

<b>Cover Sheet for Proposals</b> (All sections must be completed)	<i>JISC Capital Programme</i>	
<b>Name of Capital Programme:</b> eLearning (e-Learning; e-Infrastructure; Repositories and Preservation)		
<b>Name of Lead Institution:</b> University of Wolverhampton		
<b>Name of Proposed Project:</b> Seamless Progression and Engagement in Learning for Employment in the Engineering Community within the West Midlands		
<b>Name of Project Partners:</b> University of Wolverhampton; City of Wolverhampton College; the Lean Academy; S. Peter's Collegiate School, Wolverhampton; Wednesfield High School, Wolverhampton; Stoke Park Technology School and Community Technical College, Turner Power Train, Wolverhampton; Denso Manufacturing, Telford; RICOH, Telford.		
<b>Full Contact Details for Primary Contact:</b>  <b>Name:</b> Dr Paul Lister <b>Position:</b> Associate Dean <b>Email:</b> p.m.lister@wlv.ac.uk <b>Address:</b> University of Wolverhampton, School of Engineering and the Built Environment, Wulfruna Street, Wolverhampton, WV1 1SB  <b>Tel No:</b> 01902 322387 <b>Fax No:</b> 01902 321459		
<b>Length of Project:</b> 2 years		
<b>Project Start and End Dates:</b> September 1 <sup>st</sup> 2006 to August 31 <sup>st</sup> 2008		
<b>Total Funding Requested from JISC:</b> £180,545		
<b>Funding Broken Down over Project Years:</b> £90,000 (Year 1); £90,545 (Year 2)		
<b>Total Institutional Contributions:</b> £110,609		
<b>Outline Project Description</b> This proposal draws on established regional partnerships, technical developments and practices to provide personalised learning experiences via flexible delivery models to a range of regional learners based within the university, two schools, a college and the workplace. The seamless model developed will provide pupils at secondary school interested in pursuing a career in engineering with a clear route to the highest level that they are capable of. They will use ePortfolio to support assessment, enhance personal development planning, record progress, and to network with their peer-group. Staff will use the ePortfolio to share information with students, provide feedback on progress, support placement students, and to coordinate project work.		
<b>I have read the Circular and associated Terms and Conditions of Grant at Appendix B (Tick Box)</b>	<b>YES</b> ✓	<b>NO</b>

## SEAMLESS PROGRESSION AND ENGAGEMENT IN LEARNING FOR EMPLOYMENT IN THE ENGINEERING COMMUNITY WITHIN THE WEST MIDLANDS.

### 1. Introduction

There is an engineering skills shortage in British industry, in part due to the widespread perceptions that engineering is a dirty, manual profession, and is a difficult area of study ultimately requiring good passes in maths and physics at A level or equivalent. Higher Education and Further Education establishments consequently struggle to recruit students in sufficient number to supply the industry, a problem exacerbated by engineering not forming a significant part of Key Stage 3 and 4 curriculum. Paradoxically, the industry is associated with unfilled vacancies, well-paid jobs, and good career prospects.

The Black Country in the West Midlands is characterised by an oversupply of people with low or no qualifications and an undersupply of people qualified to NVQ4 and above compared with the national average. Whilst the number of people qualified to degree level has risen, the number is still well below the national average. Over a quarter of all businesses in the region experience skills deficits, mainly in terms of practical, technical, team working and problem solving skills. The emergence of the knowledge economy has necessitated a general requirement for higher levels of technical, generic and IT skills.<sup>1</sup>

The University of Wolverhampton has the highest percentage of students historically under-represented in HE in the UK<sup>2</sup>. The University has over 22,000 students of which 66% of these are mature. Over quarter of the mature students and about half of the 18 year olds are first generation learners; over 50% enter the University from regional partner colleges and local schools and over 10,000 students study part-time.<sup>3</sup> This provides the national reputation for widening participation success that led to the award of a HEFCE-funded Centre of Excellence (CETL) 'Enabling achievement in a diverse student body'. The CETL is experimenting with SMS through a JISC Large Scale Institutional award and has developed an ePortfolio in collaboration with a small business enterprise. The ePortfolio has been piloted with regional partners including Schools and Colleges through a further JISC award.

