

Contents

- 6. Why the research was undertaken
- 8. College Case Studies
- 32. Summary of key outcomes
- 36. Key conclusions and recommendations
- 38. Reading Between the Lines: Next Stage of the Journey



Why the research was undertaken

As part of its South West FE Colleges Capacity Building Project, AoC South West (AoC SW) through its Sustainability Thematic Group, commissioned an independent survey of colleges in the region. The aim was to examine the extent to which the Further Education (FE) sector has adopted Sustainable Development (SD) practices. The survey was carried out early in 2008 and was based on a pre-prepared questionnaire.

The distribution of the questionnaires followed an initial gathering of information and case examples from colleges. Each questionnaire collected information on the College's overall approach and on four specific areas: Leadership and Management; Building and Estates; Teaching and Learning; and Business and Community.

The completion rate for the questionnaire was extremely high reaching 91% by the time data was collated. Further returns were received after the cut-off date.

Each questionnaire was completed by a nominated person in the receiving institution, who completed the survey themselves and/or undertook a telephone interview with a member of the research team.

The detailed findings of the survey can be found on the accompanying CD-ROM.

Inspiring Case Studies: How these were selected

In addition to the main survey 11 case studies, featured in this brochure, have been developed to demonstrate what Sustainable Development practices are currently being achieved at individual colleges across the South West.

They are designed to provide a cross-section of examples drawn from different types and size of colleges, situated in a variety of locations across the region. The detailed investigation undertaken to develop the case studies identified not only good practice but also a number of further actions, including sharing knowledge and expertise, the creation of an information point and help with the curriculum.

The case studies demonstrate a range of drivers to adopting SD practices. In a number of cases external pressures, particularly in respect of building and estates have been important. External pressure has arisen from the policies of the Learning and Skills Council (LSC), South West Regional Development Agency (SWRDA) and Local Authorities as well as changes in building regulations. With these changes occurring at the same time as a significant new build programme across the sector, there has been a major impetus to develop SD in respect of building and estates. This work has, however, also highlighted the challenges of dealing with many existing buildings.

Please note that this research was completed in December 2008, before the stalling of the college capital programme and the Foster review.

All colleges in the survey would concur with Sir Andrew Foster's findings that the capital programme must be set back on track as rapidly as possible. Evaluating the case studies, it is clear that the ethos and values of an individual college have a major impact on the starting point and the subsequent development of SD. Given the autonomous nature of each college it is not surprising that institutions used different approaches to implementing SD practices and processes. Some favoured a very structured top-down approach, others a more organic bottom-up approach. Some had a plethora of policies and procedures for ensuring SD was carried out, whilst others had been slower to adopt an overall institutional approach.

The integration of sustainable development throughout the whole of the College business including, for example, the curriculum, procurement, recycling, buildings, energy management and partnership shows marked variation. A small number of colleges are well on the way to achieving a whole organisational approach, whilst in other cases the focus has been primarily around a single strand of SD, for example, buildings and estates.

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College Case Studies

- 10. City of Bath College
- 12. City of Bristol College
- 14. City College Plymouth
- 16. Kingston Maurward College
- 18. North (incorporating East) Devon College
- 20. Plymouth College of Art
- 22. Somerset College
- 24. South Devon College
- 26. St Brendan's Sixth Form College
- 28. Truro College
- 30. Wiltshire College



City of Bath College



Summary

Key features highlighted in this case study, include:

- Use of E mandate to provide measures and benchmarking of energy use
- Progressive development and implementation of actions to reduce energy consumption, including seeking to influence the behaviours of staff and learners
- Introduction of a programme of recycling, in partnership with a third party contractor
- Introduction of a Cycle to Work scheme to encourage environmentally friendly travel

The role of a crosscollege environmental group to provide leadership and to take the College's work in relation to Sustainable Development (SD) forward

Context

City of Bath College is a medium-sized general further education (GFE) college whose campus is located close to the city centre in Bath. The College serves Bath and the surrounding rural area of Bath and North East Somerset (BANES).

Historically, the area has enjoyed largely full employment. There are, however, no large-scale private sector manufacturers and employment is largely dependent on the service and public sectors. The socio-economic profile of the area is mixed. The area contains both local authority wards which reflect affluence and social advantage, and three wards with

above the national benchmark of multiple deprivation. The area has a low proportion of the population who come from minority ethnic backgrounds.

In 2005, the proportion of school students in BANES gaining five or more general certificates of education (GCSEs) at grades A*-C was 64%; seven percentage points above the national average. All but two of the local secondary schools have sixth forms.

The College offers courses in all 15 sector subject areas, although student numbers in some areas are small. The levels offered range from pre-entry to degree, with the majority of provision at Level 3. Arts, Media and Publishing is the largest sector subject area.

The College has lead responsibility for adult and community learning in BANES.

In 2005/06, the College recruited 1,577 learners aged 16 to 18 and 5,745 adult learners. Of the total, approximately 2,700 were full-time. The gender balance is that 44% of students are male and 56% are female. Some 170 school students aged 14 to 16 attend courses in the college. There is a small workbased learning provision, mainly in construction and hairdressing.

The College has, in collaboration with Weymouth College and York College, a Centre of Vocational Excellence (CoVE) for stonemasonry.

The College has a new management team who are committed to engaging with the sustainability agenda and in particular to reducing the College's carbon footprint. Energy efficiency is a key target, and achieving improvement in this area is challenging, particularly in view of the College's ageing estate.

Journey undertaken

A key element of the College's strategy has been the establishment of a cross-college environmental group with the brief of reviewing and updating the College's environmental policy. This group seeks to influence attitudes and behaviours of staff by, for example, promoting the switching-off of equipment and lights not in use, making sensible use of heating controls and ventilation, as well as using technological solutions to reduce energy consumption.

For example, there is now an automatic shut down of student computers overnight.

The College estates team has taken a number of actions to reduce energy consumption. E mandate is used to provide measures and benchmarking of energy use. A Salix¹ grant has been used by the College to improve its heating systems and introduce low energy lighting. The College is implementing software to monitor energy use in each of its buildings and this will provide information on the relative energy performance across campus.

The College has reviewed its arrangements for recycling waste to ensure a higher percentage of card, paper, cans and bottles are recycled. Collection and recycling of the materials will be carried out by a third party on behalf of the College.

The College is working in partnership with an employee benefit programme to ensure staff have access to a 'Cycle to Work' scheme that provides incentives to staff to invest in bikes to enable them to cycle to work. This will produce environmental as well as health benefits.

Achievements

- Reduced energy consumption through the adoption of new measures to increase energy efficiency, assisted by the use of grant funding
- Automatic shutdown of student computers overnight
- Acceptance that any new buildings for the College should achieve an excellent rating under BREEAM²
- Introduction of a programme of recycling working with a third party contractor

Adoption of a 'Cycle to Work' scheme for College employees

Developing a holistic approach and forward plans

The College is seeking to build on its progress to date, recognising that whilst a great deal has been achieved there is still much more to be done.

The progressive application of the principles of Sustainable Development in the area of building and estates is expected to lead to the introduction of an environmental management system in the near future. The College is committed to ensuring that any decisions regarding capital investment in its buildings and equipment reflect the need to embrace the Sustainable Development agenda.



¹See page 33 for explanation of Salix Finance

²See page 35 for explanation of the BREEAM environmental assessment method



City of Bristol College

CITY of BRISTOL

Summary

Key features highlighted in this case study, include:

- Development of a detailed environmental policy with an annual environmental audit being undertaken as part of a regular review of the College's performance
- Clear commitment to reduce energy consumption by 10% over the next five years through a strategic action plan
- Use of Salix¹ grants to make improvements to building and estates in order to reduce energy consumption
- Working with the Carbon Trust to identify the level of carbon emissions and then taking action to reduce current levels

Context

City of Bristol College is one of the largest general further education colleges in the country. It was formed by a series of mergers, culminating in January 2002 with the merger of Soundwell College.

The College has nine main centres across Bristol and South Gloucestershire and also offers provision through a large number of outreach sites and information technology (IT) centres. Approximately 2,000 staff are employed by the College.

Economically, Bristol is a prosperous city but like many urban centres has areas of significant social and economic deprivation. The College recruits from schools in the greater Bristol area. Levels of education attainment in Bristol's schools are highly variable.

In 2005, only 36% of Bristol school leavers achieved 5 or more GCSE grades A^* -C, significantly below the national average.

Programmes are offered in all 15 subject sector areas and at all levels, from pre-entry to higher education.

In 2004/05, the College had some 35,830 further education funded enrolments. Of these, 15% were full-time learners. Some 74% of full-time students were aged 16-18 years. However, across the College the majority of learners (85%) were adults. About 20% of learners are from minority ethnic backgrounds.

This compares with a minority ethic population in Bristol which accounts for 8% of the city's total population.

Vocational programmes across 12 areas of study are currently offered to 800 learners aged 14-16 years in partnership with some 30 local schools. Some further 120 learners aged 14-16 years attend the College full-time.

