



Accelerating Change in Built Environment Education (ACBEE)

Case Studies of High Quality

UNIVERSITY OF CENTRAL LANCASHIRE

FOUNDATION DEGREES FOR CONSTRUCTION

Summary of Case Study

The University of Central Lancashire has, for a number of years, worked to develop its links across the North West in the development of HE provision and to provide a clear route of progression for students from across the region. The Department of Built Environment has worked to establish partnership networks with three partner Colleges in the provision of the HNC in Building Studies over the 1990's. In addition, the provision of Fire Safety and Fire Engineering education has followed a very similar pathway to involve partners from the North West and nationally.

The Department in 2000/01 designed a Foundation Degree (FdSc) in Construction. This development has been in association with the University of Northumbria at Newcastle and six partner colleges. The development consortium includes representatives from industry, the NTO's and the Chartered Institute of Building. The project is representative of the Department's work with both industry and the community in developing new programmes to meet the needs of the sector. The project has highlighted the development of new technologies to support students at distance in the provision of learning resources and student support systems. The work is paralleled by work completed with three international partners in the provision of access routes to the Built Environment curriculum.

Characteristics

<input checked="" type="checkbox"/> Partnership Approach	<input checked="" type="checkbox"/> Clear Objectives	<input type="checkbox"/> Appropriate Measures	<input type="checkbox"/> Modularity	<input type="checkbox"/> Industry Relevance	<input type="checkbox"/> Best Practice
<input type="checkbox"/> Interdisciplinary Team-Work	<input type="checkbox"/> Other – please specify:				

Basic Information

Name of Main Author(s):	Andrew Platten
Industrial/Professional Collaborator:	College and employer consortium including Conlon Construction
Department:	Built Environment
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Case Study Title:	Partnership Opportunities Reaching Teaching and Learning (Portal)
Theme:	Foundation Degrees for Construction

Teaching Context

Subject Area Covered / Module Title:	Construction
Keywords:	Construction, management, foundation degree, partnership
For how long has this project run?	3
Subject Area:	Building

Participants

Number of Students:	185
Number of Staff involved:	10
Level / Year:	U/G

The Author(s)

Please provide brief details of the Author(s) prior experience in this field:	<ul style="list-style-type: none"> ▪ Dr Andrew Platten <p>Has been Head of Department of Built Environment at the University of Central Lancashire since 2000. He is also chair of the Council of Heads of Built Environment and the CIOB accreditation panel.</p>
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Written Statement

Please submit a brief description of your case study (500 words), using the headings provided to frame your submission:

a. Collaboration between education, industry &/or professional bodies.	<p>The project was initiated in 2000 by a consortium formed by the CIOB/CIC and CITB. A framework of benchmark statements was established by the consortium to guide proposals of the new foundation degree proposals. Following a meeting of interested parties at the CIOB a north west consortium was established lead by the University of Central Lancashire in partnership with the following Colleges: Preston, Burnley and Furness.</p> <p>Local industry support was provided by local companies such as WS Atkins and Conlon Construction. The University partnered with Northumbria University in the design and development of the programme.</p> <p>Partners to the project were tasked with the development of the course modules, assessment schemes and teaching programmes.</p> <p>The binding theme throughout the programme was flexibility of delivery and mode of access for candidates from across the region and with differing attendance modes according to employment patterns.</p> <p>The programme was characterised by the development of a core work based element which is designed to reflect professional body core working competencies and a range of course modules which incorporate negotiated portfolio assessments. The project was ambitious and whilst the programme was approved to operate in 2001, many tasks had to be revolved in the first year of operation, including aspects such as restricted industry support, the need to support full time students and ensure work based learning could be provided.</p>
b. A measurable set of objectives for each partner in the collaboration.	
c. Identify subject, issue or theme in case study with wide appeal in the built environment.	
d. Describe the context, both within the educational provider and the industry partner.	

<p>e. Describe the evaluation of the impact of the case study over time.</p>	<p>During the operation of the programme the module structure has been amended, With changes to the core programme, incorporating the bespoke module in the Management of Occupational Health and Safety. This module is delivered using the web CT platform and provides scope for students attending part time to develop their approach to the subject.</p> <p>As the programme entered its third year of operation new partners have been added to the north west consortium, including Oldham College and the Isle of Man College. Both Colleges have distinct needs for education. In Oldham there is a need to provide access routes for a growing urban population where regeneration projects are calling for the provision of up-skilling for new construction managers. In contrast on the Isle of Man, a range of candidate needs and requirements are required to meet specific local needs.</p> <p>More recently new demands for alternative routes through the programme have been requested. As an example of extending the collaboration BNFL are seeking a construction engineering route for on site managers. Thus a revised programme is currently in review, maintaining the key components but including analytical skills to provide a foundation for either services or civil engineering studies.</p>
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Learning Methods & Resources

<p>Objectives / Learning Outcomes:</p>	<p>On successful completion of the course programme, foundation degree graduates will be able to:</p> <ul style="list-style-type: none"> i Demonstrate the ability to appraise the design, construction, and performance of low rise, framed, and masonry structures; ii Demonstrate an ability to understand and apply the concepts of management and contract administration within a legal framework in a project scenario; iii Demonstrate the ability to use information and communication technologies, in particular, computer-aided design in the construction process; iv Demonstrate by application, a general understanding of the legal environment and interaction with the construction process; v Demonstrate occupational competence in a range of work skills within the context of construction, and in particular site surveying; vi Demonstrate the development of interpersonal Key Skills within the Built Environment.
<p>Outputs:</p>	<p>A range of student work, including project and portfolio submissions.</p>

