

## LSIS funded Apprenticeships/Getting People into Work Projects

### PROVIDER END OF PROJECT REPORT

**Project Title:** Enhancing continuous professional development (CPD) in the quality of teaching and learning for green skills and low carbon in Construction and Built Environment Apprenticeships

#### Section 1: Introduction

***Outline of own organisation, provider partners, and the project aims and objectives.***

Hartlepool College of Further Education (HCFE) is a medium sized College located in North East England. Excellence is a key strategic driver, coupled with a strong emphasis on employer engagement. The College champions Science, Technology, Engineering and Mathematics (STEM); Skills, Competitions and Awards; Teaching and Learning: Skills; and Teaching and Learning: Outstanding practice.

Michael Bretherick, College Principal and Chief Executive is the Chair of the Association of Colleges (AoC) National Strategic Skills Group for Construction and WorldSkills UK Champion North East education champion. The College is also the North East lead hub for the National Skills Academy Environmental Technologies (NSAET).

LSIS support and development funding for the Skills and Employer Responsive Development – Apprenticeships/Getting People into Work strand - provided the ideal opportunity to explore improving the quality of 'Green Skills'.

Recent reports including Meeting the Low Carbon Skills Challenge<sup>1</sup> (BIS March 2012) and Skills for a Green Economy<sup>2</sup> (BIS October 2011) identified the need to improve the quality of training in teaching skills for the green economy. This project focused on continuous professional development (CPD) for Further Education Colleges (FECs) developed by experts and partnership with industry leaders.

Selecting partners active in the low carbon arena, the partnership project focused on the enhancement of CPD to improve the quality of teaching and learning; and centres on the inclusion of 'Green/Sustainability' as value added content in the delivery of existing construction and the built environment Apprenticeship frameworks. Project partners were selected for their role with

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<sup>1</sup> <http://www.bis.gov.uk/assets/BISCore/corporate/docs/L/10-849-low-carbon-skills-consultation.pdf>

<sup>2</sup> <http://www.bis.gov.uk/assets/biscore/further-education-skills/docs/s/11-1315-skills-for-a-green-economy>

the NSAET and membership of the AoC Strategic Skills Group. Partners are:

- Bedford College;
- Highbury College;
- Leeds College of Building;
- Redcar and Cleveland College; and
- Sunderland College.

Apprenticeship frameworks are often viewed as rigid, as they are sector specific and for a defined job role. The slow pace of change in the development and refresh of qualifications, has failed to address industry pace of change in sustainability and the low carbon agenda, particularly when it comes to technological advancement.

The project aimed to address Apprenticeship framework rigidity by developing structured CPD, high quality teaching materials and learner resources to disseminate and embed 'low carbon' and 'green skills' across the schools of:

- a) Construction Crafts; and
- b) Building Services Engineering and Environmental Technologies.

### **How and why did the project emerge?**

As the North East lead hub for NSAET; proactive member of the AoC and regional lead with the British Association of Construction Heads (BACH); the College recognised the importance of CPD in its' strive for excellence in teaching and learning.

Skills for a Green Economy (BIS 2011): Institute for Learning: Green economy survey, identified the need for more CPD in green skills and stated that CPD should include exchange of good practice and in giving teachers and trainers time to do this.

CPD opportunities for 'Green Skills' focused on individuals and individual areas of specialism, predominantly as new technologies emerged, for example Solar Photovoltaics; Heat Pumps. The College felt it was vitally important to review its approach to CPD. It developed a pragmatic whole school approach to CPD taking into account the key themes of sustainability and retrofit. CPD activities included the following.

- Developing Master Trainers via a Master Class delivered by a National Centre of Excellence.
- Developing the role of a Green Skills Champions leading low carbon CPD.
- Developing the role of a Green Skills Champions, providing all Construction Crafts and Building Services Engineering and Environmental Technologies lecturers with the opportunity to receive structured CPD to develop their green skills knowledge and understanding.