There are nearly 800 work-based learners and the College delivers off-the-job training to a similar number of learners. An extensive programme of skills training with 20,000 enrolments is sponsored by over 1,200 employers. In addition, there are almost 1,000 higher education students.

Journey undertaken

The journey towards sustainability started approximately four years ago. External drivers, including the role of the Learning and Skills Council (LSC) and more generally the growing pressure from society to make sure that resources are there for generations to come, were important factors in energising the College to develop its approach to SD.

The College has developed an environmental policy and linked guidance on energy management as part of its overall approach to SD. The College's environmental policy was first developed in 2004, and then revised in 2007.

The College's environmental policy states:

'It is the policy of City of Bristol College to work towards a sustainable environment. In doing this the College will aspire to model awareness and understanding of local, national and global environmental issues and, through its own practices, strive to conserve, sustain and improve the environment.'

The policy goes on to identify 13 action areas for the College. For example, 'setting Corporate Performance Indicators (CPIs) and targets for improvements in energy savings and classroom utilisation to minimise its use of energy and scarce resources through good practice, prudent maintenance and use of energy efficient resources.'

Active engagement in the promotion of healthy eating and Fair Trade

The Director of Resources and Project Development is responsible for ensuring that an environmental audit is carried out every year and that reports are presented to the Principal as part of the regular review of the College's performance.

The College is committed to reducing energy consumption by 10% over the next five years through a strategic action plan which will be reviewed for progress and updated each year.

Working with the Carbon Trust the College has identified and taken action to reduce carbon emissions. The College has also drawn down funding through Salix¹ and used this to concentrate on priority areas for improvement on three of its nine campuses. Improvements made have included installing higher levels of insulation, use of double-glazing and improving lighting and heating controls. The College also has a biomass boiler which is about to become operational. There is a new building planned and incorporated into the plans are wind turbines and use of solar energy to supply hot water.

The Students' Union is active in promoting healthy eating and Fair Trade options. As part of an approach to global citizenship there is a twinning arrangement between the College and an area of Tanzania. Some students have travelled to meet their counterparts and money has been raised to support the Tanzanian community.

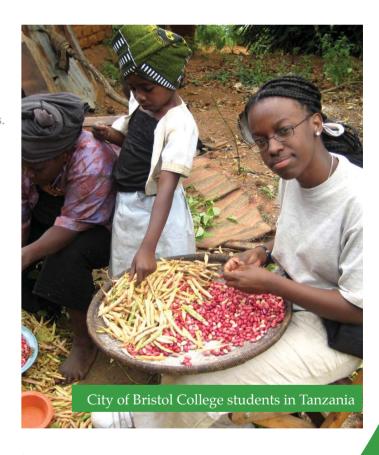
Achievements

- Meeting targets for reductions in energy consumption
- Identification of levels of carbon emissions and taking action to reduce the levels
- Improvement to the College's existing building stock, enabled by accessing grant funding
- Development of twinning arrangement with Tanzania

Developing a holistic approach and forward plans

Whilst there has been considerable action taken towards sustainability within buildings and estates function, further work in respect of the curriculum work is anticipated.

Action is underway to ensure drinking water will be delivered via the mains throughout all buildings on all the College's campus. This will enable the College shops to stop selling bottled water.



¹See page 33 for explanation of Salix Finance



City College Plymouth



Summary

Key features highlighted in this case study, include:

- Senior management leadership and support for Sustainable Development (SD)
- Use of external funding to assist the development of specific aspects of SD
- Appointment of full-time Champion/ Sustainability Officer
- The role and importance of a cross-college group which has representation from across the organisation
- How external factors may influence behaviours

Context

The College's vision is 'to be the South West's leading provider of innovative, skills-based, vocational education and training,' and the mission is 'building a better Plymouth through the delivery of high quality education and training which will enhance students' employability prospects and which is responsive to the needs of our communities'.

The College's main campus is located on the edge of Plymouth City centre. The College had some 17,141 learners in 2006/07 and a turnover of around £33 million per annum. There are some 3,584 full-time and 13,557 part-time learners. Over 1,000 apprentices are supported.

The College offers an extensive curriculum consisting of over 400 courses. Opportunities for learners range from basic courses in English and Maths through to foundation degrees.

Journey undertaken

City College Plymouth's SD journey started, in the 1990s with the realisation that environmental issues could be directly linked to cost savings. The driving force for SD came initially from the College's Estates Team who became aware of the financial opportunities offered by the Single Regeneration Budget and European Grants.

For instance, the College was an active member of a four year EU Project investigating the retrofitting of energy saving measures in existing buildings (www.brita-in-pubs.eu).

The original work of the Head of Estates was backed by the Principal and an enthusiastic team of academics willing to embrace the SD agenda. The Head of Estates is a member of the Executive of the Environmental Association for Universities and Colleges (EAUC). The College Principal signed the AoC/EAUC Further Education Colleges Sustainable Development Declaration in 2008. The commitment of the College's Senior Management Team (SMT) is further reflected in the College's recent appointment of a full-time Champion/Sustainability Officer and a Sustainability Working Group was established in 2007.

The implementation of the College SD policies is managed by the Sustainability Working Group which has cross College representation

SD is part of the College's Strategic Plan and covered in departmental/faculty plans. It has also been introduced through the College quality system as part of the self assessment for all areas of the College.

Sustainability awareness is being encouraged by including the topic on the agendas of all meetings of the Student Council, Staff Forum and SMT. The College's four 'principles of sustainability' are:

- Social progress which recognises the needs of everyone
- Effective protection of the environment
- Prudent use of natural resources
- Maintenance of economic growth and employment



Awareness of the four 'principals of sustainability' has become part of the staff induction process. Action has been prompted in many areas eg:

- The College has Fairtrade Status
- Sustainability awareness training at College training days
- Working with a City wide group on carbon footprinting
- Energy Certification prominently displayed in area buildings

The Innovation Centre (completed in 2001) incorporates a number of interesting SD features, including the visually striking wind turbines (as shown above) on the roof, high mass construction, automated natural ventilation, rainwater harvesting system, etc. The Wind turbines, which provide an important symbol of SD, have not achieved the power output originally expected.

The College has put into practice a waste management policy system, achieving increasing levels of recycling, which are also hazardous waste compliant.

A redevelopment programme for the College is being prepared and will represent an investment of in excess of £100 million. BREEAM² Education Excellent will be an important target for this programme. New buildings will incorporate a range of renewable technologies and green design features.

The curriculum has also benefited from a strategic approach to embedding Education for Sustainable Development. Individual faculties with the College are establishing Sustainable Future Groups. These groups comprise interested staff within each faculty who aim to promote sustainable practice and the dissemination of information through the formal curriculum and other related means.

The College wide Green Travel Plan was first established in 2000 as a planning requirement for the Innovation Centre and loss of parking. This has been reviewed and extended every year since. A new Green Travel Plan will be needed as part of the College redevelopment.

Achievements

- Appointment of full-time SD Officer
- Head of Estates a member of EAUC National Executive
- Waterless urinals installed in 1999 on the College's largest campus, saving £9,000 on water bills per annum and achieving a nine month payback. Many energy and water saving measure installed since under the College Energy Strategy
- Establishment of Sustainable Future Groups
- Development of effective Waste Management Strategy
- Implementation of a Green Travel Plan

Developing a holistic approach and forward plans

The College has made significant progress in respect of SD. The challenge is now to broaden and deepen current activities and ensure increasing levels of engagement by staff and students. The implementation of the College SD policies will continue to be managed by the Sustainability Working Group. The cross College representation of the group is expected to remain important as new work to increase levels of SD activity is undertaken.

²See page 35 for explanation of the BREEAM environmental assessment method



Kingston Maurward College



Summary

Key features highlighted in this case study include:

- How the initiative of an individual manager can be an important early catalyst to a College deciding to develop a broader organisational approach
- The importance of senior management leadership and the engagement of key internal stakeholders in order to gain a broadly based commitment and their engagement in sustainable development
- The importance of developing Green Travel Plans as a key requirement in securing planning approval for a new building
- The role of a Student Council in developing Fair Trade catering policies/menus

Context

Kingston Maurward College is a specialist land-based college, set in 750 acres of farmland, parkland, gardens and conservation areas, located two miles from Dorchester, Dorset. The local area is largely rural, with the highest concentration of population in the southeast of the County. The area is characterised by a relatively low-wage economy, and the proportion of the population of retirement age is noticeably higher than the average for England. The College works closely with its local community and businesses to provide opportunities which help sustain the rural economy.

The College is the only land-based college in Dorset and offers courses in six of the 15 sector subject areas. There is a diverse curriculum of vocational education and training in land-based subjects including: agriculture; countryside and food; animal care and veterinary nursing; equine; horticulture; arboriculture and floristry; outdoor education and sports leadership as well as provision in business administration, information and communication technology (ICT); and education and training. It offers work-based learning in: agriculture; horticulture and animal care; engineering and manufacturing technologies; leisure, travel and tourism; and business and administration.