The ePortfolio that has been developed and adopted by the University and its partners is a reflective tool that is able to celebrate all forms of learning; formal and informal; institutional and non-institutional; structured and eclectic. It offers something for all kinds of learners whether at some stage of transition between levels of learning; moving in to or seeking employment or simply recording achievement for the purposes of self-knowledge and self-worth. Previous work with partners has provided a good understanding of how learners are engaging with the ePortfolio and indicated the need for them to be incorporated in the curriculum and integrated in the teaching and assessment approach of the staff. This project embeds the outcomes of the previous work into an engineering programme that will provide progression from school to college and to the University, with options to experience work and or work full or part-time at different stages of the students' development.

This proposal draws on established regional partnerships, technical developments and practices to provide personalised learning experiences via flexible delivery models to a range of regional learners based within the university, three schools, an FE college and the workplace. The engagement will revolve around a newly validated work-based learning Foundation Degree in Engineering that resulted through a partnership between the University, local FE Colleges and a number of large engineering companies within the West Midlands and Shropshire. In addition the project will involve three secondary schools that are currently delivering a Vocational GCE in Engineering to pupils opting for a vocational and work-based route.

<sup>1</sup> Black Country Skills Needs Assessment 2005, [www.blackcountryobservatory.co.uk](http://www.blackcountryobservatory.co.uk) (Accessed June 15<sup>th</sup> 2006)

<sup>2</sup> THES figures, 23 Sept 2005

<sup>3</sup> HESA data 2005

The project will start in September 2006 and run for two academic years. The first year will focus on the development of staff within the partner organisations and introduce the technology and new methods of assessment. There will be some pilots in the second half of the first year in preparation for a full pilot in September 2007 – 2008. The project will enable the partners to offer Engineering provision in a seamless and joined up manner as a result of the priority funding for staff time to specifically work on these crucial aspects. Once in place, the Foundation Degree will be fully embedded and sustainability will follow using the more routine reviewing, planning and delivery cycles with partner organisations. The impact of the project is expected to be significant.

## 2. PROJECT DESCRIPTION

### 2.1 Overview

The intention is to develop and embed a scheme that provides pupils at secondary school interested in pursuing a career in engineering a clear route to the highest level that they are capable of using the latest technology and student support methodology. The project can be described in terms of three areas of activity, and in combination will provide opportunity for seamless progression and embed a culture of lifelong learning from an early age.

#### 2.1.1 Key Stage 3

Starting with Key Stage 3 pupils, the intention is to shape a curriculum offer that provides for a Vocational GCE in Engineering at Key Stage 4 together with complimentary subjects (for example either ICT or Manufacturing), alongside academic qualifications. Whilst the Vocational GCE qualification is soon to be replaced by the Vocational Diploma, the two are similar in principle and sustainability in this respect is assured.

Working with the local Design Technology Curriculum Heads Group and the Lean Academy<sup>4</sup>, pupils from the three schools and at Key Stage 3 will be selected and offered **industrial exposure** sessions with the industrial partners identified. Industrial exposures will typically be half-day visits, and might include a shop-floor tour and a work-based learning activity designed to engage pupils' interest, and to inform and challenge their perceptions of engineering in a knowledge-based economy.

