



The Reason for Being

Introduction

classofyourown®, a small private company with a social enterprise ethos, was established in May 2009. Led by Architect Dan Gibson and Land Surveyor Alison Watson, the **classofyourown**® team brings extensive experience in private and public sector construction projects to provide authentic workshop activities bringing "*the sustainable classroom*" to life.

Through our workshops, students establish their own company and adopt roles of construction industry professionals in order to undertake the design, management and marketing of a sustainable building project. Our research into the fundamental principles of sustainability ensures that students have a broad understanding of the use of materials, renewable energies and the supply chain.

The design of *the sustainable classroom* is influenced by the learner's individual learning styles and imagination. Learners can set their own standards and take responsibility for the decisions they make. The design day is intense. Young people are natural collaborators and the workshop platform has generated some amazing results. Through effective participation, learners demonstrate their understanding of environmental issues and sustainability through their wonderful creations. Noteworthy is their acceptance that tolerance, empathy and teamwork play an enormous part in the overall success of a project - all essential qualities for life.

classofyourown® has been engaged with both educational and industrial research since November 2008. Our partnerships with industry specialists, all of whom are willing to share their experience and knowledge, provides further support for young people and their teachers and parents when considering their career options and choosing appropriate subjects for GCSEs and/or Diplomas.

Ongoing collaboration with Liverpool John Moores University in the fields of Education and Sustainable Architecture enables **classofyourown**® to validate our educational currency.

Our directors are members of the Cross Directorate Sustainable Schools Progress Group, working together with other like-minded parties to promote and progress sustainability and best practice in schools, and are STEM Ambassadors – volunteer role models who give their time to promote Science, Technology, Engineering and Mathematics based careers as part of a nationwide awareness programme.

classofyourown® is registered with the UK Register of Learning Providers (reg. no. 10028539) and holds Enhanced CRB checks for each employee.

Why is the timing right?

In May 2008, OFSTED published their findings regarding schools and their 'inadequate'¹ delivery of sustainability, and so far, our research supports evidence that secondary schools in particular have little understanding of the Department for Children, Schools And Families' Sustainable Schools initiative. Through **classofyourown**[®] workshops, students can understand each of the 'Eight Doorways'² through applied learning and their own individual and group research. This programme also involves communication, delegation and presentation skills.

The introduction of Diplomas, and certainly the Construction and Built Environment Diploma, left many young people and parents confused. The very word 'diploma' has historically been associated with study towards traditional trades rather than professions. We asked young people what career they might choose if they pursued the CBE Diploma, and mostly they answered 'builders' or 'bricklayers'. As professionals and entrepreneurs, we are very keen that young people see the built environment as a challenging and exciting subject leading to technical careers in architecture, civil and structural engineering and management careers, accounting, planning and law, to mention but a few.

classofyourown[®] demonstrates this spectrum of career possibilities by providing a real project where students can be actively involved in decision making, policy writing, planning and management. Learners will understand that buildings are not created as if 'by magic' behind building site hoardings. An enormous amount of work is required before, during and after a new school building, for example, is built. It is hoped that the introduction of real life professional role models throughout the school term will inspire and motivate young people of all abilities and genders. The timing couldn't be better – in our opinion, our workshops can complement the school BSF³ journey. Feedback from one workshop session demonstrated that students could engage more dynamically with BSF design team members and had a better understanding of sustainability. Learners had the opportunity to quiz architects as to their own principles!

All young people have ambition. They need the opportunity and platform to discover it, then take the appropriate course of action to realise that ambition. **classofyourown**[®] workshops empower young people through the creation of a project they can take ownership of, however large or small. They can drive change in sustainable thinking from the learner's perspective, taking valuable ideas and environmental concerns to school stakeholders and decision makers. By engaging with the learner voice, head teachers and managers can create a sustainable legacy influenced by the young people who are defining their future within the school.