The College recognised the importance to link with like-minded and proactive partners to support the project and secured key partners to develop and 'test'

new resources and approaches to CPD.

### **What was the starting point?**

One way to accelerate the pace of change is through the inclusion of a sustainability module in Apprenticeship framework delivery. Delivery however is dependent upon excellence in teaching. Currently CPD for low carbon is ad-hoc as it is heavily dependant upon the individuals' specialist teaching area.

Partners voiced a CPD 'wish list' that would assist in structuring CPD. It included the following items.

- CPD best practice guide - How others do it.
- Virtual learning environment (VLE) materials to support attainment of relevant and up-to-the-minute knowledge and understanding aligned to a national accredited qualification.
- Support from industry, through a mentor.
- Support from Further Education partners, sharing best practice, developing ways of working and CPD tools in partnership.
- Support from LSIS, this project; improved use of Excellence Gateway.
- Resource library for learner materials.
- Overview of national strategy and current drivers.

The outputs of the project were based on this wish list, together with an evidenced based report.

## **Section 2: Activities**

### **Who has been involved?**

Project partners are:

- Bedford College;
- Hartlepool College of Further Education;
- Highbury College;
- Leeds College of Building;
- Redcar and Cleveland College; and
- Sunderland College.

The project has been continuously supported by LSIS.

HCFE as lead partner developed the project concept and submission. Upon approval it liaised with like-minded FEC's via the NSAET and AoC groups to agree and confirm project partners.

HCFE created the development plan; budget and extension development plan and associated budget. HCFE worked with partners to develop partner development plans; gathered the evidence base and determined the focus and thematic leads for CPD development. HCFE managed the partners and

provided support through effective communications via a range of techniques. They arranged a face to face partner meeting at Highbury College, Portsmouth and combined with on-site tours of the College to view environmental technologies in-situ and in the teaching and learning environment.

As lead partner, HCFE devised and developed the following items.

- Agenda.
- Terms of Reference.
- Project budget and financial management update.
- Development Plan and Partner Development Plan.
- Evidence based report.
- Skills Champion role description.

Highbury College offered to develop a sustainability CPD resource, accessible from the VLE and aligned to national occupational standards and Qualifications and Credit Framework (QCF) qualifications.

Bedford College offered to develop Retrofit CPD resources focused on Construction, to compliment CPD already available for Building Services Engineering, in the form of PowerPoint and Hex Games.

Redcar and Cleveland College, Sunderland College and Leeds College of Building have provided regular, on-going feedback and advice to shape the resources. Redcar and Cleveland College provided a 'trial' CPD event in August 2012 to showcase the new resources. HCFE have developed a MasterClass with Narec, the National Renewable Energy Centre, which will be delivered to the four Northern partners in early Autumn, 2012.

### **A summary of what has happened so far?**

The development plan, extension plan and associated budgets were submitted to and approved by LSIS in February 2012.

Partners were secured early, January to February 2012 and provided with a clear role and purpose. LSIS provided project support and direction, developing an excellent working relationship with the lead and project partners.

Initial communications were achieved through telephone conversations and email. A face-to-face meeting at Highbury College produced a highly commendable event, combining site tours, a project update and review. This was supported by a broad range of high quality documents.

By early July 2012 the planned outputs detailed below, had been achieved.

- Six Further Education providers actively engaged.
- Agreed ways of working with LSIS and peer support group.
- Clear methodology for project development and implementation.
- Strong evidence based; resulting in the production of a structured report to confirm and support the starting point.

- Structured CPD for staff in the two schools of Construction Crafts and Building Services Engineering and Environmental Technologies.
- Development of a Master Class for specific School staff to 'champion' green skills and low carbon.
- High quality tutor materials via Highbury College Ascentis VLE and Bedford College Retrofit.
- High quality learner materials.
- Two minimum staff engaged with the baseline evidence phase; supported by the six Further Education partners.
- Green Skills Champion Role outline.
- Production of a final report for LSIS, Summer 2012.

