

East Midlands Collaborative Partnership for the Regional resources repository supporting innovation in sustainable construction for business

Lincoln College



Project Synopsis

A regional resource repository (ConstructionSite) along with the Innovation in Sustainable Construction consortium of college partners, have been brought together under this new LSIS project, together with other interested parties proposing to develop further accessible, skills transfer activities around sustainable construction technology for the construction industry in the East Midlands. We want to build on the good work already completed and increase the content of the modules based on input from employers.

Project aims

The aim of the project:

To initialise an educational consortium of at least six East Midland educational organisations and to collaborate in the development and delivery of provision that meet construction industry business needs, specifically applying innovation in Sustainable Construction. Incorporating a strategy of partner engagement within the sector, and the wider East Midlands, greatly enhancing economic opportunities and seeks to avoid duplication.

As courses develop, the aim of the East Midlands Academy Cluster has been to offer all new Environmental Technology provision within its geographical base to employers. An anticipated high demand is expected, further provision within the cluster will be developed as future markets emerge.

The project partnership has sought to initiate ideas across a broad range of sustainable activity but especially those that address the following areas:

- 1) The development of training provision resources or services to support the uptake of resource efficiency and low carbon technologies.
- 2) Technology showcasing to facilitate the market readiness of new products and services.

Project delivery

Since the NTI Pathfinder and LLN's came to an end, the take up of further initiatives such as the LSIS East Midlands Collaborative Partnership for the Regional Resource Repository has been established to continue supporting Innovation in Sustainable Construction for Business project, East Midland Construction Built Environment

The establishment of the East Midlands Skills Academy Cluster has a membership of 9 educational organisations throughout the East Midlands:

- Stephenson College
- Lincoln College
- Chesterfield College
- Leicester College
- South Leicestershire College
- Moulton College
- Grantham College
- Derby College
- Northampton College

The development of collaborations between Small to Medium Enterprises (SME's) businesses has resulted in environmental and resource efficiency improvements. The collaboration has identified opportunities for environmental or resource efficiency improvements within companies themselves or through the development of new programmes or services. The aim is to support the project post funding and ensure that the innovative networking, sharing best practice and collaboration between the Pathfinder Colleges continues, extending to other training providers.

Each partner are engaged in the curriculum development of sustainable construction technology and continuously active in promoting new technology in construction to employers and the industry in order to generate demand. Development of new courses, projects and sharing of best practice have been disseminated throughout the partnership.

The partnership has developed excellent further links with both universities, other FE colleges and other training providers in the East Midlands, utilising the existing NTI network and the AOC energy task group. Through the NTI pathfinder project the original partners appointed a specialist advisor to promote innovative methods of sustainable construction. This has involved five FE colleges in the East Midlands working together to give a series of joint presentations on innovative sustainable construction within the East Midlands.

This was launched at the EXPO 2009 event at the Walkers Stadium in Leicester April 2010. Through the network, the colleges also have input into the development of new units of accreditation for both the Plumbing and Electrical sectors. Members of the partnership and NTI network sit on both the Summit Skills and Construction Skills qualification advisory groups. The partnership has representation on the NAPIT Micro generation certification scheme and is looking to work with NAPIT in the future to develop suitable sustainable training programmes to support applicants to the scheme.

What did you learn from the project?

The partnership working through the East Midlands Skills Academy Cluster have identified new provision as it continues to develop demand in the industry. The partnership wishes to further enhance and expand on this project with the option to be able to offer training in rainwater harvesting, grey water recycling and heat pumps.

The development of dedicated facilities to deliver Environmental Technologies centers are supporting both training of full time students, apprentices and employers. Training consists of both formally approved qualifications as well as bespoke employer courses.

The Summit Skills Qualifications currently available in QCF include Solar Thermal, Photovoltaic's, Heat Pumps, Water Harvesting, and environmental technologies awareness.

Within the East Midlands Skills Academy Cluster, there is further capacity to offer the majority of these programmes and technologies.

What were the views of key stakeholders?

The partnership members are committed to the promotion of sustainable technologies and developing sustainable technology programmes to employers and the industry. All members of the partnership have made significant contribution to attaining sustainable curriculum materials, equipment and participated in marketing and awareness raising events for employers. This has been viewed as a positive and useful start to creating a demand for sustainable technologies. The views of employers indicate that they wish to continue to be proactive in the development of courses and contribute to the curriculum development where appropriate.

Were there any unforeseen issues?

The current economic downturn has slowed the project from reaching its full potential within planned time frame. Also challenges presented by employers cutting back on training budgets and focusing on survival have presented new and alternative approaches for the creation and availability of bespoke short accredited courses utilising on-line materials and blended learning techniques.

Slow down in response of business advisor partnership activities together with the successful conclusion of the Lifelong Learning Network has resulted in the non-take up of Construction site web site. funding for on-line resource by key partners has changed, emphasis of the web-site being used as a curriculum development resource has become independent. Despite this, efforts have been made to widen the availability of the web-site to a national network of partners. The web-site resource is planned to be funded through subscriptions provided by partners and no longer is seen as a cost effective advantage by Universities and other education providers.

Although interest has been growing and encouraging, current demand for sustainable technology has been limited with take up by employers not fulfilling expectations so far. However it is recognised as legal and legislative directives become established and implemented, an increase in demand for sustainable technologies and training will grow as economic recovery is secured.

Would you do things differently next time?