The Workshop Ethos

classofyourown® acknowledge that young people have different ways of learning. Our workshops provide an opportunity to engage children and their communities with green issues by encouraging their natural interest in their own education environment. The forming of their own ethical design company to create a sustainable school project promotes collaboration, ownership and the real life application of functional skills.

classofyourown® aims to:

- Involve schools, their families and communities in 'real life' projects
- Support the Sustainable Schools Framework and promote sustainable living at home
- Support and encourage Functional Skills through experiential learning opportunities
- Support PLTS and SEAL Learning Objectives
- Promote community cohesion
- Enhance and support Diplomas, for example in Construction and the Built Environment, Environmental and Land Based Studies, Engineering, Business Studies and ICT.
- Enhance knowledge of occupational currency required in the vocational sector
- Provide a potential training platform for college students and apprentices
- Provide a platform to include Prince's Trust volunteers
- Provide an authentic work related programme for young people who are not in education, employment or training schemes (NEETS)
- Provide access to a like-minded, countrywide team of multi- disciplinary architects with genuine social and environmental interests
- Provide a potential platform for learning within the BSF and PCP⁴ frameworks.

An Eco Classroom as a 'whole school' unique demonstration model demands the same sustainability design and maintenance considerations at a scale which all stakeholders can relate to.

The **classofyourown®** model demonstrates a unique environmental learning platform where learners can consider the use of renewable energy and local, responsibly sourced materials, and furthermore, how the building can clearly and comprehensively promote the benefits of sustainable living to the wider community.

Through hands on design and construction management, learners can watch the building grow and monitor and evaluate its structural and environmental performance post build. As more unique **classofyourown®** projects are constructed, learners can compare, contrast and share information about each unique project and ultimately define their own environmental best practice.

The classofyourown® Workshops

Day 1

The process begins with the completion of a simple self assessment questionnaire based on key skills and likes/dislikes, students adopt roles of construction industry professionals within their own company in order to undertake the design and marketing of an environmentally friendly building project.

A year group will be divided into random groups of ten to form design teams with a brief to design an Eco Classroom and landscape. Each team member will complete a short questionnaire which will help them choose a role within the company. The team roles include Management - a company director and sustainability officer, a marketing manager and brand designer, and Technical - two architects, two surveyors and two landscape designers.

The team members have a range of templates to help them address environmental issues in line with the Department for Children, Schools and Families' Sustainable Schools initiative. The **classofyourown®** educational resources support all activities and are designed to engage *all* abilities.

Together, they will create a learning environment which will help their school and their community to understand the different factors (the eight doorways) which will make their school sustainable.

The main hall of the school becomes the designated site where all 'construction' will take place. A pond and tree template is placed at opposite ends of the site as permanent features.

Using professional measuring equipment, the **surveyors** measure this area, defining orientation of the 'site' and 'natural' feature positions (through placement of life-sized tree and pond templates). They must present all this information to the team at a board meeting.

The **architects** conduct their classroom design research using the internet, and **landscape designers** research local biodiversity using a range of resources provided by The Wildlife Trust. They must complete design templates to showcase at the end of the workshop.

A Management Team is led by the **company director** whose responsibility is to ensure the overall success of the company, and is assisted by key personnel as follows:

The **marketing manager** must write the company mission statement and strap line, and the **brand designer** will compliment this with a company logo.

The **sustainability officer** will ensure that the company's ethics and sustainability values are upheld and help the Company Director to collate this information.

Three board meetings are held throughout the day to allow feedback and discussion between members of each team and collectively, the team will work together to throughout the day to enable their Director and a designated architect to present the company's final classroom design and values to their 'client'.

These individual group presentations to 'the client' (generally the headteacher/chair of governors and a guest from the construction industry) take place at the end of the day after which a winning team plus two runners up are selected, based on assessed criteria:

- Management Presentation
- Survey Plan
- Architects Design
- Landscape Design

An 'Excellence in Education Award for the Promotion of Sustainable Practice' certificate is presented to the head teacher in recognition of the students' efforts on the day.

Day 2

Further half day intensive management, survey, architecture and landscape design workshops follow on at a later date where the 30 strong, typical class size (hence the 'Class Of Your Own' title), team of winners and runners up work together to perfect their overall collaborative Eco Classroom design.

The management team form their own 'company' and roles are restructured to mimic those found in a real life design company, and together with the technical team, this select group of students have the overall responsibility to deliver their project on behalf of the school and community.

However, through presentations and specific topic inclusion mapped into in the curriculum, all students can contribute their own ideas and thereby feel a genuine sense of inclusion and ownership. There are excellent opportunities to develop a range of skill sets, with much scope to promote further class based discussion in all subject areas and provide extended schools and community cohesion activities.