The curriculum extends from foundation level to higher education and includes full-time and part-time students. Just over 40% of all enrolments were on entry and Level 1 courses, one-third on Level 2 and 11% on Level 3 courses. The remainder were on other provision or higher education programmes. While the number of enrolments is higher for students aged over 19, full-time equivalent numbers are broadly balanced between adults and students aged 16 to 18. The College works with schools across the County to provide a broader range of vocational options for pupils aged 14 to 16. The great majority of students are white British, reflecting the local population.

Journey undertaken

The original drive for SD came from the Principal and Commercial Director and their joint enthusiasm to promote recycling. This has developed and the College now recycles card, plastic, glass, aluminium, electrical goods and paper and has a compacter to assist this process. Recycling bins are positioned around the College. These recycling activities quickly reduced the number of wheelie bins by 11 making a saving of £3,600 per year.

The waste kitchen cooking oil is now recycled and used as biofuel for one of the tractors that students use

Following the initiative on recycling, a Sustainable Development Group chaired by the Principal was established by the College in 2006. There are eight members of the group who between them cover all key aspects of the College's work. At the outset the group met monthly. Consultants have been used to support the Group's work. A consultant is currently working with the group to develop a comprehensive policy on SD



Achievements

- The College's SD group has developed a
 Green Travel Plan, which was a key planning
 requirement in order to secure approval to
 construct a new learning and teaching centre
 in a highly sensitive conservation area. The
 grant of planning permission for the new
 building in such a sensitive conservation area
 was a significant milestone in the College's
 development. At the beginning of the process
 many doubted whether planning permission
 would be granted
- The College's lead on procurement is a member of the Sustainable Development group and is actively pursuing energy reduction and responsible procurement
- The Student Council has been involved in Sustainable Development across the College and has initiated Fair Trade sessions as well as partaking in a Food Focus Group. Students have been involved in planning the new building and in helping to increase the level of recycling
- A biomass boiler (fuelled by the College's own cereals and wood chips,) has been procured as a demonstration unit for schools and the local community as well as the College's own training uses and the heating of three dwelling houses

A biomass boiler is fuelled by the College's own cereals and wood chips

Developing a holistic approach and forward plans

The development of an integrated and organisation-wide approach is being progressed. The fact that all key areas of the College are represented on the Sustainable Development group has been important. The current development of comprehensive SD policy is an important next stage. A key feature of the emerging policy is that SD will be introduced into the College's curriculum.



North (incorporating East) Devon College

Summary

Key features highlighted in this case study, include:

- Collaboration with the Devon County Council and local bus operators in developing and using SMART cards
- The development of a 'car free' campus linked to, amongst other actions, the establishment of a Park & Ride facility
- The encouragement of a paperless culture based on the philosophy that waste management/ minimisation starts with not creating waste in the first place
- The adoption of energy management policies which have included enabling information, technology and communication (ICT) equipment to be closed down at the end of the working day

Context

North Devon (incorporating East Devon) College, offers an extensive portfolio of academic and vocational courses. The College has approximately 12,500 learners and 1,150 staff. The College's two main sites are in Barnstaple and Tiverton. Located in important sub-regional market towns, both campuses serve surrounding rural areas.

The College's North Devon campus serves a rural catchment area which has a notably dispersed population. Transportation of learners to the College presents a significant challenge. The College provides an extensive bus service to outlying villages, meeting the travel needs of the learners and the wider community. Working with Devon County Council and different bus contractors the College has introduced a system of SMART cards for travelling on these services.

The area of North Devon, in particular, has lower levels of productivity and employment when compared with many parts of the South West and is seen as a priority area for economic development. The area is relatively remote from other major population centres.

The College is engaged in a major new build programme involving the relocation of its Barnstaple campus. The estimated cost of this development is £125m. The development will place the College geographically at the centre of the town and will include a range of new buildings and facilities, including the development of an HE in FE centre and innovation facility.

Journey undertaken

North Devon College's commitment to Sustainable Development (SD) is evident from the knowledge, enthusiasm and commitment of its Senior Management. The SD agenda has the full support and commitment of the College's Senior Management Team (SMT). The SD work of the College is led and championed by the Vice Principal. The appointment of a new of Head of Facilities will ensure that SD is at the heart of the College estates and is at the core of its day-to-day operations.

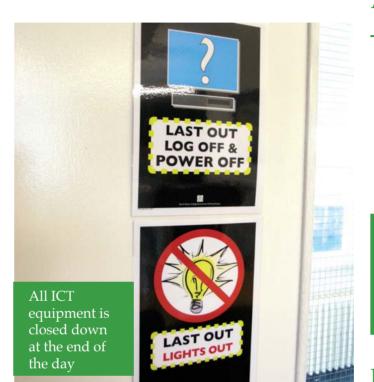
However, the journey towards sustainability has not always been smooth. Barriers and challenges to adopting sustainable practices have had to be surmounted by the College in achieving its current position on SD.

The College's Environment Working Group was formed some six to seven years ago.

The relocation of the College's Barnstaple campus offers an excellent opportunity for the College to incorporate and show case a wide range of sustainable features, including a biomass boiler and grey water recycling. Building on the present policies the new campus will also incorporate extensive waste recycling (paper, glass, plastics and cardboard). These practices are currently being extended to the College's East Devon campus.

As noted previously, transport is a significant feature of the College's operations. The new campus is being designed to be car free. Achieving this aim will include establishing an out-of-town Park & Ride scheme in Barnstaple. If the system proves a success, then it is hoped that it will be adopted and expanded by the County Council.





This is an example of the college initiative leading the way in developing and implementing new SD practices.

An interesting feature of the College's SD policy to date has been the aim of moving in the direction of a paperless culture. The philosophy behind this initiative is that waste management/minimisation starts with not creating waste in the first place. Work to achieve a reduction in waste has involved both administrative and teaching activity. For example, learners are expected to enrol on-line, are given a USB memory stick on enrolment and receive induction into a range of practices and procedures designed to avoid the generation of waste.

Energy management policies have included enabling information, technology and communication (ICT) equipment to be closed down at the end of the working day. At the start of 2009 the College also completed a major Salix¹ project.

The College curriculum demonstrates many aspects of SD. For example, the College's construction work includes demonstration of renewable technologies and techniques both to individual learners and a wide range of local construction companies.

Achievements

- Extensive waste recycling at one campus
- The planned development of a new campus, incorporating a wide range of SD practices, including transport, energy use and waste minimisation
- Reduced energy consumption by switching-off ICT equipment out-of-hours

Significant progress in moving towards a paperless culture

Developing a holistic approach and forward plans

There is still considerable work to be done to change attitudes and behaviours in respect of SD amongst the College's staff and learners. However the current redevelopment of the College's Barnstaple Campus provides an exciting and a once-in-a-generation opportunity to make a step change in the use of SD practices. The policies and practices being established as part of the new development are expected to have a significant impact on attitudes and behaviours. The experience of these changes will undoubtedly lead to further learning and also present the opportunity to cascade new practices to the College's other major campus in Tiverton.

¹See page 33 for explanation of Salix Finance



Plymouth College of Art

Plymouth College of Art

Summary

Key features highlighted in this case study, include:

- Development of an institutional policy, strategy and action plan for Sustainable Development (SD)
- Establish a cross-college SD group, chaired by a member of the Senior Management Team to take forward the strategy and actions for SD
- Implementation of a Green Travel Plan, using revenue raised to reinvest in better facilities to encourage alternative forms of travel to the College
- Calculation of carbon footprint linked to target reductions for energy use through adopting a range of accompanying actions to reduce current levels of consumption
- Taking steps to reduce/recycle resources, including those used for specialist teaching and learning activities

Context

Plymouth College of Art (PCA) is one of four specialist art and design colleges in the further education (FE) sector. The College offers further and higher education courses, with FE constituting just over half of the provision.

The College's mission is 'to be a dynamic, specialist art college which educates and encourages innovation, intellectual curiosity, entrepreneurship and creativity in art, design, crafts and media'.

The College provides opportunities for art and design ranging from art workshops for younger school children, programmes for Year 10 and 11 secondary school pupils, to full-time and part-time further and higher education courses for school leavers and adults. Just over half the students are female. Those from minority ethnic groups represent approximately 4% of the total of student population. The numbers of students from disadvantaged backgrounds and with declared specific learning difficulties and disabilities have increased in recent years.

The majority of further education students are aged 16 to 18, studying full-time on Level 3 courses. These students come from a wide geographical area.

Levels of employment in Plymouth are lower than the averages for England and the South West region. Key Stage 4 results in Plymouth are slightly lower than the national and regional averages and the proportion of sixth form students in Plymouth progressing to higher education is below the national average.

In 2007-08, the majority of adult learners were enrolled on part-time level 1 and 2 programmes or on a fulltime access to higher education course.