A shorter and more focused time frame together with clearer measurable outcomes would have benefited further development of sustainable technologies, together with an increased standardised approach in collecting data concerning employer needs and analysis of employer requirements, based on current information. A cross referencing mechanism for matching employer needs with the requirements for staff training or CPD would have been an advantage to responding to employers in a more cohesive manner. The original time line featured on the LSIS bid was not followed fully to conclusion due to changing emphasis on activities and developments.

Project outcomes

Did the project achieve its original aims?

With regards to a collaborative approach to providing a service and developing sustainable curriculum in construction technology within the East Midlands the project has exceeded expectations together with the coordination of acquiring equipment and resources that is now being utilised in the programmes/courses that are now approved with both employers and students benefiting. Further expansion and employer engagement in sustainable technologies are still necessary and ongoing as new initiatives and events arise.

What were the key outcomes and/or outputs from the project?

There have been a number of key events, meetings and conferences held during the projects life that have served to drive the awareness of sustainable technology in the construction sector which has promoted the sharing of good practice and facilitated the aims of this project.

- EXPO 2009 event at the Walkers Stadium in Leicester 22nd April 2010
- Idle Valley rural Learning Centre visit 20th April 2010
- Pathfinder meeting 12th May 2010
- Lindum Employer event Sustainable Technology for companies 19th May 2010
- Renewable Technology demonstration New College Nottingham 26th May 2010
- East Midlands BACH Regional Meeting 18th June 2010
- Construction site steering group Robin Hood house Nottingham 25th June 2010
- Employer Breakfast meeting University of Leicester Walkers Stadium 8th July 2010
- BACH Chairs Group meeting 16th July 2010
- EMBCE Employer engagement event 8th July 2010
- Construction site steering group Robin Hood house Nottingham 23rd August 2010
- East Midlands BACH Regional Meeting 8th October 2010
- BACH Chairs Group meeting 21 October 2010
- BACH Autumn Conference 17th November 2010
- Sustain Lincolnshire Bid meeting 14th December 2010
- Grantham College Eco house launch 14th January 2011
- BACH Conference Birmingham 15th – 17th March 2011

The development of a dedicated facility to deliver Environmental Technologies centre support both training of full time, part-time students, apprentices and employers. The curriculum, programmes and training now offered consist of both formally approved qualifications as well as bespoke employer courses.

The provision that is available:

- Solar Thermal - 4 centers
- Photovoltaics - 3 centers
- Heat Pumps - 2 centers
- Water Harvesting - 3 centers
- Environmental awareness - 2 centre

The Summit Skills Qualifications currently available in QCF include Solar Thermal, Photovoltaic's, Heat Pumps, Water Harvesting, and environmental technologies awareness.

Within the East Midlands Skills Academy Cluster, there is capacity to offer these courses.

Qualifications currently available in QCF

- 1) Level 2 Award in Environmental Technology Systems Awareness **November 2010**
- 2) Level 3 Award in the Installation of Solar Thermal Systems **February 2011**
- 3) Level 3 Award in the Installation of Solar Photovoltaic Systems **September 2011**
- 4) Level 3 Award in the Installation/Maintenance of Solar Photovoltaic Systems

September 2011

- 5) Level 3 Award in the installation of Heat Pump Systems **September 2011**
- 6) Level 3 Award in the Installation/Maintenance of Heat Pump **Systems September 2011**

- 7) Level 3 Award in the installation of Water Recycling Systems **September 2011**
- 8) Level 3 Award in the Installation/Maintenance of Water Recycling Systems **September 2011**

Were there any unforeseen outcomes?

From Summit Skills data it has been identified that in the immediate future, the provision will need to be a further enhanced in the following areas:

- Solar Thermal - 2 centers
- Photovoltaics - 1 centers
- Heat Pumps - 1 centre (Lincoln College)
- Water Harvesting - 2 centers (1 -Lincoln College)

What impact has the project had on your service users (learners, employers and communities), your own organisation, other participating organisations and other key stakeholders?

Multi-purpose teaching and learning facility appropriately equipped double as conference facilities and would allow visual demonstrations of the benefits associated with environment.

The result of the project has been to provide a cost effective local and regional solution to training and awareness raising of environmental technologies.

How will the impact of the project be sustained?

Through the project network and in conjunction with other FE partners who are working closely with employers such as Lindum Group and Lincoln Group Training Association the impact is to provide training skills necessary enabling the industry to deliver more energy efficient and sustainable designs in building construction. This work will continue and will identify areas of training that local colleges will undertake in the future. It is also recognized that one organization alone cannot meet the needs of all employers and therefore the East Midlands Skills Academy Cluster gives an opportunity of referral.

Sharing of project findings

Explain how you will share the outcomes and learning from the project with the wider sector and how you will encourage other providers to actively engage with this work

Colleges have their own Business Unit that works closely with employers. The Business Development Centre (BDC) at Lincoln College has business advisors that deal with employers on a day to day basis.

Lincoln College has TQS Part A and operates a Central Employers database which captures all employer enquiries to the College. The College has both a dedicated telephone number and email address for employer enquiries. Enquiries are then dealt with by a central team and recorded on the CRM software system.

Lincoln College locally works closely with Lincoln Group Training Association (LGTA) which is a training group that represents 60 small to medium enterprise construction companies. The College through the project has also been involved in the survey conducted on 180 construction SMEs across the East Midlands on their awareness and training needs with regard to sustainable and innovative methods of construction. The survey indicated that one barrier to adopting new innovations such as solar was the lack of an independent centre.

The development of a dedicated facility to deliver Environmental Technologies training will provide the opportunity to promote the benefits of Environmental Technologies both to end users (consumers) and those employed in related industries. It will act as a centre for education within the city of Lincoln whilst creating a bespoke centre for delivering training with appropriate facilities.