Supplementary Workshops

classofyourown® have written a series of workshops to encourage the active involvement of learners as a project progresses , enabling them to adopt the roles of 'real life' professionals, not only as introduced in our one day Eco Classroom challenge workshop , but also more specific construction oriented roles.

Learners work side by side with **classofyourown®** professionals and their industry colleagues to take their design right through to the finished build stage and beyond as they take responsibility for its sustainable maintenance. Not only are they using applied skills to achieve programme targets, they are also meeting role models who can introduce and inspire a wide range of career options.

When the project is completed and official handover to the school takes place, learners really do feel they have created '***a class of their own***'.

Project Development

1. Recognition and Project Inclusion

classofyourown® recently won a Lancashire Business Environment Award for Environmental Innovation, and also recognition as Highly Commendable Environmental Champions. The Awards were introduced in 1997 to highlight the growing importance of green issues in business and to showcase examples of environmental excellence and commitment to green issues across the county. This award has brought us recognition from major construction and engineering companies who are engaging us to assist delivery of future projects.

classofyourown® is working with a number of schools and local authorities to assist in the delivery of the Building Schools for the Future³ and Primary Capital Programme⁴, NHS LIFT⁵ Co-location Projects and a number of landscape design and sport related projects.

This not only supports effective, proactive learner inclusion, but also reinforces the Department for Children, Schools And Families' strategy to reinforce community cohesion⁶ in schools.

The aim of the core workshop day is for students to group into design teams to create their very own energy efficient Eco Classroom and gives students a real sense of inclusion from concept through to project completion. In line with the Sustainable Schools Framework⁷ initiative, they will discuss the issues of sustainable development. Learners are encouraged to persuade and argue their points of view, come to a resolution and provide a practical solution which promotes the project's benefits on a local and global scale. Our workshop model is flexible in that it can incorporate alternative projects and still deliver the same life lessons to young people. For example, we have a project in Sheffield where school children are helping a local rowing club to design and develop a new boathouse facility which will include a classroom where school children and community groups can learn about the local biodiversity, along with healthy living through sport (see www.damflaskproject.co.uk).

2. Sustainable Design

Our research, conducted with Charlie Smith, Doctor of Sustainable Design and Senior Lecturer at Liverpool John Moores University Design Academy, enabled us to define a set of working criteria which young learners could comprehend and refer to when working on the Eco Classroom project.

i. Responsive and Robust

A building that can change and adapt over time to the needs of its users, teaching techniques, learning philosophies and outcomes.

- The space should promote best practice in teaching and facilitate different teaching methods and formats, from large group events to pupils working in small groups and also individually.
- The space should facilitate both formal (chairs and tables) and informal learning (beanbags, inhabiting the floor, or using furniture in an unconventional way).
- The scale of the space should be appropriate for groups of different sizes whilst also being appropriate for the individual learner. It could be adaptable to suit different sizes of learning groups.

A building that does not become redundant due to inflexibility.

- The space should be a 'free plan', with internal partitions (fixed or moveable) independent of the building's structure.
- Internal partitions (if any) should be non-structural, to facilitate potential changes to the internal arrangement.

Resist 'vogue trends' that may quickly become outmoded and outdated.

- The building should be appropriate to the teaching strategies envisaged, and to the ways in which it will be inhabited and for the people who use it.

Occupant rather than technology driven.

- The building should be integral to the learning that takes place within it; each element of the building should provide an opportunity for learning.
- The focus of the building should be the ways pupils will learn in a progressive environment.
- The building should not be a 'statement' collection of sustainable technologies. It should not be a model of sustainability first and classroom second.

ii. The Indoor Climate

Responsive to frequency of use and patterns of occupancy.

- By what methods is the space quick to warm, particularly if it is occupied intermittently? This will be affected by both the type of heating system and by the building's fabric.
- By what methods is the space adequately cooled in summer?

Energy use to be minimised.

- High levels of thermal insulation.
- Air-tight structure; passively ventilated.
- Is mechanical ventilation considered inappropriate?
- Appropriate passive solar heating (scale and orientation of openings).
- Appropriate use of thermal mass (with careful consideration of response rate, depending on occupancy patterns).
- Appropriate use of renewable energy sources, to meet reduced demand.

- Appropriate artificial lighting system.

Renewable energies to be utilised where appropriate but not 'box ticking'.