The College works in partnership with a wide range of local schools, colleges, community organisations, employers and higher education institutions to support student achievement and progression. The College and its students are actively engaged in the promotion of the cultural and creative industries at a local, regional and national level.

Reinvesting revenues from a Green Travel Plan in facilities to encourage alternative forms of travel

Journey undertaken

Work on sustainable development started two years ago as a response to the LSC strategy for sustainable development. A policy was developed and approved by the College's Corporation. Having agreed the overall policy, an associated strategy and action plan were developed and a cross-college group established. Membership of the group was composed of enthusiasts for SD and included student union representation. Chaired by the Director of Finance, all major areas of the College were represented on the group.

One of the first pieces of work initiated by the Group was a Green Travel Plan. A key element of the plan was for staff to pay for car parking. The income generated was used to support sustainable development initiatives including, for example, showers and cycle racks as a policy to encourage cycling.

The Estates team has calculated the carbon footprint and have a clear view of what action needs to be taken to reduce the current footprint. Targets have been set to reduce consumption of electricity by 5% per annum. More generally, measures to improve energy efficiency have included the installation of new boilers with the help of a Salix¹ grant, the replacement of windows and a real drive to turn off computers and other equipment over night. Use of water has been vastly reduced.

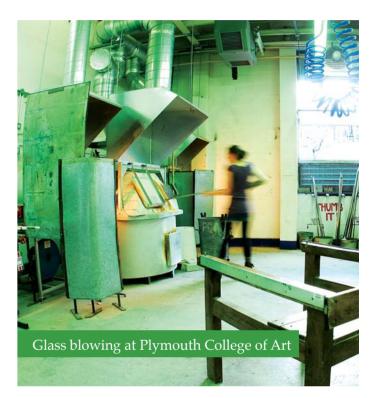
The nature of the work of a specialist art and design institution can be very resource intense e.g. glassblowing and photography.

Recycling of cans, bottles, paper and card takes place. Computers are leased. Sustainable procurement is being addressed internally but also with partners especially in HE. The Green Travel Plan is being reviewed. Refectory services, outsourced through Scolarest, have responded well to the demand for healthy options and locally sourced food on the College menu.

Achievements

- Development of a clear policy and associated strategy and action plan for SD
- Calculation of carbon footprint linked to target reductions for energy use through adopting a range of accompanying actions to reduce current levels of consumption
- Taking steps to reduce/recycle resources, including those used for specialist teaching and learning activities
- Establishment of a cross-college SD group, chaired by a member of the Senior Management Team to take forward the strategy and actions for SD





Developing a holistic approach and forward plans

Unlike many institutions PCA started with the development of an overall policy for SD and progressed to establishing a clear strategy and action plan. From the outset a cross-college group for SD was set up to provide a clear focus for discussion and decision-making which looked across the institution.

The next stage is to increase levels of communication regarding the benefits and impacts of the strategy to teaching staff, and to encourage a greater use of the College's acquired knowledge and expertise of SD within the curriculum. As part of this drive, the College is also considering how the current work of the SD group might be further extended into the area of learning and teaching.



Somerset College

Somerset College of Arts and Technology

Summary

Key features highlighted in this case study, include:

- Sustainable Development is becoming embedded in the College culture and is viewed as a key feature of the College's current and future strategy
- The development of the Genesis Centre (demonstrating how different sustainable materials can be used for building) exhibits the holistic approach adopted throughout the college and the use of the project can be seen in the curriculum
- Calculation of the College's carbon footprint.
 This was benchmarked in 2007 and recalculated in 2009
- Implementing a Green Transport policy which includes the provision of a Park & Ride facility and encouraging car sharing
- Advanced estates environmental strategy focused on energy saving including excellent cross-college use of recycling bins to reduce the amount of waste being sent to landfill

Context

Somerset College is a provider of both Higher and Further education, with approximately 2,250 full-time and 3,700 part-time students. The College employs approximately 400 full-time staff.

Somerset College operates predominantly from its main campus just south west of the centre of Taunton on the Wellington Road. The College's main campus is modern and has benefited from significant capital investment. The College's administration and the majority of its learning areas are located on the

There are three other College owned sites in Taunton:

- Canonsgrove: University level student accommodation located three miles from the main site and providing accommodation for 176 HE students
- Galmington: A motor vehicle workshop, again approximately half a mile from the main site

• Bishops Hull: A former school, housing performing arts students, approximately half a mile from the main campus

A significant programme of new building is planned for the main campus, which is expected to commence in 2009/10. This will bring all learner provision onto the main site, leaving just student accommodation off-site.

Journey undertaken

Sustainable Development is seen as a key policy in both the College's current and future strategy and mission. Over the past seven years Somerset College has made major progress in respect of SD and is at the vanguard of development in the sector. The College has been running a highly successful staff sustainability champions scheme for over five years which engages 10% of staff individually and in cross-college initiatives. Senior Management leadership of SD was provided in the early years by the Deputy Principal and has since been led by the Principal and Head of Marketing who is also the lead Sustainability Champion.

The importance given to SD is reflected by the Principal chairing the College's Sustainable Development Strategy Group which includes the Executive leadership team as well as practitioners within the College.

The College's work on SD was advanced and enhanced by the construction of the Genesis Centre, the South West Centre for Sustainable Construction, a flagship sustainable building part funded and supported by the South West Regional Development Agency and the LSC. The Centre showcases a wide range of SD practices, including the use of alternative building materials. The success of the Centre has attracted many national awards. These include:

- Green Gown Award 2008 for Sustainable Construction
- Chartered Institute of Waste Management 2008 for environmental excellence
- Civic Trust Award 2008 Benefits to the Community

- Green Gown Highly Commended Award, 2008, for continuing professional development courses in sustainable construction
- Highly Commended Award in the RIBA Building Sustainability Awards 2006 for 'Sustainable Building of the Year worth less than £2m'
- Short listed for RIBA Public Building awards 2007

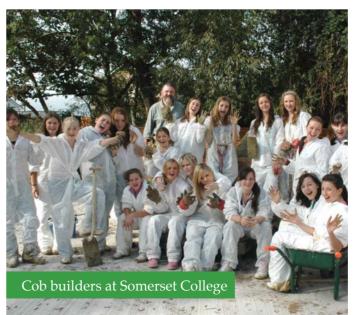
The College is closely linked to the Centre for Sustainable Futures at Plymouth University and was awarded scholarships for key academic staff to attend courses at Schumacher College, an international educational leader in holistic environmentalism.

Education for SD is being embedded into the curriculum. There is groundbreaking work on SD in the area of Teacher Training using the principles of action research. As well as engaging academics new to the profession it offers a progressive model to many other institutions.

Waste management is a key part of the College's SD strategy and recycling is given a high profile.

Local food is sourced by all catering contractors working for the College and Fair Trade is being promoted by the main catering contractor to the College alongside the encouragement of healthy food.

The College's carbon footprint was first calculated



in 2007 and a further assessment is being made in 2009. Targets have been set for improving the College's environmental performance in the Estates environmental strategy.

Achievements

- Development of a flagship centre for sustainable construction
- Provision of recycling bins sited throughout the campus, resulting in a considerable reduction of the quantity of waste sent to landfill
- Implementation of a Green Transport policy incorporating the use of Park & Ride (discounts for student/staff users), car share bays and the provision of cycling tracks. Cycling has also been encouraged by the provision of showers and increased cycle racks
- Introduction of biodiversity areas and schemes, including greenhouse/polytunnel vegetable cultivation and a staff and student 'veg box' scheme

Successful staff sustainability champions scheme

Developing a holistic approach and forward plans

Integration of SD throughout the work and activity of the College is well underway and continuing to be progressed. Green procurement is under investigation and unofficial buy local policies already exist. A student green group is being formed and a system of student environmental awards planned. The College works with numerous national partners including Eden, The National Trust, Hestercombe and the CITB.



South Devon College

South Devon College

Summary

Key features highlighted in this case study, include:

- The benefits of focussing on what makes a difference to students and is useful and practical
- Identifying and using a group of 'enthusiasts' to drive the College's SD work
- Involving learners and associate members of the college community – e.g. contract cleaners – in the development and implementation of SD initiatives
- Use of solar panels and rainwater harvesting in the design of new buildings

Context

South Devon College is a general further education college serving Torbay and the surrounding area in South Devon, including the South Hams. The College aspires to deliver outstanding teaching and learning and to provide the best possible learning environment for its learners.

In 2005-06 the College re-located to a new campus site at Vantage Point in Paignton. The campus is comprised of a fully converted pre-existing building together with specifically designed specialist buildings.

Since the move to Vantage Point, the College has experienced considerable growth in learner numbers and is now seeking to expand its existing accommodation at a cost of circa £20 million. An Application in Principle has recently been approved by the LSC and a full Application in Detail has been submitted.