<p>Teaching Method(s): <i>A brief description of what you actually did. What sort of activities & interaction occurred?</i></p>	<p>A range of different methods are included in the programme. The following aspects are indicative of the teaching methods employed:</p> <p>Formal Classes – traditional class room lectures are the central mode of delivery for key information</p> <p>Portfolio Assessment – the main form of assessment for this course is by the submission of a portfolio submission. In each module there will be a defined set of learning outcomes. Normally, students are required to complete a portfolio of evidence to demonstrate their ability to meet these outcome requirements. The portfolio may include examples of project work, work based materials or information generated in a tutorial exercise. In each case students are required to present their materials.</p> <p>Practical Work – this allows the appraisal and investigation of modelled or simulated building projects, the development of laboratory and site skills and the development of computing skills.</p> <p>Group Work – this aspect involves the priority allocation of activities in the resolution of constructional problems, the simulation of management processes and project planning, design and monitoring, the resolution of roles and responsibilities, presentation of project work.</p> <p>Seminar Activities - promotion of active contributions in course exercises, the provision of detailed discussion of construction issues.</p> <p>Case Studies- provide a demonstration environment in which students can apply their understanding to resolve problems and prepare solutions.</p> <p>Case Histories - enable the review of real life projects and working solutions to realistic problems.</p> <p>On line learning – the use of web CT provides scope for off campus learning and review of the formal class contact.</p>
<p>Assessment Procedures: <i>A brief description of any assessment methods used.</i></p>	<p>The key mode of assessment is by the submission of a portfolio submission. The portfolio is specifically designed for each module. It comprises a series of course assignments or project related tasks. These may be set by the tutor or negotiated by the student to meet the requirements of the module. Submitted work is agreed with the tutor and gradually the portfolio is developed across the learning outcomes of the module. Other methods used include simulated project work and practical assessments.</p>
<p>Support requirements:</p> <ul style="list-style-type: none"> • <i>For you and/or the students.</i> • <i>Funding/costs.</i> • <i>Did you or the participants need/get technical support?</i> 	<p>Teaching assistant to support students and staff important particularly regarding electronic delivery of H& S module.</p> <p>Funding – always too little – we gained administrative support in development of the programme and a centrally funded PI post although in reality much of the ground work was undertaken by lecturing staff.</p> <p>Technical support is made available. But be prepared to put in a lot of time to get the partnership to work.</p>

'Good Practice' Tips

<p>Further advice and pointers - incl. enablers / barriers / proposals for improvement.</p>	<p>Enablers</p> <p>Team working – it is good to commence projects by working on a collaborative basis. Tie in tasks with partners to encourage ownership.</p> <p>Consortium workshops</p> <p>Themed – enable best practice to be developed and disseminated</p> <p>Barriers</p> <p>Industry acceptance, professional body accreditation is vital to recognition. Culture of assessment, very new for many students (and staff). It is important to get the terminology across all parties.</p>
<p>How can other staff or partners reproduce this technique / method?</p>	<p>Reference material</p> <p>Try the following reference areas</p> <ul style="list-style-type: none"> ▪ HEFCE Foundation Degree prospectus (and associated documents); ▪ CITB / CIC / CIB Benchmark Criteria; ▪ CIOB Education Framework and guidance on FDSC awards; ▪ Draft Building & Surveying Benchmark Statement; ▪ University Guide concerning Foundation Degree approvals. <p>Useful tips</p> <ul style="list-style-type: none"> ▪ Keeping talking ▪ Having a good idea of the curriculum is important ▪ The key issue is time and managing partners ▪ The workload should not be underestimated

Supplementary Information

<p>Any other factors which you wish to be considered?</p>	<p>Taken from Best Practice in Construction Network Case Study: http://www.cebe.ltsn.ac.uk/BPBN/index.htm</p> <p>BENEFITS</p> <p>The benefits of the foundation degree are:</p> <p>To the student:</p> <ul style="list-style-type: none"> ▪ it provides a new route for students who do not attain the two 'A' level or equivalent pass level. These students are the under-achievers at school or college who often develop later in life and are more suited to a vocationally based form of learning; ▪ the foundation degree offers a real choice for these students who wish to progress towards a management based career in the construction industry; ▪ it has been designed to provide a more flexible approach to learning in terms of timetable and content. The programme features negotiated learning module and the use of portfolio styles of assessment; ▪ it is structured to provide a series of 'step out' or exit points for students, who may wish to spread out their learning over a number of years; ▪ the work place module provides a range of work based learning scenarios – the provision of optional competence units in the module enables students in a variety of working roles to complete the programme whilst still meeting a common set of learning outcomes.
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	<p>To the staff:</p> <ul style="list-style-type: none">▪ the opportunity to become involved in new national curriculum developments. <p>To the Institution:</p> <ul style="list-style-type: none">▪ raised national profile through active engagement in national curriculum developments;▪ a unique marketing opportunity;▪ the opportunity to widen access to its undergraduate degree courses. <p>Issues and lessons to be learnt:</p> <ul style="list-style-type: none">▪ The validation of the programme was not without its problems. Issues that have been debated include:▪ consideration of workload with respect to a series of one-week workshops;▪ how best to ensure adequate preparation by students, both before and following the workshop events;▪ definitions of portfolio assessments and how the learning outcomes were met. The portfolio assessments should be clearly stated to students in terms of structure and content and the student handbook includes a detailed definition for students.▪ the role of industry based assessors. This could only be enabled if the mentor / assessor was a competent assessor. It was agreed that all assessment would be centred at the University or College running the module and that the industrial partner would act as the mentor.
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