- What is a realistic and appropriate percentage of the building's energy use to be supplied by renewable sources?
- What are appropriate sources of renewable energy for this site, such as: PVs, solar water heating, ground source heating, biomass, wind, etc?

Maximum amount of natural daylight – essential to quality learning environments.

- Is daylight even throughout the space?
- Are there sufficient openings (windows, glazed doors, clearstory openings and roof-lights) for adequate daylight, whilst bearing in mind heat loss and heat gains?
- Which way are openings orientated?
- Glare must be controlled.
- Over-heating in summer must be avoided.
- The layout of openings should be considered in the context of the proposed range of internal layouts, and of future internal layouts.

Use of passive systems rather than unnecessary or vogue technology.

- The building should be easy and cost-effective to manage and maintain, suggesting low tech rather than high input.
- The building should be low energy, but should not rely on technology to achieve this.
- Technology should be used in a way that is appropriate to the scale of the building.
- The building's occupants should have control over their environment, including: blinds, windows, lights, temperature.

iii. Local and Appropriate Materials

All materials to be sourced within a predetermined radius of the site.

- Where is the site?
- What materials are available?
- What is the local vernacular; or, what materials predominate locally?
- What materials are appropriate?
- What is our radius?

All supply chains to be within a predetermined radius of the site. UK only?

- Where do all the (key) materials originate from?
- How are they brought to our site?

All materials to be: Reused, Recycled or Renewable.

- What are our materials? What can we find?

Performance of the building structure will facilitate the flexible specification of external materials.

- Does the building want to blend / camouflage or be bold / predominate?

Prefabrication to be utilised where appropriate and cost effective but not to cut corners.

- Modular construction should be used appropriately to save time / cost.
- The construction methods used should enable non-specialists to be involved in construction, in order to involve the pupils, the teachers and the community.

- The ways in which pupils, teachers and the community will be involved should be considered from the outset of the design process.
- Not a prefabricated building arriving on the back of a lorry, as this would not be part of the educational process, would miss an opportunity for training / apprenticeships, and detract from the sense of ownership.

iv. Custodianship

By the school, its students and their community.

- How and what would the pupils like to be taught within the building?
- How and what would the staff like to teach within the building?
- How would the community like to be involved with the building?

Increase sense of ownership through a contribution to the design and construction.

- The design process should involve the pupils, the staff and the community.
- The building should embody their ideas, energy, contribution and support into the design.

Increase perception of permanence through a sense of ownership by the community.

- The building should be embedded in the minds of the pupils, the teachers and the community.
- How does the building reach out to the community, beyond the ways in which the school does at present? The building should act as a catalyst for change.
- How does the 'solidity' of the building contribute to its sense of permanence? The building should not evoke the perception of a temporary structure.

v. Learning Landscape

A seamless integration between internal and external learning.

- The building should include a well-considered series of boundaries between the classroom and the wider landscape to facilitate a variety of relationships between each.
- The building should have various degrees of enclosure?

Encourage native and local biodiversity through the creation of new habitats.

- What are the local species we would like to live in our landscape?
- How does the building become a potential habitat?
- How does the surrounding landscape encourage new habitats?

Promoting physical contact and interaction with nature, biodiversity and horticulture.

- The building should be an integrated part of the landscape, seamlessly woven into it.
- The building should encourage interaction with the landscape that surrounds it, in visual, physical and educational terms.

3. Sustainability – The Bigger Picture

The Department for Children, Schools and Families would like all schools to be sustainable by 2020, and “to prepare young people for a lifetime of sustainable living”. A sustainable school, including buildings and grounds, provides an excellent teaching and learning resource for staff, pupils and the school community.

A National Framework was introduced to assist schools to understand how they can actively promote sustainability through a commitment of caring for oneself, one’s community and one’s environment (see www.teachernet.gov.uk/sustainableschools/framework/framework_detail.cfm).

