Why We Need an Education Revolution

By Richard Dunne

Introduction

If we are to take seriously the idea of a sustainable future, then the current education system is not fit for purpose. This is not to decry the need for high standards and rigour in education. Rather it is a call to re-contextualize learning, to join it up around project-based enquiries that provide students with a much more holistic view of how the world works and their part in it.

At its simplest level, if we are to learn about a particular historical period, it makes sense to look, too, at the architecture, the artists, the writers and philosophers, the music and the culture of that time. More than that, we can then ask what it is that this particular period in history teaches us. What is its relevance to today and how might these past practices inform our thinking into the future?

Food is fundamental to a good education. If we are what we eat, then we surely need to consider what we eat. And yet, very often, there is very little reference at school to the food that is served on our plate. It is detached from the story of how it was produced and the journey of where it came from, stories and journeys that are rich in learning opportunities and full of ethical dilemmas.

*All the photos included in this article were taken by the author.
We may well know the nutritional content of certain foods and why some foods are better for us than others, but if we have no understanding of where the food has come from, how far it has travelled, whether it was sourced locally and in season, what production system made it and the impact of that system on environmental and human health, then we have missed the fundamental first chapters of the food story.

We know that food and farming is the biggest contributor to greenhouse gas emissions and yet for the most part, education is barely connecting the food that we eat with the systems that produce it. When we are unaware of something, we are not going to be interested in it. Conversely, when we start to explore some of the issues around, for example, the provenance of our food, we are likely to take a real interest in it and become increasingly discerning about what we choose to eat.

Once we start to learn in this way, learning comes alive. In the case of food, we can link what we learn to what is served in our school kitchen. We can look at local sources of food or even whether it would be possible to grow food on a reasonable scale in our school grounds. We might look to build a partnership with local growers. We can consider the cost implications of buying free range or organic food over other more industrially produced food and whether we think it is right to pay a true cost for this more sustainable approach to food production.

A joined-up approach to learning

This approach is remarkable in its absence since education, for the most part, teaches for separateness. It divides up learning into separate subject silos and there is often no connection from one subject to another. Students learn in boxes.

There are clearly always going to be times when a subject-specific concept or method needs practicing and securing, but if a concept or method is not then applied in any meaningful way, the learning quickly loses any sense of purpose. When learning is taught in this way, then it will have little or no relevance to students beyond a test grade. This is an incredibly narrow and uninspiring way to learn.

If we look to the natural world, we see that it works systemically. The idea of separateness does not exist in Nature as everything is connected. Indeed, as the Prince of Wales reminds...
us in his book, Harmony, a new way of looking at the world, Nature teaches us wholeness. And, of course, natural systems are sustainable systems. The way they work shows us how we should work if we are to replicate similarly sustainable practices. They teach us about connections, relationships, consequences. This is how all learning could be.

For the most part, sustainability in education is seen as an add-on. It might be presented as a one-off environmental day or eco week. It will almost certainly be presented outside of the formal curriculum. It may engage the interest of a good many students, but the mere fact that it is not integrated into the broader curriculum means that the opportunities to link learning together are unlikely to be explored.

We cannot hope to create a sustainable future with this kind of approach.

The way forward

So, what needs to be done? The solution is closer at hand than we might think. Rather than departmentalizing learning into subject separate units with no thought for how they might connect together, it surely makes sense to take a particular theme or area of study and look at how subject-specific skills and knowledge can feed into this work. It will need some creative thinking to align subjects, one to another, and there will clearly need to be space within the timetable to teach discrete elements of any given subject, but the key is to see the learning as a cohesive whole.

The best way we have found to do this is to build learning projects around enquiries or big questions. These questions guide the learning to a meaningful conclusion at the end of
each half-term. They usually focus on a historical, geographical or scientific theme. Writing
tasks and supporting grammar skills are related to the enquiry, maths and science concepts
are delivered through the enquiry, too. A series of weekly questions creates a sense of
journey towards a concluding activity or event that we call a Great Work. This is a way to
recognize and celebrate the work that has been done. It could be an exhibition, a
presentation, something made or performed or planted. And this approach gives students
a clear sense of where they are going, like a river to the sea.

Half-termly enquiry questions might include:

What journey does our river take?
How can we build community?
Where does our food come from?
How can we ensure our oceans stay amazing?
Why are bees so brilliant?
What can we learn about trees through the seasons?

And each enquiry of learning references a sustainability issue. From considering how to use
water wisely to learning how to build community, from understanding food provenance to
responding to the issue of plastic waste in our oceans and how this links to our throw-away
culture, from seeing how a bee colony works to the benefit of its wider ecosystem to
planting orchards of heritage fruit trees, every project is addressing an aspect of
sustainability and building a picture of how a sustainable future might look.

Importantly in this model, Nature is our teacher. Natural systems have worked for millions of
years and they provide the best model for our future well-being. The Prince of Wales, in his
book *Harmony, a new way of looking at the world*, tells us how the great traditions, cultures
and religions have always understood this need to live in harmony, and he references how
principles of Nature teach us how to recreate it.

