these considerations naturally have a STEM relationship e.g. comparison of drainage in different soil types and noise recording experiments.

Moving onto the fixed infrastructures, there are many more areas to consider. Utility usage covers consumption of natural gas, electricity, water and internet connectivity. Smart metering of these utilities will enable a review of consumption quantities and patterns.

Initiatives such as building management systems, photo voltaic panels, LED lighting, light and water motion sensors and insulation e.g. roof, window, and pipe lagging, can be used to reduce consumption levels in both warm and cold weathers. Consideration should be given to any unwanted effects e.g. promotion of the build up of mould and bacteria.

Building maintenance may also produce hazardous e.g. paints and lacquers, and non-hazardous waste streams e.g. waste timber, as well as consumption of utilities to perform activities e.g. use of power tools. This could all be reviewed to ensure legal compliance and identify any opportunities to improve the sustainability of these activities.

A study into the digital footprint of FVA or the CLF could be conducted, which could highlight things like carbon footprint of digital services provided.

A review of the emissions generated from fixed infrastructure include waste water, heat escapes and any F-gas consumption (for air conditioning systems). A review of any additional air and water pollutant escapes can be conducted.
These considerations offer an opportunity for curriculum activities e.g. thermal imaging of the building (they can be loaned from local libraries), temperature and wind speed measurements in and around the school grounds.

Some building services could consider things like catering and waste management. Points to note include supply sources of produce, waste food collection, waste packaging, use of sustainable cutlery and crockery, energy performance of white goods. An audit could establish the food miles attributed to food provisions and quantities of food waste generated.
Curriculum opportunities include grow your own food, waste less, and go plastic free studies. These could take the form of design a poster to promote these sustainable ideas.

The school supply chain can be reviewed. This could include location of suppliers, sustainability credentials of suppliers, types of supplies and their packaging i.e. if they are recycled and are they recyclable, and how long they are expected to last when used in a school environment. Examples of school supplies include:
- Furniture;
- Consumables (books, stationary etc.);
- Educational equipment and materials e..g white boards, laptops etc.

Any financial services the school use e.g. school banking/ savings/ Penguin pounds/ grants, can also be assessed for their supplier's sustainability credentials.

Curriculum opportunities include a review into the waste hierarchy of end of life goods.

Careers

By considering the factors identified in this plan, and incorporation into the curriculum where possible, it can cultivate skills and interests in topics that could serve as a future career opportunities.
Another curriculum consideration would be identifying professionals whom can provide an overview of their career profiles to the pupils.

Continued Professional Development (CPD)

By engaging in some of these ideas, FVA stakeholders i.e. teachers, staff, academy council, could claim CPD hours, which is key to maintaining motivation and developing additional skills that may benefit them in their future careers.

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