The ‘Eight Doorways’ agenda allows schools to address issues through the following themes:

1. Food and Drink

- Supply healthy, sustainable food and drink
- Strong commitments to the environment, social responsibility and animal welfare in their food and drink provision
- Maximising their use of local suppliers

2. Energy and Water

- Display energy efficiency, renewable energy and water conservation
- Showcase opportunities to all - wind, solar and biomass energy, insulation, rainwater harvesting and grey-water recycling to everyone who uses the school
- Save money on energy bills

3. Travel and Traffic

- Promote use of vehicles only where absolutely necessary
- Provide exemplary facilities for healthier, less polluting or less dangerous modes of transport
- Encourage car-sharing and public transportation
- Promote walking and cycling to boost fitness and well-being

4. Purchasing and Waste

- Minimise waste
- Promote sustainable procurement, using goods and services of high environmental and ethical standards from local sources where practicable
- Reduce, reuse, repair and recycle as much as possible
- Save money through all of the above

5. Buildings and Grounds

- Manage and design new and existing buildings to visibly demonstrate/ teach sustainable development/living to everyone who uses the school
- Promote learning through the natural world (food growing, conservation biodiversity) and outdoor play to help them learn about sustainable living

6. Inclusion and Participation

- Promote community cohesion and social inclusion by providing an inclusive, welcoming atmosphere that values everyone’s participation and contributions
- Instil a long-lasting respect for human rights, freedoms, culture and creative expression

7. Local Well Being

- Act as hubs of learning and change in their local communities
- Promote citizenship within their local areas
- Enriching their educational mission with activities that improve the environment and quality of life of local people

8. Global Dimension

- Develop a responsible, international outlook among young people based on an appreciation of the impact of their personal values and behaviours on global challenges
- Promote global citizenship with activities that enrich the lives of people living in other parts of the world

However, according to a report written by OFSTED in 2008 entitled “Schools and sustainability: a climate for change?”⁸, the awareness and teaching of sustainability issues through National Curriculum subjects was “inconsistent and uncoordinated” in the majority of British Schools. They reported that many schools knew very little about sustainability and placed little emphasis on teaching or promoting it.

classofyourown[®] have recognised that there is indeed a communication gap in secondary schools in particular and perhaps the Department for Children, Schools And Families’ good intentions have been marred by the constant barrage of paperwork and bulletins regularly landing on a teacher’s desk.

Currently, we have found that Primary Schools are generally more familiar with the Framework, and many are actively addressing a number of ‘doorways’, perhaps due to a moderately flexible curriculum. This scheme is supported at Primary level where teachers and children have superior knowledge, however as learners progress to Secondary school, this knowledge has the potential to become diluted or even disappear if it is not reinforced (in fact, with no exception, we are deeply concerned that the teachers and students in Secondary schools where we have either visited or provided workshops still have no knowledge of the National Framework and Eight Doorways).

classofyourown[®] believe the framework can only succeed if it is provoked via a ‘whole school’ commitment from senior management and governors, providing CPD opportunities for teachers in order that they can recognise opportunities to promote meaningful inclusion in the curriculum throughout Primary, Secondary and Tertiary education.

Our workshops reinforce each theme of the Eight Doorways agenda through collaborative student activities. **classofyourown**[®] is supporting North West Sustainable Schools through promotion and provision of resources to assist teachers in classroom sessions, bringing the significance of climate change to life and demonstrating to students that that they each have an important role to play in helping to protect the environment.

One of these resources is the **classofyourown**[®] ‘Route to a Sustainable School’ document, developed with secondary school students. Based on the eight doorways, young learners go beyond a school’s voluntary self evaluation S3 Performance Matrix⁹ requirements and identify and assess their own school’s Doorway issues. Learners identify concerns and the outcome if they were left unresolved. They suggest ways to solve the problem, including who would help them achieve their goals (managers, subcontractors etc.) and over what timescale.

Not only does this support student inclusion in the school management process, but it allows brings to life the everyday solutions to a wide range of environmental issues. Learners can collaborate to agree goals and values, communicating these to their peers and agreeing ways to perform designated individual and group tasks. From recycling to reducing waste, learners can have a positive impact on their future planet, driving change in their schools' policies through a bottom up strategy. Young people can be motivated to become sustainability activists if they are given responsibility for the decisions made in their own environments, both at school and at home.

4. Pre Qualification and Design Quality

The potential to 'teach' the wider community can be demonstrated by classroom activities which can extend into the home to encourage parents and extended families to be more environmentally friendly (e.g. energy diary projects and other 'homework').

Sustainable Schools are encouraged to take 'an integrated approach to improvement'¹⁰ through engagement with its local community. Companies recognise the advantages of working with schools and this has been particularly apparent in recent Building Schools for the Future projects. However, **classofyourown**[®] has discovered that, in many cases, learners are only superficially engaged in the design specification and subsequent building development. Typically, learners are involved in peripheral projects, for example, initial design consultation, designing the hoardings which surround the new school building site, or taking part in a construction health and safety awareness discussion.