#### 2.1.2 Key Stage 4

Cohorts of pupils at Key Stage 4 and studying Vocational GCE in Engineering will be offered support and guidance in undertaking their studies and shaping their academic and career aspirations thereafter. The Lean Academy has an important role to play here in offering participating schools elements of curriculum, provision of resources (including a knowledge base), and supporting pupils in the development of the softer skills identified by employer groups as shortfalls, including team working and other transferable skills. Pupils will be offered **industrial encounters** with industrial partners where they can see and touch some facet of modern engineering, and gain an appreciation of the expectations of a 'blended' professional engineer in terms of technical and people skills. Pupils will be mentored in the use of the University of Wolverhampton's ePortfolio, to personalise their learning experience, to record their experiences and 'map out' their futures. The activity described here adds another dimension to the Young Apprenticeship Scheme, and probable outcomes would be increased uptake in the scheme and improved employment prospects for school leavers.

#### 2.1.3 Further and Higher Education

Pupils choosing to continue their studies into FE and HE, and that enrol onto the new Foundation Degree (Science) Engineering award offered by the University in partnership with Wolverhampton College of FE and industrial partners identified here, will follow a curriculum that encourages them to develop competences in areas recognised as deficiencies (e.g.

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<sup>4</sup> The Lean Academy is a £0.5m project that aims to engage with 120 businesses during its first year and deliver 80 National Vocational Qualifications. They are also set to work with 150 14-16 year olds and take on 5 Apprentices (<http://www.advantagewm.co.uk/news/lifelong-learning-curve-at-lean-academy.html>).

employment and transferable skills) alongside technical and practical aspects. The Foundation Degree has been developed in accordance with the University's widening participation agenda, and is flexible in terms of delivery. Students will be provided with meaningful, relevant and personalised **work-based learning** opportunities to support their studies, facilitated by appropriate technology and taking advantage of the University's ePortfolio to support assessment, enhance personal development planning, record progress, and support peer-group networks. Staff will use the ePortfolio to share information with students, provide feedback on progress, support placement students, coordinate project work, and to record any additional CPD. Students that successfully complete the Foundation Degree will be eligible to progress to higher levels of academic study at the University and elsewhere.

Funding made available for 2006-07 will be used to: train partners in ePortfolio mentoring; to provide staff development workshops to all partners in tools and techniques; to develop materials for industrial exposures, industrial encounters and work-based learning (including e-learning); and to ensure compliance with Health and Safety and CRB legislation. Funding made available for 2007-8 will be used to undertake pilot activities described above with cohorts of pupils and students in partner organisations; the seamless model developed with JISC funding will become future practice, sustained thereafter with traditional funding streams. Evaluation of outcomes will be disseminated to practitioners, institutions and subject communities outside the University by conference activity (to include the Higher Education Academy's Engineering Education Conference) and journal publications, and by publication a project web-site; it is anticipated that work undertaken here will lead subsequently to funding bids for follow-on activities and developments.

## 2.2 Aims and Objectives

The overall aims are to

- raise the awareness and aspirations of all students within the project of the opportunities that exist to acquire further qualifications and work experience as well as the potential to continue to Higher Education and Employment
- provide opportunities for work experience in the Engineering sector
- enable the development of skills through the use of the virtual learning environment and specialist engineering software
- encourage reflection and action planning of goals through the use of the ePortfolio
- engage in collaborative learning and problem solving through the ePortfolio
- gain foundation degree credits for all aspects of learning whether social, school, college or work based evidenced and assessed through the technological tools associated with the project
- enable progression to higher levels of study by student peer mentoring delivered on-line and face to face
- explore and evaluate from the learner perspective novel methods of on-line assessment including formative, computer based, self and peer assessment.

AIM	YEAR 1	YEAR 2
Raise the awareness and aspirations of all students within the project of the opportunities that exist to acquire further qualifications and work experience as well as the potential to continue to Higher Education and Employment	Students participating on the engineering programmes in all partner institutions will be given a questionnaire about motivation and aspirations. These will be followed by focus groups will discuss and fully identify their needs.	In response to the feedback; marketing, brochures, a programme pack for each level and for the whole programme will be produced for August 2007, showing the relationships between the work in the School, college with the employers and the University. Exit and entry points will be very clear