The College delivers a wide range of provision including E2E and Adult Safeguarded Learning. It holds Centre of Vocational Excellence (CoVE) status for the Construction Trades and was the first college in the South West to achieve the Training Quality Standard in November 2007. It was one of ten providers selected for a BECTA Technology Exemplar Award in February 2008. In addition, the College has won Beacon Awards for Automotive, Engineering, Delivery of Learning Resources and Capital Development and Construction.

The College has recently been awarded 'outstanding' following a full OFSTED inspection.

The College aspires to excellence and inspiring its learners in a sub-region where the economic performance is below the average for the region.

Journey undertaken

The College has concentrated on what makes a difference to students and is useful and practical. Work on SD did not start with a top down policy. It started with a general invitation to staff to join a new Sustainable Development group for the College.



The group of enthusiasts, including a governor and subsequently the newly appointed procurement officer, came together in 2006. Three sub-groups were quickly established and worked on recycling and waste disposal, large projects such as building works and the overall curriculum. The sub-groups involved learners and sub-contract partners such as the cleaners. The approach was primarily one of finding out what staff and students wanted. In responding to the views expressed there was a focus on what would help make the student experience more valuable and interesting. In developing the College's plans consultations were also sought with the Carbon Trust.

²See page 35 for explanation of the BREEAM environmental assessment method

The College now undertakes a high level of recycling and has recently invested in a compactor and industrial shredder

Achievements

- The College now undertakes a high level of recycling and has recently invested in a compactor and industrial shredder, enabling all paper waste produced on site to be recycled. There has been some limited help with this through the Local Authority who are themselves at an early stage in their approach to SD
- Particular attention has been paid to the estate and the planned new build programme.
 Initiatives for the existing estate have included reducing energy consumption through a change in pumps, replacement of all car park lighting and the automatic shut down of computers overnight
- The new build programme includes the development of an eco-farm with six hectares of land to accompany the buildings. Design plans include solar panels, rainwater harvesting and effective thermal modelling to achieve maximum non-mechanical cooling. Five new buildings are to be constructed of which two will achieve a BREEAM² Excellent rating and the remainder a Very Good rating
- Marketing materials are now printed locally using environmentally friendly paper and dye.
 Neither plastic bottles nor chewing gum are sold on campus
- The Adult and Community Learning
 Department has established a programme of
 free talks and activities on SD to celebrate Adult
 Learners' Week. These activities were on the
 theme of the environment and recycling and

included sessions on biodiversity, composting, pollution, local food and farming and recycling including art projects with waste materials

Developing a holistic approach and forward plans

SD has become well integrated through all parts of the College by focusing on its value to students.

The sustainable agenda is incorporated into the College's key strategic aims and operational objectives with specific annual targets. The agenda aligns with the need for the College to be cost conscious, resource efficient and socially responsible. The College's VLE, plasma screens around the campus and the College Radio are being used to communicate to students that the work that is underway and as a means of consultation. Automotive students will be undertaking a full review of College travel arrangements in 2008/9 with a view to further reducing carbon emissions. The College's energy consultants are reviewing electricity consumption and usage to identify cost saving and cost efficiency initiatives. Water usage is being reviewed with a tap replacement initiative under consideration and the possibility of 'rain water collection' on the existing building to be used in all toilet facilities.





St Brendan's Sixth Form College



Summary

Key features highlighted in this case study, include:

- The role of ethos and values in encouraging students and staff to look at a wide spectrum of issues and activities relating to Sustainable Development (SD)
- The use of wide a range of enrichment activities to develop the interest and citizenship of the College's learners
- The development of a new building to set new standards for SD
- The implementation of a comprehensive Green Travel Plan, resulting in significant reduction in the use of motor vehicle journeys

Context

St Brendan's Sixth Form College, located on the South East edge of Bristol, is the "Catholic College for the community" and offers sixth form education for young people from the Catholic community in and around the Bristol and Bath conurbation. It also serves a wider community by welcoming all who are happy to be educated within an explicitly Christian environment. While it is intended that all the College's work should be imbued with Gospel values, there are two areas of provision which are central to the College's mission: the chaplaincy and the certificate of theology programme, called 'Spiritual Journey', undertaken by all full-time learners.

Through events arranged by the chaplaincy, all learners have the opportunity to take part in regular acts of worship, including the weekly Mass or ecumenical service, as well as engage in activities that promote social justice. The chapel is a peaceful space at the heart of the College. The twice yearly assemblies involve large numbers of learners in a thought provoking spiritual reflection.

Learner numbers have increased from 1,016 enrolled in 2003/04 to 1,545 in 2008/09. The large majority of learners are aged 16 to 19 and following A Level courses. Ninety one percent of enrolments are at Level 3. The College offers 42 AS and 41 A Level subjects, and seven A Level vocational courses.

Extensive recycling programme which includes paper, plastics and clothes, the latter being particularly successful

Provision at Level 2 has been recently expanded to meet the needs of a wider range of learners. Vocational courses as well as GCSEs at Level 2 now account for 8% of the College's enrolments. A small, but increasing, number of learners are engaged on Level 1 courses.

The College recruits from several partner schools in the Collegiate, but also from a wide catchment area extending beyond Bristol and Bath. The College has been very active in reaching out to learners from a diverse range of communities and faith groups. The proportion of learners from minority ethnic communities, at 19%, is more than twice the number within the local population. In many of the schools from which the College draws its learners, the proportion of pupils gaining five A*-C grades at GCSE is significantly below the national average.

Journey undertaken

The College's long-standing ethos and values is a major driver of SD. All full time learners take part in the Spiritual Journey programme. It covers a range of issues with an aim to develop the whole person and there is an encouragement for students to provide mutual support. There is also a concentration on citizenship through the tutorial provision delivered by student support managers who spend half of their time on these activities. There are various enrichment action groups, involving students in voluntary work such as Vinvolved and the Duke of Edinburgh scheme. Another group, 'People and Planet', promotes fair trade and campaigns to raise awareness of such issues amongst the College community. Many activities take place each year in support of a wide range of charities, both local and international. Students provide a senior citizens' party for those in the local community every year. There is a group involved in work that relates closely to that of Amnesty International. Students were involved in the Caring for the Environment Mass as part of the year for the Diocese. There is also an emphasis on healthy living and healthy eating, supported by the Every Child Matters framework, with fair-trade food available through the refectory with significant provision of physical activities and team sports. There is extensive recycling, including paper, plastics and clothes, the latter being particularly successful.

The College is engaged in a new building programme, for which there is considerable enthusiasm. This has already enabled better access to physical activities for students. The building programme is enabling a reduction in the carbon footprint and will at least achieve the higher end of Very Good of BREEAM² rating. The new building has high levels of insulation and a green roof. The green roof will provide a habitat for insects and some ground nesting birds as well as controlling water run-off. Toilets will be flushed with grey water. The building will be naturally ventilated with some forced convection. There is a ground source heat pump, and photovoltaic cells to provide energy. A proposed wind turbine did not receive planning permission. All computers are already automatically shut down overnight and the new build will also allow projectors to be turned off automatically. There will be no light switches in the new building, lighting being controlled automatically via movement, infra red sensors and daylight intensity sensors.



The current building is very poor and difficult to change.

Alongside the building programme there is a Green Travel Plan. Of the students, the majority travel by bus with less than 15% travelling by car. 10% of the students cycle and improved cycle facilities are being put in place. Buses are run by the College to supplement the public service. Staff are encouraged to cycle and car share. For staff, there is a bike purchase scheme in place and an offer of loans to buy season tickets, both of which have been taken up.

Achievements

- A wide range of student-focussed activities which encourage learners to develop informed attitudes to a wide range of issues, including SD
- New building programme and its emphasis on carbon reduction through both saving energy and use of sustainable sources
- A comprehensive Green Travel Plan, which had achieved significant reduction in the number of motor vehicle journeys
- Recycling facilities which also include clothes

Developing a holistic approach and forward plans

Whilst there is no policy for SD, activity has been mainstreamed by the senior team promoting a wide range of actions. The College ethos and values, together with the underpinning of Every Child Matters, the Spiritual Journey programme, citizenship and enrichment activities pull together the education for SD. SD in subject based curriculum depends on how likely the subject lends itself to this area together with the relative enthusiasm of those teaching e.g. the use of ethical cases in AS/A Level Law.

²See page 35 for explanation of the BREEAM environmental assessment method



Truro College

PENWITH COLLEGE COL

Summary

Key features highlighted in this case study, include:

- Opportunity to exceed minimum standards at the time of new build projects
- Rescheduling the start of classes to reduce the average travel time of learners to college
- Adoption of a range of measures to reduce energy consumption, including the automated shutdown of equipment
- Reduction in the quantity sent to landfill through the use of recycling receptacles, placed in prominent places
- Negotiation of discounts with the operator of local recreational, leisure and sports facilities as part of a healthy college programme

Context

Truro College (part of Truro and Penwith College), located in the far South West, is a tertiary college offering a wide and varied curriculum portfolio. All age groups, types of provision and levels are catered for, including 14 to 19 year olds, adult learners, engagement with employers and HE provision.