A major requirement of any public sector tender process involves the submission of a Pre Qualification Questionnaire (PQQ) before it will be invited to tender. The Questionnaire typically includes sections related to a company's financial information, equal opportunities, health and safety and general environmental policy information, plus additional quality and technical questions.

For use in school capital projects (and forthcoming virtual projects), **classofyourown**[®] has worked with students facilitate their own 'Children's PQQ' which focuses on sustainability, their community and their education. Contractors must define commitment, particularly addressing how they will provide the children with significant learning experiences. They would demonstrate their accountability to the students through, for example, meetings with a designated student council.

In a similar approach, many local authorities use 'The Design Quality Indicator for Schools' (DQI), introduced in 2005 by the Construction Industry Council in partnership with the Department for Children, Schools And Families, to provide a method of evaluating the design and construction of new buildings and the refurbishment of existing buildings. We are currently writing a 'Children's DQI' with young people which again will ensure the project provides them with ownership, inclusion, and most importantly real educational value and measurable outcomes.

5. Personalised Learning

The **classofyourown**[®] workshop programme allows the learner to choose a preferred subject or discipline, and make informed decisions about how he will achieve his targets in ways to support his individual learning style. This freedom of choice of activities encompasses Personal Learning and Thinking Skills (PLTS), Social and Emotional Aspects of Learning (SEAL) and Citizenship Issues. There are excellent opportunities to develop all these skills, in particular the roles of Team Worker and Effective Participator, with much scope to promote further class based discussion, extended projects and community activities.

classofyourown[®] workshops result in positive emotional effects – students of all attitudes and ability mixing seamlessly together. We have documented feedback reporting increased confidence and self-esteem, and a sense of personal and community focussed purpose. Students quote their feeling of ‘saving the planet’, and whilst we cannot profess to changing the world overnight, we believe we are having a measurable impact on their attitude to climate change and taking responsibility for it.

6. Bringing Learning to Life

As employers ourselves, we value people with practical skills and knowledge. Our workshops promote the use of core Functional Skills required to solve a range of real life work based problems.

classofyourown[®] actively promote STEM subjects through appropriate workshop activities. By involving role models and extending links to the world of work we can help to ensure that young people are encouraged to understand the excitement and importance of science, technology, engineering and mathematics, and the career opportunities to which the STEM subjects can lead. Both our directors are STEM Ambassadors.

Our ongoing collaboration with Liverpool John Moores University has helped us to extensively research and define the learner experience and outcomes. **classofyourown**[®] workshops offer applied experiential learning where the subject content has a lasting impact, linked to a social, global need, rather than simply being an organisational ‘tick box’ for enterprise.

classofyourown[®] has introduced The Function Junction (www.classofyourown.ning.com) – a forum where construction specialists can post their everyday examples of functional skills used in the industry. The information gathered will ultimately provide an exceptional resource for teachers to support a range of curriculum subjects.

7. **classofyourown®** and the Global Dimension

When our environment is changing so rapidly, sustainable thinking must remain constant.

Sustainability is a key feature of the **classofyourown®** series of workshops. We are helping children to recognise the impact they personally can have on the wider world; that as ‘good citizens’ they can make positive contributions to their local, national and even global society simply by making educated choices in the way they live their lives.

During a workshop focussing on sustainable procurement, we asked a mixed age group of young learners to define sustainability and we were greeted by a wide range of examples and many derived from the ‘cut and paste’ genre. However, some of our students described sustainability as “basically finding ways to care for life on Earth (where CARE is the operative word)”. We do not need to be radical in the way we approach sustainable living, but we can all be a little more considerate in the way we make decisions.

An example of young learners considering cause and effect occurred during another **classofyourown®** workshop where students were asked to research sustainable garden products for a sensory garden they had designed. One of the students asked “what does it matter, where things come from?” We decided to answer this question with an example which most children could relate to:

We asked which students regularly purchased a particular brand of chocolate, and all hands were raised. We asked if any of the children had watched a recent television documentary¹¹ which highlighted the use of palm oil in a top selling brand of chocolate. No one had. We then explained the outcome of the documentary; that orang-utans inhabiting the rainforests cleared (the trees consequently burned or sold as timber) for palm oil plantations are at risk of extinction as their homes and food source are taken away from them. The news not only provoked an immediate boycott of the brand as young people were visibly shocked that such things were happening in the world, but also led to a discussion about fair trade, sustainable alternatives and more importantly, how to raise awareness in our society.