Provide opportunities for work experience in the Engineering sector	The Foundation Year Employers Forum will be tasked with opening up opportunities for all students on the programmes to participate in work experience for various periods of time. All placements will have a definite learner outcome and credits linked to them. Employer student supervisor will be trained as the work based learning assessors and provided technology training.	Students from all partners will be in work for certain periods of the year. They will be assessed via the ePortfolio and prepare a webfolio of their experience to share with their colleagues and tutors.
Enable the development of skills through the use of the virtual learning environment and specialist engineering software	Students will be recruited from all partner institutions and trained as technology mentors to support the development of the participants' skills. The students will be introduced to the ePortfolio, their local VLE and any software.	The college will act as the specialist software hub and students from the Schools and college will engage on-line. All this core work will be supported by student mentors
Encourage reflection and action planning of goals through the use of the ePortfolio	Participants will be paired with an ementors who will support their induction to the use and benefit of the eportfolio in producing webfolio for CV purposes to other educational institutions and employers.	Both staff and mentors will demonstrate and encourage students to reflect on their progress, needs and goals and share their thought with their peers
Engage in collaborative learning and problem solving through the ePortfolio	Assessment of the programmes will be via the VLE and eportfolio. The participants will be formed into tutorial groups and tutor led activities will encourage the sharing of ideas and concerns.	Assessment will be conducted as planned alongside group work. The student experience of the process will be captured
Gain foundation degree credits for all aspects of learning whether social, school, college or work based evidenced and assessed through the technological tools associated with the project	Work-based and school based activity will be aligned to the University credit bearing system to ensure that all the learning associated with the scheme receives acknowledgement	All activity will receive credits and all students participating will be supported by a mentor throughout their studies
Enable progression to higher levels of study by student peer mentoring delivered on-line and face to face	The roles of the mentors will be developed and the most appropriate support identified	A final questionnaire on aspiration and progression will be conducted.
Explore and evaluate from the learner perspective novel methods of on-line assessment including formative, computer based, self and peer assessment	Feedback will be obtained from the students and staff at all stages of this pilot year to ensure that the main programme in year 2 is implemented successfully.	Full evaluation of the student experience of technology, approach and goal planning.

### 2.3 Timetable

September 2006 - December 2006

Appointment (via secondment) of:

- Project Managers from University and Wolverhampton College
- ePortfolio Coach and Mentor
- VLE Coach and Mentor

#### January 2007 - March 2007

##### Workshop Activities:

- EPortfolio: Training of school, FE college, and industrial mentors
- Health and Safety, Risk Assessment, and CRB legislation requirements

##### Working Groups:

- 'Industrial exposure' and 'industrial encounter' session development
- Work-based learning materials development and identification of supporting TSL materials (including software)
- Production of guidelines to support and implement pilots
- Specification of hardware requirements

#### April 2007

##### Appraisal and approval of:

- 'Industrial exposure' and 'industrial encounter' sessions
- Work-based learning materials
- Health and Safety compliance, Risk Assessment and CRB checks
- Acquisition of hardware

#### May 2007 - August 2007

##### Preliminary pilots:

- Key Stage 3 - industrial exposures (to assess pupil perception and suitability of activity) and guidance provided to staff and pupils on 2007-8 activities at Key Stage 4
- Key Stage 4 - Industrial encounters (to monitor and evaluate pupil experience, ePortfolio engagement, and effectiveness of teaching and learning strategies), and guidance provided to staff and pupils on the Foundation Degree Engineering, work-based placement opportunities, and ePortfolio usage in 2007-8

#### September 2007 - June 2008

##### Pilot implementation (ongoing monitoring and evaluation of):

- Key Stage 3 - Pupil selected from participating schools, and offered industrial exposures in participating industrial organisations
- Key Stage 4 - Pupils that are studying Vocational Engineering awards to be provided with industrial encounters, mentored in ePortfolio usage and coached in soft-skills development
- FE/HE Foundation Degree Engineering - Students given personalised work-based learning activities, fully engaged in ePortfolio activity to support assessment, enhance personal development planning, record progress, and support peer-group networks

#### July 2008 - August 2008

- Critical reflection on outcomes, leading to publications in Conferences and Journals, and publication on the project-website
- Ratification of seamless model, thereafter funded by conventional funding streams
- Identification of follow-on activities and developments for future bids.