There are approximately 20,000 students enrolled in each academic year and the College employs some 600 academic and 500 support staff.

The average annual turnover is around £40 million and there are plans to extend further the curriculum provision. This is expected to include meeting subregional demand for training in the construction and catering industries.

There is an extensive new build and refurbishment programme planned for the College's Penwith Campus.

Journey undertaken

The first recognised steps towards Sustainable Development began over eight years ago when Truro College was required to submit a 'Green Travel Plan' in order to gain planning consent for a new building. The decision at the time was to go beyond the Local Authority requirements and to develop a student focussed travel plan. Although meeting BREEAM² thresholds was not a requirement for the new development, the new buildings for the College went beyond the requirements of the time and incorporated many features which are now seen as crucial to achieving sustainable builds.

The approach to SD at the College is unusual in that it has not been subject to formal policies, but has rather been seen as a key consideration in decision making at a senior level and as a result permeates down to operational actions.

The College's travel plan has led to the timetabling of classes for the later start of 09.15 in the morning. The impact of this change is a reduction of some 25 minutes in the average journey time made by learners in getting to college.

Waste management is another aspect of SD to which the college has given attention. This is currently managed and sorted at the Truro campus and covers all the main waste streams e.g. paper, plastic and cardboard. Receptacles are placed in all public meeting areas and offices. Compaction is used for waste destined for landfill. The College has also adopted a policy of reusing furniture and equipment where possible.

Reducing energy consumption has been another area of focus for the College. The use of information, communication and technology (ICT) equipment consumes a large amount of energy. Consumption has been reduced through a shutdown programme which commences at 17.50 with a ten minute warning, giving the user the opportunity to override the automatic shutdown if they wish. New lighting systems working on automatic timers, have also been introduced to reduce unnecessary power consumption.

There is a Healthy Campus philosophy that extends to both students and staff. A negotiated membership scheme offers heavily subsidised (student membership £20 a year, £25 a month for staff) access to recreational, leisure and sports facilities, including gymnasium, that are managed by Carrick District Council.



The College has adopted a policy of reusing furniture and equipment where possible

The Penwith campus is expected to benefit from a £33 million capital spend on new buildings and the refurbishment of existing facilities. The College aim, if possible, is to gain the BREEAM² Excellent grade for these developments.

Achievements

- Reduced travel times for learners travelling to the College, through adjusting the start time for classes
- Falling quantity of waste sent to landfill
- Extending the life of different assets by reusing furniture and equipment where possible
- The implementation of new energy management measures to reduce level of consumption
- Encouraging the use by staff and students of recreational, leisure and sports facilities by the negotiation of preferential discounts

Developing a holistic approach and forward plans

The College has made considerable progress in respect of SD practices. In the immediate term the redevelopment of the College's Penwith site will offer a major opportunity to broaden and deepen the College's knowledge of a wide range of SD practices.

²See page 35 for explanation of the BREEAM environmental assessment method



Wiltshire College

Wiltshire College

Summary

Key features highlighted in this case study, include:

- The development of clear environmental policy, key objectives in sustainability and a model of environmental sustainability
- Focusing Sustainable Development (SD) activities around four themes
- The appointment of SD champions across the College's four campuses
- Identifying a lead for taking overall responsibility for SD across the College

Context

Wiltshire College offers a wide range of over 1,000 courses across its four main campuses – Chippenham, Lackham, Salisbury and Trowbridge - and nine smaller education centres across Wiltshire. The College caters for a wide range of learners who undertake courses for leisure or vocational study.

The College aims to empower students to become independent learners, helping them to raise their self-esteem and enabling them to develop their personal and professional lives. The core values of the College are to:

- 1. Put the learner first
- 2. Deliver outstanding quality and innovation
- 3. Celebrate and respect diversity
- 4. Empower staff to maximise their potential
- 5. Provide an outstanding and responsive service to customers, employers and the community

Wiltshire College also offers a wide range of higher education accessible through its network of centres across Wiltshire. Currently, some 750 students are enrolled on full-time foundation degree and undergraduate programmes.

In 2007-08 the College went through a major restructuring and significantly increased its size. The College is currently engaged in a major capital build programme.

Journey undertaken

Sustainable Development is an important feature of Wiltshire College's work. The College's Environmental Policy states:

'Wiltshire College has a key responsibility to reduce its direct and indirect impacts on the environment. It is committed to implementing and achieving Learning and Skills Council (LSC) milestones through its business activities. It also has a key-influencing role in promoting sustainable development through the education process.'

Through its environmental policy the College has established a number of key objectives. They are to:

- Carry out audits of consumption and management of energy, water and waste
- Implement environmental management system (EMS) BS8555
- Ensure College buildings through their design and operation demonstrate good practice in SD
- Encourage biodiversity on all sites
- Implement procurement practices that reflect social and environmental as well as economic aspects
- Support local markets and/or promote Fair Trade
- Implement a travel plan to reduce the environmental impact of travel
- Embed SD concepts or approaches into the curriculum

Chippenham is developing as a Healthy College Campus

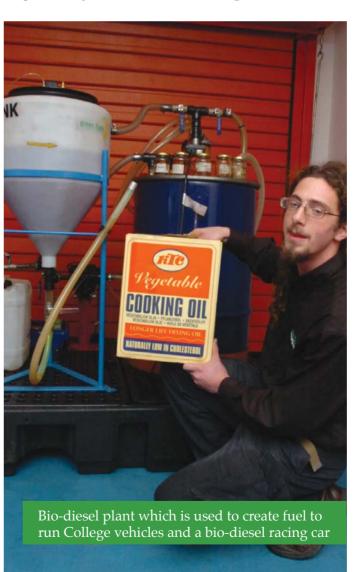
The College is committed to reviewing its policy every three years or as required in response to changes in the organisation or legislation.

In line with its Environmental Sustainability Policy, Wiltshire College has adopted a model of Environmental Sustainability.

The College's activities are focussed around four themes in relation to SD:

- Leadership and Management
- Teaching and Learning
- Business and Community
- Building and Estates

18 SD champions have been appointed, four of whom each take the lead on the SD themes. The lead for Leadership and Management takes overall responsibility for SD across the College.



The appointment of 18 enthusiastic SD champions drawn from across the College is designed to assist the development of a whole organisation approach

Already established is an Environmental Sustainability Reporting Schedule, which contains 18 key objectives with planned activities listed against them. Activities monitored on a regular basis and actual activity is placed alongside the planned to identify any variances.

Achievements:

- Development of a model of environmental sustainability for the college, focussing SD activity around four themes
- Appointment of a significant number of SD champions

Developing a holistic approach and forward plans

Integration of SD throughout the work of the College is growing and is being driven by a model which involves all parts of the College.



Summary of key outcomes

Summary of key outcomes from the questionnaire survey and investigations carried out in developing the case studies

The survey revealed that the Further Education Colleges (FECs) in the South West demonstrate a wealth of good practice in Sustainable Development (SD).

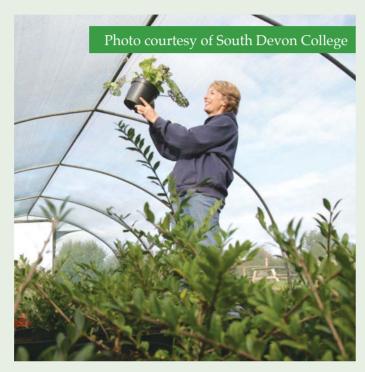
The survey returns highlighted a number of general issues:

- All colleges have started to engage with SD and are beginning to become more action orientated
- In some instances there is a gap between stated policy and colleges taking action to change behaviour and/or practice
- The majority of colleges have started to make some progress in the areas of waste and energy management, but there is now an opportunity, in a number of cases, to take a more strategic and integrated approach
- SD activity in the area of Buildings and Estates has often been triggered by legislative and/or financial pressures
- Detail on curriculum changes to accommodate SD was often missing from the completed questionnaires raising the question of whether this area requires greater attention
- Many colleges are extremely active in the area of business and community, but this engagement has not generally extended to SD

Turning to the specific strands of SD examined by the questionnaire, the following examples of good practice can be highlighted:

Leadership and Management

- Examples of good organisational models with clear objectives and targets applied to all parts of the college
- Strong commitment from senior managers towards the objectives of SD
- Achievement of high levels of commitment throughout the College community



- College ethos that enhances students' knowledge of, and involvement in, SD
- Clear environmental/sustainability policies
- The introduction of a green procurement policy including, for example:
 - 1. use of ISO 14001 accredited companies e.g. furniture suppliers
 - 2. Fair Trade status being actively sought together with increasing emphasis on local purchasing of food supplies
 - 3. Central premises team using local labour and reusing furniture, materials and equipment, e.g. reuse of lab or art room materials
- Appointment of full-time Sustainable Development Champions

Teaching and Learning

- Effective partnership working, for example, construction students' work on straw bale building. This can be seen at http://occombefarmstrawbalebuilding.blogspot.com
- Sustainability conference for applied arts students 2009
- SD incorporated into the curriculum (using four areas of the SORTED approach)