To demonstrate the theory that ‘knowledge is power’, we left the students to calculate how many chocolate bars would remain on the shop shelves if every student in their class, their school, their locality, boycotted just one brand of chocolate. Not only did this introduce Functional Skills but also demonstrated the potential for a small group of people to effect a great impact on a major global issue.

Refocusing on their garden project, and by now fully aware of the disastrous consequences of sourcing unsustainable wood, the students were asked to make contact with a respected ‘green’ supplier and enquire exactly where they sourced the wood for their bird feeders and garden benches. They were told the wood came from “sustainable forests in Scandinavia”. They were able to appreciate that sometimes solutions are more complex; that imported wood may well be certified, but the typical carbon footprint related to the transportation of this wood is 5.5 times that of timber sourced locally.

These and numerous other workshop themes promote extended discussion through cross curricular activities – mathematics, geography, science, English, and in particular citizenship.

8. The Web Platform as a Collaborative Tool

classofyourown® have a vision that young learners from schools across the nation and indeed throughout the world should have the opportunity to collaborate and learn from each other.

At **classofyourown**®, we are neither looking to tick education and environment boxes nor pay lip service to existing initiatives where student consultation is cursory; we want to create real experiences and give young people the confidence and opportunity to express themselves regardless of their academic ability. Not only that, we want to encourage young people to talk to each other, compare notes, make suggestions...

Starting with our pilot project at Accrington Academy, we are aiming to establish a national network of school building projects that are conceived, designed and procured by students through participation in focused workshops assisted by industry professionals.

Every project will be linked through a digital platform that enables students to share ideas, collaborate and exchange experiences on a regional, national and potentially international level. As this network grows, their projects, whether actual or virtual, will form the basis of a forum within which to learn about sustainability whilst promoting the student voice, personal and environmental responsibility, career opportunities and community cohesion. Projects will be of a scale necessary to ensure students and their community can assume ownership and control, yet of a complexity that provides a high standard of cross curricular learning and teaching opportunities that can be incorporated across the entire school timetable.

We believe that user generated views are critical to the success of the platform and so engaged young learners (age 11 to 16) from Abraham Moss High School, Greater Manchester, to let us know what makes them tick. The opportunity to evolve a model web platform with learners promoted valuable comments and ideas from a cross section of today's savvy young technophiles, and we hope this will ensure its longevity both in the curriculum and at home. Most of all, the **classofyourown**® **web** will allow young people to LEARN FROM EACHOTHER and change the world which they will inherit.

A number of days of student led debate allowed us to outline functions which the web platform would deliver:

Overall website contains:

- Downloadable Items (carbon footprint calculator, pre-session activities, session templates, outlines of roles, skills outlines)
- Case studies
- Chat room to discuss specific subjects as well as projects teams
- Wiki containing general information. This would then be edited by all contributors with named individuals having higher levels of control

Individual project website (user controlled) contains:

- Log in.
- Calendar with key project milestones and alerts on specific tasks

- responsible market place for the project to promote itself through for the local community (teacher led)
- Communication within the team and a pathway of communication for the team to contact outside supporters (school governors, the rest of the school, local businesses, councillors)
- Chat room to discuss specifics regarding the project
- Access to suppliers, including reviews.

Individual project review website (teacher controlled) contains:

- Log in
- As above with the ability to put extra reminders, links to information and gentle hints
- Wiki (possibly?) containing information on how the project fits into the curriculum. This would then be edited by all contributors with named individuals having higher levels of control. This would then act as a review tool over time

Supplementary requirements

- Parents and teachers can engage through a community blog 'shout out'
- All projects should be drawn/displayed in 3D
- Exchange ideas and hold best practice forums
- Create a responsible marketplace
- Enter design competitions.