## **2.4 Project Deliverables**

The key deliverables from this project will be:

- 1) Model of seamless progression from school to university with options for breaks and periods of credit bearing work experience, full-time and part-time opportunities.
- 2) Guidelines for tutors and students on the benefits of work-based learning
- 3) Guidelines on assessment through technology
- 4) Conference and Journal publications on the cross-sector student (14-20+ years of age) experience of using ePortfolios, VLE and bespoke software.
- 5) Identification of the staff and student development needs

## 2.5 Risk

### 2.5.1 Stakeholder Analysis

Stakeholder	Interest / stake	Importance
University of Wolverhampton	Main user of the virtual learning environment and ePortfolio; Regional University and point of transition for learners; Recently validated Foundation Degree in Engineering with employer engagement; Research into the pedagogic and technical strands; Understanding of alternative ways of supporting transition to HE.	High
City of Wolverhampton College	User of the Virtual learning environment, ePortfolio and specialist engineering software; Pathway partner through the Engineering Foundation Degree to University of Wolverhampton; Close relationships with the Lean Academy and local employers.	High
Stoke Park Community and Technology School, Coventry	High level interest in using VLE and ePortfolio; Experience of Vocational Engineering GCE; Interest in work-based experience and aspiration.	Medium
St. Peter's School, Wolverhampton	Pathway partner to Wolverhampton College. High level interest in developing work-based learning routes; High aspirations for learners into employment.	Medium
Wednesfield High School	Specialist Engineering Comprehensive School that believes in the ideals of inclusivity and fairness. They aim to take children from where they are to where they are not by providing high quality teaching and inspiring high quality learning.	Medium
Lean Academy	Innovator in vocation routes.	Medium
Turner Powertrain	Turner Powertrain Systems is the world market leader in the design, development, manufacture, sales and support of off-road vehicle transmissions. They are advocates of 6-Sigma quality assurance and Lean Manufacturing techniques.	Medium
Denso	Denso is a leading global supplier of advanced technology, systems and components for the automobile industry. Denso are advocates of the Toyota production system.	Medium
RICOH	The moulding shop at Ricoh's UK factory in Telford is one of the most impressive in the country. Ten machines produce, typically, between 750,000 and 1 million plastic parts per month, for use on Ricoh's well-known range of photocopiers. To reinforce its commitment to resolving environmental issues, Ricoh has now made Waste Management one of its four global strategies, and has a zero-waste policy.	Medium
Black Country Pathfinder 14-19 Networks for Excellence	Technology to support progression to FE/HE;	Low
JISC	Successful completion of the project;	High

	Value for money; High impact on understanding of using of technology to enhance progression and engagement in learning in society today.	
JISC Regional Support Center	Monitors and promulgators of innovative/novel learning technology in FE.	Low

### 2.5.2 Risk Analysis

Risk	Probability (1-5)	Severity (1-5)	Score (P x S)	Action to Prevent/Manage Risk
Staff leave	1	2	2	Back up members of Wolverhampton and college team have already been identified.  Secure names of back up personnel from partner institutions at first meeting.
Student engagement with technology minimal.	2	4	12	This aspect will be assessed via small pilots in year one to identify the need in terms of training, coaching and mentoring to ensure successful engagement in year 2.
Staff in colleges / schools do not have the time to participate	1	4	4	The project is providing financial support to enable staff to participate and develop the necessary skills. The Coaching and mentoring will allow extra support to be provided at the point of need.
Organisations withdraw	1	1	1	Highly unlikely with the high level of commitment.
External suppliers	1	1	1	ePortfolio software is currently being used – so unlikely to fail.  VLE university owned and supported available to partners and unlikely to fail.  External software partnership in place and committed to project failure unlikely.
Legal	1	1	1	Established partnership, all software developed; scheme relies on partnership and novel application.