**Principles of Nature**

So, what are these principles and what do they mean for education?

In no particular order, they are:

The principle of the cycle – Nature works in cycles. These cycles create no waste or
pollution. They are self-sustaining and self-limiting. They never stop. This is the perfect
model for a sustainable future. So how can we teach our young people to understand the
importance of cycles, to develop a cyclical mind-set and to design cyclical systems so that
they learn how to live within limits and recycle everything back into the system, just as
Nature does?
The principle of interdependence – Nature's systems are wholly interdependent. They are all about the relationships that exist between one thing and another. They work at a local level and on a global scale. They remind us that for every action, there is a reaction or consequence. This is a great way for us to see how we live and interact. And, as this article points out, this idea of interdependence is critical to a joined-up way of learning. It is essential to seeing how everything works together.

The principle of diversity – Nature values diversity in all things. Its biodiversity is its strength. It ensures resilience in the system within which it works. This diversity is something to revere. So how can we not just recognise diversity and difference in one another, but in the diverse ways in which we all learn? It is clear that a sustainable future will need more than one solution. The strength of what is achieved will be based on the diversity of the solutions created and in how we promote diversity in the way we learn, in how we work, in what we grow, and in what we value in our world.

The principle of adaptation – Nature is brilliantly adapted to its place. Its adaptations have evolved over millions of years and its intelligent designs have much to teach us. With so much to learn, we need to protect and preserve Nature if we are to discover more about it. Adaptation in terms of learning is about adaptation to place and giving learning a local context. Often learning bears little relevance to the place where it is taught. And yet, if we engage students in learning that develops in them a sense of belonging, they are far more likely to feel part of and contribute to the community in which they live. We know that community is a central tenet of a sustainable future, so finding ways to nurture it in our young people is essential.
The principle of health – Nature is inherently healthy. Its systems and practices serve the well-being of the greater whole. Through its dynamic processes, these systems remain in good health. Just as importantly, we feel healthy and well in Nature. It is why it is so critical that our young people spend time outside, experiencing the awe and wonder of the natural world. In a world where so many systems and practices are unhealthy, it is essential to explore what we need to be healthy in body, mind and spirit, and how we can ensure the health of our soil, air and water. In educational terms, how might we judge the health and well-being of a school through the health and well-being of its staff and students? Is learning successful if it disengages the majority? Conversely, what kind of learning gives students a real sense of well-being in what they do? We believe it is when they are purposefully engaged in meaningful projects.

The principle of geometry and beauty – Nature has a geometry. This geometry can be seen at a micro and a macro level. We notice it in the circles, spirals and symmetries that exist in us and around us. And the more we learn the geometry of Nature, the more we see that we, too, are Nature. This way into learning gives students a wholly different view of the world.

The principle of oneness – we are all one in Nature. This idea of oneness both relates to the fact that all these principles exist not separately, but as one integrated whole. And it relates to a deep sense of connection we may experience to something greater, a spiritual dimension to who we are. In all our busy doing, it is important for our students, indeed for us all to nurture our being through mindfulness, meditation, contemplation or simply by taking time out to stop and be present.

These principles enable students to see the world from a new perspective, through a different lens. They enable students to articulate their understanding of the world in profound and enlightened ways. They provide a rich and meaningful context for learning. They are a blueprint for a sustainable way of life.
A new story

Right now, education needs a new story. We know that there will always be some kind of measure to learning, but if this becomes the dominant model for how we educate, and subjects are taught with no sense of cohesion in how they are planned and delivered, then learning will remain piecemeal and often of little relevance to young people.

Instead, we need to find ways to bring learning together around purposeful projects and give students a lead role in showcasing the outcomes of their research and the issues they want to highlight through this process. This may not be possible with the pressures of a GCSE syllabus, but from Early Years right through until the end of Key Stage 3, when students are 14-years old, it is certainly achievable with some creative thinking and a will to make it happen.

The more this approach can be trialled and developed, the more we can shift education to a better place. This is beginning to happen in a small, but growing number of schools. A new story is being told. It is a story of hope, of meaning, of relevance and purpose. And the best bit of all is that the narrators of the story are the students themselves, students who are learning how to live in harmony.
Author

Richard Dunne is head teacher of Ashley CofE Primary School, an Ofsted graded ‘Outstanding School’. The school has over 500 children aged 4-11 and it teaches through enquiries of learning, big questions that provide the focus for each half-term’s learning. The children play a lead role in running the school’s sustainability projects from monitoring the school’s energy to measuring water and food waste every lunchtime to growing organic fruit and veg in the school grounds and looking after the bees. More recently, Richard has established a set of Harmony principles inspired by the Prince of Wales’s book Harmony that references how principles of Nature can guide all learning. This work is now being shared widely in schools and teacher training colleges in the UK and around the world.