

Cassop School - From Coal to Carbon Zero - A Legacy of Coal and Our Journey From It

Summary

This small 100 year old primary school building, set between two former colliery villages has used the environment as a focus for renewal. Initially used to stimulate excitement and inspire work, this has evolved into a concern for the world environment. Renewable energy and a philosophy of sustainability now provide a positive pathway to involve children in global issues.

Impacts

The impacts are many and widespread through the whole school and local community. Cassop has a long history of work in sustainability and is a centre of expertise regionally, visited by other schools and organisations interested to learn from the school.

Key leadership role: led by the headteacher, shared by the whole school community

Where are we now?

We are proud to say that in 2007 Cassop School was awarded the accolade of The National Teaching Awards Sustainable School (a “whole school” award) recognising over 20 years of work with the school and community appreciating and caring for the environment. It also marked ten years since the school installed the first grid connected wind turbine in a UK school and began work towards developing a sustainable and carbon neutral school.

Energy and waste

By 2007 the school was heated from pelleted re-cycled waste wood locally sourced and powered from a 50Kw wind turbine and a 2.5Kw array of solar panels. The school houses a community re-cycling centre, has a field containing almost every species of native tree, a pond and bird hide as well as a vegetable garden and a small tree nursery.

Buildings and grounds

The evolution

Our sustainability work evolved from a very clear philosophy and approach to learning. It was not, however, meticulously detailed in action plans and targets. It is tempting to write in retrospect and to accredit all actions against a highly detailed plan but the truth is that we as leaders of a school will sometimes work intuitively, taking a direction for our school work which feels right, knowing our own children and their interests and needs. We chose approaches which we felt confident would be relevant, motivating and exciting for our children.

Setting the vision

The pathway to our emergence as a sustainable school was one of evolution, a process that will never be complete. No school should stand back and claim to be a sustainable school, there will always be more that can be attempted and, most importantly, new waves of children to enthuse. It is by necessity a continuing process. The technology of the building can act as a teaching tool but the real achievement must be in the knowledge and attitudes of the people within the building.

Until 1983 Cassop was a typical Durham mining village, dominated by its colliery. There were both challenges and opportunities in pit village schools. The challenges centred around a certain insularity and lack of experiences. The opportunities were that we had a rich environment and a supportive community. It was and remains our firm belief that children work at their best when the following conditions apply:

Focus on
learning

- the work can be shown to have relevance to them
- the work has a clear purpose
- the work connects with their own frameworks of knowledge and understanding
- the work encourages thinking and feeds upon their curiosity.

This philosophy became the central factor in decisions about planning work with children and the resources that we used. Very little commercial or scheme material is used but a great deal of “first hand learning”. This approach has been re-enforced in staff appointments as it required imaginative teachers to develop work of a very high quality from the raw material of the experiences we offered to the children.

Resource
provider

Well planned environmental work can provide all of the above conditions for learning. We had two compelling reasons to use our environment:

- the children needed exciting opportunities upon which we could draw
- the environment, exploited for mining and quarrying, presented opportunities for our direct involvement.

We began working with children on our immediate environment, our school field. At the same time we took children on a great number of structured visits to exciting places. We reasoned that if we were to expect children to try to improve our environment, first we needed them to appreciate and to be excited about it. They also needed to experience other contrasting environments in order to make critical judgments and to compare the possibilities.

Buildings
and grounds

Looking outward, beyond the school

Our school fieldwork developed gradually year by year, enabling children to be involved over a prolonged period of time. We began by planting trees, each year taking advantage of Durham County Council Tree Week.

Student voice and leadership

This work spread into our two villages and we became actively involved in campaigning for some of the redundant quarry and colliery areas to become nature reserves. This strand of campaigning and encouraging children to actively find and use routes to influence others has become an important aspect of our work. "What can we do ourselves?" and "How can we influence others?" have become our twin mantras.

Local well being

Inclusion and participation

From environmental work to sustainability

Resource provider

Innovator

The turbine was a lucky break. Durham County Council and Northern Electric were keen to demonstrate that in 1998 people would accept community sized wind turbine projects. Our reputation for environmental work was already established and fortunately our site, isolated on the top of a limestone escarpment, was highly suitable. Our part in the partnership was to develop the educational potential.

The turbine gave us a positive route to introduce climate change, which even in 1998 we felt was an issue that should not be avoided. From this point we used positive publicity and persistence to struggle for grants to introduce as many renewable energy features as we could. This was partly for energy for the school but mainly to provide teaching opportunities both for ourselves and other schools.

Energy and water

Looking outwards

Looking outward beyond the school

At a very early stage we took the view that we could develop our work on sustainability much further if we opened our doors and actively encouraged others to use our building, grounds and environment. This work was and continues to be unfunded but brings the school and its children all kinds of opportunities.

Inclusion and participation

Distributed leadership

In terms of leadership it has required a shared enthusiasm from governors and all staff. It has required a strong act of faith on the part of the governors as it has involved the leadership team of the school in a great deal of additional work: some directly involved in working with other schools and some to redress the balance in the school and to plug the gaps.

How have we benefited?

It is dangerous to attribute the benefits in a school to any one aspect of the work. The school has, however, undoubtedly thrived. The last two Ofsted reports were judged as being outstanding. This is mainly due to a combination of the philosophy to keep work exciting, relevant and

tailored to the children's needs and to a very hard working staff who set and expect high standards.

The sustainability work has given our children many opportunities to meet, talk and work with visiting adults. Their competence and confidence has risen markedly through communicating ideas and being taken seriously by our visitors.

The community too has enormous pride and a great deal of knowledge about what we do and the whole journey has cemented a confidence in the school. A less expected benefit has been the development of our global dimension. A link with Kenya, a highly successful Comenius Project with five European schools and a twinning with a Chinese school have all come about through (and in turn fed into) our sustainability work.

Local well
being

Global
dimension

Because we are a small staff we cannot afford to be indulgent when recruiting people. We need to be pragmatic and cannot simply collect people who have the environment as their only priority. When recruiting we look for the philosophy and attitudes and personality of the candidates. Beyond this we need to balance our team with people with enthusiasm for all elements of the curriculum. An aim is to find ways to involve more people in the work with other schools.

Another challenge is to continually refresh the enthusiasm of our own children by continuously developing and to avoid the danger of assuming knowledge. We aim to give children sufficient opportunity to learn so that they can genuinely drive the process forward as equal partners.

Grants and award money used for aspects of our work have come from a wide variety of sources but our advice would be not to start by seeking funding but first to demonstrate interesting things and real commitment and then to invite partners to join a successful project, adding specific aspects. Some connection to the company's activities always helps. Grants are the place to start with a willingness to match funds from school sources.