The following has been scheduled:

- Trial CPD event facilitated by Redcar and Cleveland College, planned August 2012.
- Production of a Case Study, which will be accessed via the LSIS. Excellence Gateway, planned September 2012.
- Master Class facilitated by Narec, planned 4 September 2012.

**Were changes made to plans during the project? If so, why were these necessary?**

The original project identified the need for lecturer CPD resources and teaching resources. Initially these resources were seen as two separate developments. However Highbury College developed a VLE resource, which aligned to national occupational standards, national QCF qualifications and the Ascentis Award in Environmental Sustainability Level 1 and Level 2. This development resulted in one resource with dual purpose that met the needs of both lecturer and learner.

Bedford College offered to *plug the gap* in terms of Retrofit CPD materials, focused on the Construction Skills sector footprint and therefore an additional output included the production of high quality PowerPoint and Hex Games aligned to the national strategy, Green Deal.

### **Section 3: Working in partnership**

**How easy was it to establish the partnership?**

It was relatively easy to establish the partnership due to existing and developing relationships via the NSAET and AoC.

**How effectively did the partners work together?**

The partners were active and productive. They offered their views openly and provided updates and input when requested. Three of the five partners provided a more hands-on approach, offering to design, develop and test resources. Two partners concentrated on quality feedback.

The partnership was effective in that it produced the planned outputs, within the timescales and budgets planned.

**Were there any issues to overcome? If so, how was this done?**

LSIS provided excellent support, giving direction, guidance and a nudge or two to keep the project on track and within the prescribed reporting procedures. This ensured that the project remained on schedule and within budget. There were no concerns to overcome.

**What advice would you give to providers in future projects, which are new to partnership working?**

- Secure excellent partners but don't dwell on geographical location.
- Develop a relationship with LSIS early on in the project to develop ways of working and agree milestones to achieve success.
- Actively contribute, even if it face to face is not an option.

**Section 4: Impact****What has changed? What difference has the project made?**

We now have a comprehensive CPD offer for lecturers engaged in green skills across schools for Construction Crafts and Building Services Engineering and Environmental Technologies. The development of a Master Class is key and the model is adaptable for others to use as best practice. The Green Skills Champion provides clarity on the role of a green skills lead, building on the Master Trainer attributes and providing a framework to ensure that the role has longevity. The development of high quality CPD resources enables the College to provide a structured CPD programme for all staff within the two schools, which will ensure that all staff have the same opportunity to gain knowledge and understanding of green skills. Those that have undertaken the Master Class, embedding their role as Skills Champion within the College, will deliver the CPD.

**Are there any measures that demonstrate the impact the project has had? (e.g. for learners, staff, employers, your organisation)**

Throughout the project, partners have effectively engaged to give feedback on the content and design of the CPD resources, which provides ownership of the final products. Quantitative measures will be known once the CPD has been delivered. For example staff will have the opportunity to undertake the Ascentis Environmental Sustainability Level 1 and Level 2 qualification.

**Were there any unintended outcomes from the project?**

Overall it was an excellent experience. Putting together a 'virtual' team and achieving what we have is commendable. Key strengths include our approach to project management, partnership working and working to our strengths to produce a great range of products that can be used by the wider Further Education sector.

Highbury College hosted site tours and the project team meeting during May 2012, which proved extremely beneficial, generating new working

Relationships, knowledge and understanding. The visit shared best practice, allowed for questioning and debate, offered solutions for development, which shaped and enhanced the project.

Unintended outcomes included:

- Dual purpose CPD resource: the Ascentis Environmental Sustainability VLE resource, met learner resource needs as well as lecturers.
- In turn this meant that the surplus funds were transferred to an extra CPD resource, focusing on Retrofit, aligned with the national Green Deal strategy.
- Sector Mentor: the Master Class, developed with Narec, proposed a sector mentor for each participating lecturer.