Following on from our research with young people, we have established key justifications for development of the platform:

- Significant reduction in the use/disposal of paper
- open source-based technologies and applications enable less technical users to use digital technology, promoting educational equality regardless of gender, age race or culture
- A richer environment for active learning promoting language, literacy and numeracy skills
- Unrestricted 24/7 accessibility provides a global platform where young learners can engage at their own pace during the weekends and evening, with no travel issues (and therefore a smaller carbon footprint!)
- Extended opportunities for learners, particularly those in rural locations.
- Real time interaction with people and data, and ability to connect with mobile technology
- Design revisions can be effected in real time
- A platform to capture ingenious ideas from visionary learners in a world where self expression is unrestricted and valued
- Student e-portfolios promote reflection and personal learning and thinking skills

- Young people know their environment better than anyone, and their contribution to school design is significant and essential. A platform can facilitate collaboration between schools, designers and contractors where learners can promote sustainable design and responsible procurement
- Young learners have multi-disciplinary skills just like construction professionals, and bring a wealth of ideas to a collaborative design
- A design by young learners demonstrates what is valuable to them. They are the 'customers' of a school and will engagement is enhanced if their environment suits them.
- Young learners are open minded, natural collaborators and already use a wide range of social media to connect with their peers, e.g. Facebook, Bebo, MySpace
- A web based collaboration platform can promote transparent, democratic decision making.
- Young learners can develop a methodology which can inspire the design industry itself.

The classofyourown® web platform provides:

a) Curriculum Mapping

- An overview and examples of where COYO principles and projects fit across curriculum subjects

b) Functional Skills

- Functional Skills overview
- FS Mapping Entry, Level 1 and 2
- Construction profession examples for teachers and students

c) PLTS and SEAL

- Overview
- Mapping
- Examples

d) Learning Outside The Classroom

- Overview
- Mapping
- Examples

e) Lesson Plans

- Sample lesson plans for teachers including homework suggestions

f) School Timetables

- Teachers can identify/share appropriate on and off curriculum opportunities

g) CPD for Teachers

- COYO Teacher Training opportunities
- Other CPD providers

h) Live Project Webcams

- Webcams based on live sites for children to observe progression of an eco project

Reference

- 1 OFSTED report “Schools and Sustainability: A Climate for Change? Published: May 2008 Reference no: 070173. See [http://www.ofsted.gov.uk/Ofsted-home/Publications-and-research/Browse-all-by/Documents-by-type/Thematic-reports/Schools-and-sustainability/\(language\)/eng-GB](http://www.ofsted.gov.uk/Ofsted-home/Publications-and-research/Browse-all-by/Documents-by-type/Thematic-reports/Schools-and-sustainability/(language)/eng-GB)
- 2 Department for Children, Schools and Families’ National Framework for Sustainable Schools 2006. See <http://www.Department for Children, Schools and Families .gov.uk/aboutus/sd/doorways.shtml>
- 3 BSF - Building Schools for the Future. Introduced in 2004, the Government school buildings investment programme with the aim of rebuilding or renewing every state secondary school in England by 2020. See <http://www.partnershipsforschools.org.uk/about/aboutbsf.jsp>
- 4 PCP – Primary Capital Programme. Introduced in 2005, the Government commitment to renewing at least half of all primary school buildings nationally by 2022/23 through Local Authority “Primary Strategy for Change” programme. See <http://www.teachernet.gov.uk/management/resourcesfinanceandbuilding/Primary Capital Programme/>
- 5 NHS LIFT (Local Improvement Finance Trust) is a vehicle for improving and developing frontline primary, community and social care facilities, allowing Primary Care Trusts and Local Authorities to co-invest in providing community based new premises in new locations. See www.dh.gov.uk/en/Aboutus/.../NHSLIFT/index.htm
- 6 Community Cohesion - The Department for Children Schools and Families Guidance on the duty to promote community cohesion, published in July 2007. See <http://www.teachernet.gov.uk/wholeschool/Communitycohesion/communitycohesionresourcepack/intro/>
- 7 Sustainable Schools Framework. See http://www.teachernet.gov.uk/_doc/10390/s3.doc
- 8 Schools and sustainability. A climate for change? See <http://www.ofsted.gov.uk/publications/070173>
- 9 S3 Performance Matrix. See http://www.teachernet.gov.uk/_doc/10390/s3.doc
- 10 See http://www.teachernet.gov.uk/sustainable-schools/about/about_detail.cfm?id=50&levelselected=2
- 11 “Britain’s Really Disgusting Food”, broadcast Mon, 22 Feb 2010, 23:05 on BBC One