Buildings and Estates

- New building programmes with SD designed in at an early stage, including proposed development of an eco-farm
- Good use of Salix¹ grants for lagging, boiler management, lighting control, etc
- Expertise about renewables, including biomass boilers, wind turbines and bio digester; offering both direct benefits as exemplars for teaching and to external organisations
- Energy management systems, including automatic shut down of student computers overnight
- Good waste management strategy
- Drinking water delivered by the mains throughout the College, enabling the retail shop to stop selling bottled water
- Reduction in water use within an old building
- Waterless urinals installed in 1999 at the largest campus, saving £9,000 on water bills per annum and achieving a payback in nine months
- Green Travel Plans, for example, use of Park & Ride (discounts for student/staff users), car share bays, cycling tracks through college, supported by showers and changing facilities and increased cycle racks and walk-to-work
- Recycling arrangements
- Biodiversity areas and schemes for greenhouse/ polytunnel vegetable cultivation, including a staff and student 'veg' box scheme
- Calculation of the carbon footprint and an energy reduction action plan with targets linked to this established
- Good knowledge of the issues across buildings and estates
- Key performance indicators identified

Business and Community

- Twinning arrangement with Tanzania
- Active engagement of the student body in the promotion of healthy eating and fair trade
- Student green group formed
- Development of student environmental awards



¹ Salix Finance is an independent public funded company, set up in 2004, to accelerate public sector investment in energy efficiency technologies through investment in save schemes. Salix receives funding from the Carbon Trust, and grants from the Learning and Skills Councils for the FE sector have been periodically managed through Salix. For further information go to: http://www.salixfinance.co.uk/home.html

¹See page 33 for explanation of Salix Finance



Summary of key outcomes

Barriers to success

The questionnaire and discussions with colleges in connection with developing the case studies allowed consideration to be given to the barriers to developing SD practice either further, or more quickly. Barriers to success identified, included:

Leadership and Management

- Lack of effective communication
- Lack of attention to changing the staff culture
- Competition for resources given other priorities
- Balancing business and SD pressures e.g. cost of transporting students to College
- Weaknesses in the knowledge basis. i.e. what works and evolving practice
- Initial outlay in terms of funding and cash flow
- Ensuring that there are financial benefits from any piece of work

Building and Estates

- New build costs make it extremely difficult to meet the BREEAM² excellence threshold. Consideration might be given to seeing if the LSC can provide examples of where this standard has been achieved in a costeffective manner
- Existing buildings and their inherited problems
- Lack of sub-metering of energy use
- Practical issues, regarding location of recycling bins in a city centre campus
- Lack of understanding by architects of sustainability issues
- Increasing costs of alternative sources of energy

Teaching and Learning

• SD is yet to be recognised as central and given sufficient weight by the LSC/ OFSTED, etc.

Lessons learnt

The survey return also indicated that colleges have learnt many lessons from their work in relation to SD to date. Here are a few examples taken directly from questionnaire responses:

- It takes longer than you think. Shotgun doesn't work
- Make it practical
- It is always important to heighten the profile of achievements and to feed back success stories and new developments
- The necessity of support from senior managers, clarity of roles and a framework
- Progress must be targeted, reviewed and evaluated, but must be realistic
- High profile and quick wins are essential for both staff and students



- It is necessary to have bite size pieces of work which staff can see achieved
- The curriculum programme must be flexible and adaptable
- Cross College Sustainability Working Group has helped make a significant advance in getting SD into the academic areas
- The new builds offer an opportunity to display excellence in green construction
- It is necessary to integrate SD into college activities and business functions

² BREEAM claims to be the world's most widely used environmental assessment method for buildings. BREEAM assesses buildings against a set criteria and provides an overall score which will fall within a band providing either a Pass, Good, Very Good, Excellent or Outstanding rating. Many agencies have adopted BREEAM as the benchmark for assessing the sustainability of buildings. For further information go to: http://www.breeam.org/index.jsp

- It is important to plan properly and to check what the returns are against the initial costs. (Adoption of Renewable Technologies is discouraged by long payback periods.)
- Regarding BREEAM ratings, the College is conscious of different demands on ratings by different funders e.g. RDA requires Excellent as opposed to Very Good. The Excellent rating can cost 20% more than Very Good
- As in most colleges some litter was a problem.
 For example, gum but stopping the sale on site vastly reduced the problem
- Wind turbines on roofs have not worked well (Planned target = 33,800 kWh/a against an actual achieved = 8000 kWh/a). Although they do have a tremendous 'wow factor' for any visiting SD enthusiast
- Financial robustness of a college affects willingness to adopt SD although much can actually be done without additional funding
- New legislation like the Hazardous Waste Regulations can be the key to unlock an extra staff position, e.g. Sustainability Officer
- Good energy management needs extensive sub metering
- There needs to be a 'crisis' to achieve a change in people's travelling habits. For example, loss of parking due to a college redevelopment
- Consultants claiming SD skills need to be tested to ensure they do have such skills. Many around do not
- SD is an extra skill that will need consistent extra effort until it becomes a subconscious experience.

- Until then scarce time and finances can easily drive out good intentions
- Getting your catering and cleaning contractor to change their approach on purchasing and menus is really hard work but don't weaken. Change the contractor if necessary and certainly make your SD approach targets for key contracts
- SD is fun. It adds a new dimension to your job that is interesting and rewarding. It does mean extra effort and not being discouraged when obstacles appear; go round them
- Looking after the environment has proved popular with Not in Employment Education or Training students (NEETS)

What might colleges have done differently?

Colleges were also asked to reflect on their experiences and if they would have done some things differently. A number of comments were offered:

- The education of students should have been a higher priority
- An excellence rating in BREEAM should have been considered at the outset rather than trying to fit it in part way down the planning route
- We would have got recycling underway more quickly, taken up further opportunities for recycling and if possible have included kitchen waste which currently appears too expensive
- The College should have introduced a second biomass boiler for heating which should be bigger and more efficient than the first
- We could have given staff the Green Travel Plan earlier
- We could have increased the clarity of roles and who does what



Key conclusions and recommendations

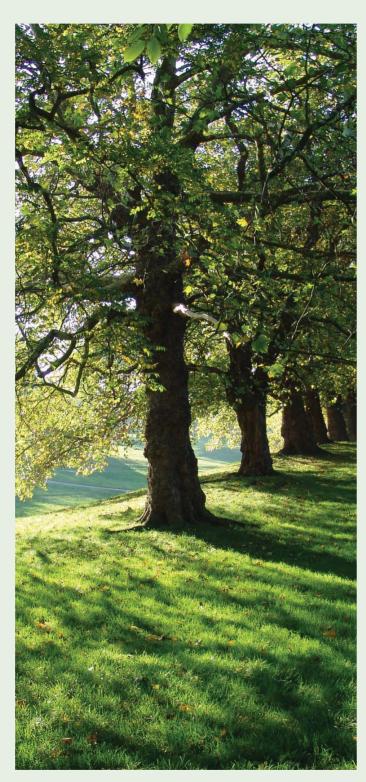
Arising from an analysis of the questionnaires and work undertaken in relation to the case studies there is a strong sense that expert knowledge and good practice within the FE community could be beneficially shared to enable an enhanced level of understanding and commitment across the region. In addition to the technical aspects of SD, more general issues including achieving effective communication and achieving high levels of staff awareness, commitment and engagement are potentially important.

Development of a central resource for the region based around a web portal

Many of those interviewed were keen to have a central resource point with someone to e-mail or phone in order to gain up-to-date information rather than all colleges having to commit separate resources towards the same end. A common resource might be configured around a web portal as detailed below.

The features of the website might include:

- Good practice examples
- Easy access to summary information about new SD initiatives
- Guidance on, say, forthcoming changes in legislation
- Best practice document with checklists. (NB. the NHS has had such documents for some time.)
- Email alerts
- Email contact help line
- Discussion forum e.g. what is important to measure and how to know when you are succeeding or how do others get staff to turn off equipment overnight?
- Video conferencing facility



The website might also have a number of specific sections, for example:

Leadership and Management

- Actions to raise awareness and gain commitment
- Job descriptions of sustainable roles and responsibilities
- Performance management systems

Curriculum Development

- Curriculum materials for different aspects of SD
- Advice on the accreditation of units or programmes for SD
- How to integrate aspects of SD within the constraints of a defined syllabus

Building and Estates

- Advice and guidance to achieve BREEAM Excellent
- Assistance with recycling methods and opportunities
- Advice on the introduction of an Environmental Management System
- Information on grants such as Salix

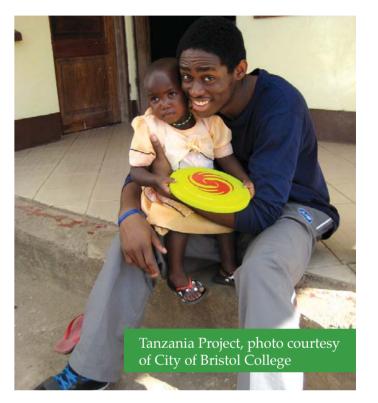
Procurement

- Information on achieving sustainable procurement
- Linked to the web portal there would be an opportunity to develop a 'community of practice' in SD, building on the initial work of the AoC SW's Sustainability Group

Emerging continual professional development needs

Linked to the development of a web portal a number of CPD needs were identified. These included:

- Support for colleges in developing a business case for SD
- Assistance in developing and embedding SD in the curriculum, using a number of approaches.
 For example, as a stand-alone topic, as part of an enrichment programme, or integrated into the existing units



• The delivery of good practice models in leadership and management. In developing these models it is recommended that further work is undertaken drawing on the current report

SD and Business and Community activity

• The issue of how business and community activity might be linked to SD should be explored. This could be part, for example, of the corporate social responsibility of colleges in seeking to engage with the deeper values of the SD agenda and help others to do the same





Colleges in the SW are contributing significantly to the Sustainable Development (SD) agenda and a raft of excellent practice exists.