## **Section 5: Success and challenges**

**What have been the key achievements?**

- Collaboration and true partnership working.
- The resources.
- A successful project.

**What has been critical to the project's success (up to three things)?**

- LSIS support.
- Leadership by the lead partner.
- Collaboration.

**What have been the key challenges (up to three) and how were they addressed?**

- Initially geographical location of the partners.
- Synchronising each theme, timing, content and design to ensure that the resources complimented each other.
- Time.

## **Section 6: Resources produced by the project**

**What resources have been created to share?**

1. **Green Skills Champion role outline**
2. The **Environmental Technology Master Class** for National Skills Academy Environmental Technologies (NSAET) Master Trainers schedule
3. The **Green Deal: Low Carbon Retro-fit of Buildings (tutor guidance)**  
3a. **The Green Deal: Low Carbon Retro-fit of Buildings (power point)**
4. Dual purpose CPD and learner resources aligned to national

occupational standards, national Qualifications and Credit Framework (QCF) qualifications and the national strategy, Green Deal. These resources take the form of a **Green Deal Hex Game** for three topics:

- Energy assessment and advice
- Environmental technology
- Insulation/energy reduction

Each topic has three related resources, (a) instructions on how to play the Green Deal Hex Game, (b) thirty questions and answers and (c) the hexagonal question and answer game pieces.

#### **Who are they for?**

- Lecturers predominantly
- Ascentis VLE resource offers a resource for both lecturing staff and learners.

#### **How could they be used?**

**The Green Skills Champion role outline** will be of interest to providers looking to develop a role promoting low carbon and sustainability in construction crafts/building services, engineering or environmental technologies. The **Environmental Technology Master Class** showcases an example CPD event for up skilling the Green Skills Champion.

**The Green Deal: Low Carbon Retro-fit of Buildings tutor guidance** accompanies the **power point (3a)** of the same name **and** is designed to be delivered as an interactive question and answer session to students or staff. The **Green Deal Hex Game** is a versatile multi purposed resource. It is designed for a virtual learning environment or it can be used interactively in a classroom to develop knowledge and stimulate debate in the three topics of Energy assessment and advice, Environmental technology and Insulation/energy reduction. The resources can be used as handouts, preparation for CPD or to support the delivery of the Ascentis Award in Environmental sustainability, level 1 and 2.

## **Section 7: Future planning**

#### **What plans do you have for building on the work/outcomes of this project?**

The College has plans to develop and produce a Sustainability Strategy, which will describe the College's approach to reducing its carbon footprint, potentially looking to utilise national standards such as the Carbon Trust as a benchmark for good practice. We will work with project partners to develop our strategy and approach, using best practice and guidance from leaders in their field.

We will share the resources developed, our approach and ways of working



with partners and via the LSIS Excellence Gateway. Specifically we will share the project outcomes with the NSAET lead hubs and partners; also via AoC Strategic Skills Group members.

**What plans, if any, are in place to continue working as a partnership?  
How is the work of this project sustainable within the lead organisation  
and in the partner organisations?**

All of the partners are members of the NSAET, either as a lead hub – Bedford College, Hartlepool College, Highbury College, Leeds College of Building; or partner. Redcar and Cleveland College and Sunderland College will continue working together via the national academy team. We will share the resources, our approach and ways of working to cascade to a widest possible audience.

**Section 8: Contact details**

Name of lead organisation: Hartlepool College of Further Education

Name of Project Manager: Sally Gardner

Job title: Business Development Manager Construction and Environmental Technologies

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**Please confirm that you and your organisation agree that LSIS may put  
this report on the Excellence Gateway**

*(double click in box below)*

Yes ☒

No ☐

**May we include your contact details in the report for the Excellence  
Gateway?**

*(double click in box below)*

Yes ☒

No ☐