

E-Construction Transformation Project

Learn Direct & Build are delighted to announce the E-Construction Transformation project, which will develop e-learning packs to fill the demand for craft and soft skills training for:

- Carpenters and joiners
- Bricklayers
- Stonemasons
- Painters and decorators
- Roof slaters and tilers

Building on the experience and networks of the established Learn Direct and Build strategic partnership that was formed to help alleviate the key skills shortages in the Scottish built environment by making education more efficient, effective and interesting through the use of e and blended learning.

The project will commence in May 2005 and be completed in August 2007.

Please find more detailed information on the project below or contact us for further details.

Background

The built environment is one of the most important sectors in the UK, accounting for 10% of the UK GDP but it suffers severely from skills gaps and shortages. The Scottish Construction Skills Survey 2003 states that, "Approximately 2,300 hard-to-fill vacancies were reported, meaning that about two thirds (68%) of all current vacancies were proving difficult to fill".

Carpenters and Joiners accounted for about 20% of the hard-to-fill vacancies but there is also a shortage of bricklayers, stonemasons, painters and decorators, and roof slaters and tilers. While the skills in greatest shortage are craft-specific, there is also a great need for 'soft/generic' skills such as communication or customer handling, problem solving skills, communication skills and health & safety skills/knowledge.

However, all the colleges in Scotland that offer built environment education and training are oversubscribed in terms of applicants and cannot meet the education and training needs of many potential recruits to the construction industry. It is not surprising that there is pressure from employers to make changes to the format of education and training for the industry.

Aims and Objectives

The overall aim of the project is to transform the efficiency, effectiveness and economy of the Scotland-wide college delivery of work-based/related qualifications and learning in the built environment sector in order to meet skills shortages and gaps and individual learning and tutoring needs mainly at general operative and craft levels (SVQ levels 1, 2 and 3) initially in Brickwork, Stonework, Carpentry and Joinery and Painting and Decorating.

1. Research, identify and monitor all relevant blended learning developments being undertaken by the FE sector in Scotland in order to avoid duplication and ensure the cost effectiveness of the project.
2. Map SVQ units (and later HN provision) to identify units or elements that can best be supported or can only be supported by an e learning approach.
3. Identify existing paper based learning packs that can be used as a basis for e learning.
4. Train FE "subject authors" in the development or adaptation of learning materials up to storyboard level.
5. Ensure that the use of ICT learning materials is not just seen as an "add on" but forms an integral part of the learning experience, leading to emphasis on different styles of learning and the freedom to use them.

6. Develop electronic versions of underpinning knowledge/study support selected for work-based/work related qualifications (under the ambit of CITB-Construction Skills) and produce engaging, standards compliant learning and assessment materials.
7. Keep track of developing practice in the use of portals. Create/access a repository for all e learning products developed by the project
8. Ensure that FE lecturers and specialist support staff are trained to update materials to assure the quality and consistency of learning experiences and to encompass changes in legislation and revision of qualifications
9. Enhance college/workplace delivery of Modern Apprenticeships in Construction by lessening face to face contact with tutors thus encouraging learners to take more responsibility for their own learning and tutors to have more time for mentoring activities and for the creation of learning and assessment materials.
10. Promote and disseminate project materials and approaches and make them available to all appropriate colleges throughout Scotland.

Project Methodology

The main focus of the project will be on the creation of pedagogically sound fully digitised learning packs to encompass the requirements of each unit. This development hinges on a partnership approach based on utilising the strengths of those organisations and individuals involved in the project as well as a commercial development company appointed by the project. The project will extend the work carried out in Learn Direct and Build's project in the creation of a Virtual Building Site using games technologies.

The Digital Learning Packs will contain learning and support materials and assessment tools. Design of the packs will be mindful of current research concerning learning styles and pedagogical principles. The packs will meet current standards regarding design and accessibility. It is intended that the packs be of the highest quality and will be subject to a rigorous review and testing process at each stage of its development. Source materials will be derived from existing paper packs, existing online content and content created by subject specialists.

- Project director will identify existing content
- Project manager working with the coordinators will map the qualification frameworks to the materials already available.
- Project coordinators will then work with subject experts to identify scenarios for development in the Virtual Building Site.
- Project coordinators will then work with subject experts who will author content not available in other forms and storyboard the digital packs and the VBS scenarios.
- Development of online content will be undertaken by commercial developers.
- The quality working group will ensure that material created meets the required standards.

Deliverables

- E-learning packages for construction topics
- E-learning repository
- Blended learning approaches utilising the e-learning materials
- Tutorials for students on the use of blended learning
- Events and workshops for staff on the use and updating of blended learning
- Training for subject specialists in the authoring of e-learning packages
- Design criteria for the development of blended learning packages
- Innovative approaches to the content of blended learning packages
- A dissemination strategy for the completed materials
- A promotional strategy for the innovative approach to construction education
- A web site containing the blended learning materials and associated guidance materials