Leadership and Management

We need to communicate the message that sustainability in all its forms is the right thing to do.

There is a need for clarity and understanding of what sustainability means to your organisation, what it involves and how it can be responded to.

We need to involve all stakeholders in embedding sustainability throughout the organisation.

Teaching and Learning

Increasingly the student body is aware of sustainability and how your organisations responds to this issue, so work with them.

The embedding of sustainability varies greatly across curriculum and enrichment; a curriculum audit is essential.

Buildings and Estates

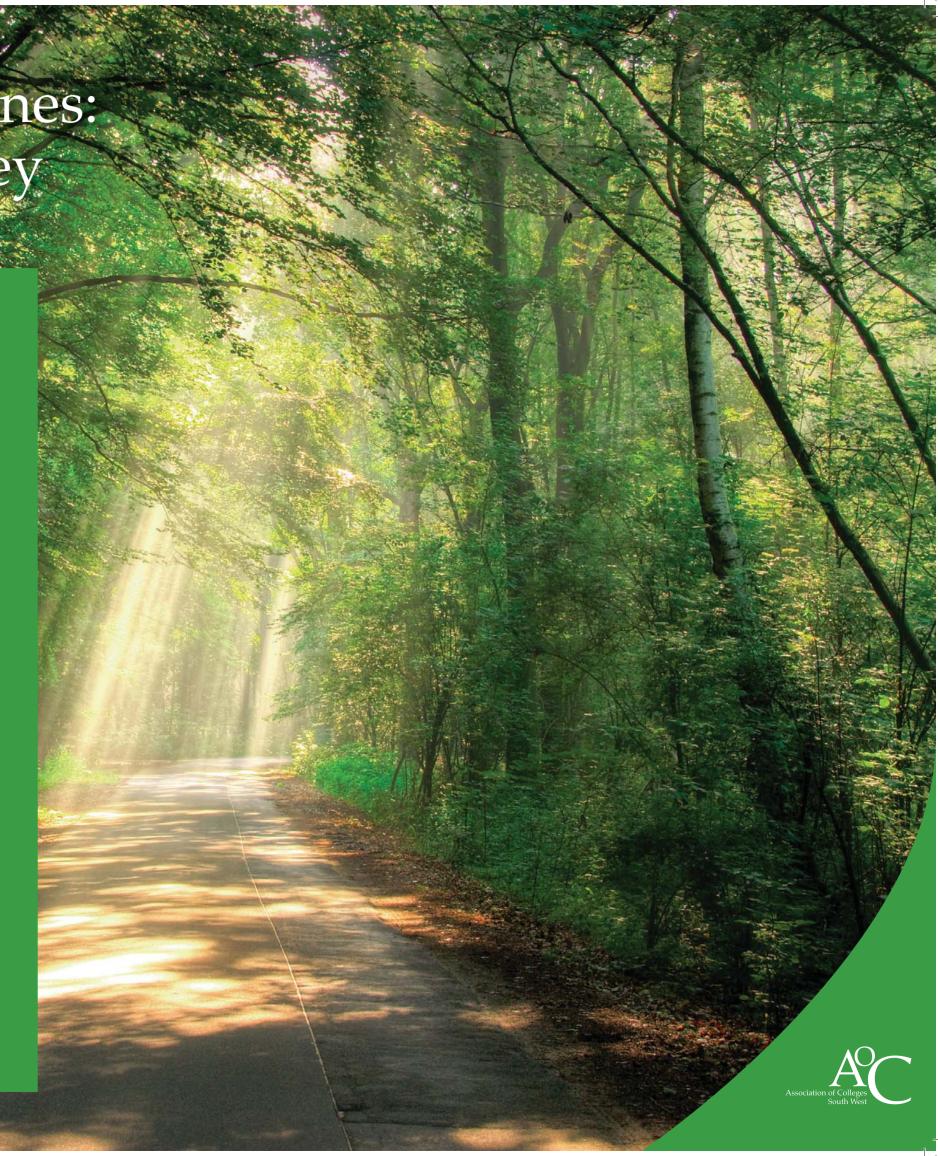
There has been a lot of focus on Buildings and Estates and many lessons have been learnt.

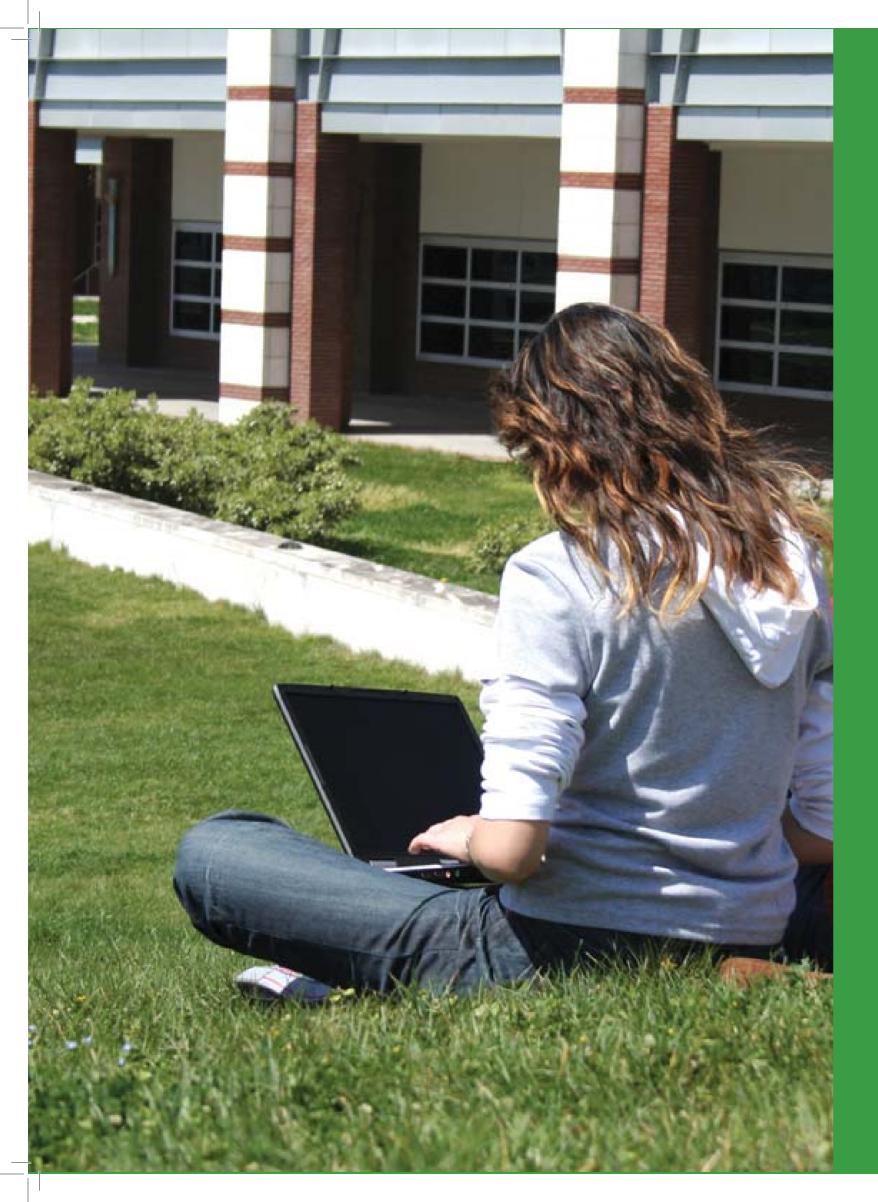
Sub metering of energy use is underutilised and is an effective strategy to pursue.

Practical issues (such as location of recycling bins) are often difficult to resolve, there are many examples of good practice to help you with this.

Business and Community

Colleges could capitalise more effectively on their position as a business in their local community as a lead learning organisation to embed sustainable development.





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