### 2.6 Intellectual Property Rights

The IPR and/or copyright asserted by the owners of the relevant technologies employed remains that of the originators and is unaffected by this research proposal. Copyright in written work, diagrams, use-cases, project reports, and other artefacts arising from this project will be assigned to members of the collaborative consortium and licensed to the JISC for educational purposes. Due deference to both data protection and sensitivity of content will be established very early on, via both JISC and the various institutional protection officers, to ensure both compliance with legal requirements and regard to individual personal data.

## 2.7 Sustainability

It is expected that the programme will be full sustainable as the benefits of the approach and partnerships will be secure.

## 3. BUDGET

In terms of curriculum development and innovative use of technology by staff and students the University of Wolverhampton and Wolverhampton College are leading this project. The budget proposes to second a project manager from the School of Engineering and the Built Environment within the University and the Engineering Department of the College. They will share responsibility for the delivery but each will have clear and individual objectives.

See Annex 1.

## 4. KEY PERSONNEL

Name: brief paragraph on career, contribution to project, qualifications in the area, any other projects of similar nature involved with:

**Dr. Alison Halstead:** Dean of Learning and Teaching, University of Wolverhampton, Project Sponsor and fund holder.

Qualifications BSc Physics , PhD Engineering,

Worked in Industry and three other HE establishments.

Successfully run ESF, EU, FTDL, TQEF and JISC projects. Currently on the ESRC commissioning panel for the Technology Enhanced Learning projects. Also leads the £4.5million Centre of Teaching Excellence project and is a National Teaching Fellow.

**Dr. Paul Lister:** Associate Dean (Quality and Academic Standards), School of Engineering and the Built Environment, Project Applicant 1.

Qualifications BSc Engineering, PhD Engineering

Industrial experience: automotive CPD and aerospace knowledge transfer

Research experience: tool wear in metal cutting operations

Editorial experience: Member of editorial panel of the International Journal of Engineering Simulation, Co-Editor of the Engineering Education Conference 2005.

**John Stretton:** Vice Principal for Teaching and learning at City of Wolverhampton College.

Qualifications: BA hons in History, PGCE, Med in Educational Studies. Membership of the Wolverhampton 14 to 19 Learning Partnership executive group, and the Black Country 'Aimhigher' executive group.

Wider experience: Secondary school teacher and head of Department, Career teacher trained, Lecturer, Head of School and Faculty Director in FE. Secondment to Engineering Careers project as part of Career teacher training.

**Dave Vaughan:** Manager of the City of Wolverhampton Lean Academy based within Turner Powertrain (CAT Group) Wolverhampton formerly Head of Engineering and Electronics with the college.

Qualifications: HNC (Full Tech Cert) Engineering and Fabrication&Welding, IEng, Member of the Institute of Welding. Industrial experience in aerospace, production engineering and Lean manufacture. Trained Lecturer and active member of the World skills and local schools design Heads group.

**Bill Wolger** – Head Teacher Stoke Park Technology School and Community Technical College.

Qualified teacher and senior leadership awards

Introduced both GNVQ Engineering and the VLE into the School advocate of releasing the potential in all children through technology-enabled means. Will co-ordinate the project between the partners and staff at the School and manage the project team of students and staff within the school.

## 5. SUPPORTING LETTERS

- 1) Professor G Hurd, Deputy Vice Chancellor, University of Wolverhampton
- 2) Kevin Harrison, Head of Technology, S.Peter's Collegiate School
- 3) Bill Wolger, Head Teacher, Stoke Park School and Community Technology College
- 4) Peter Harriman, Assistant Head, Assessment & Director of Engineering, Wednesfield High School
- 5) John Strelton, Vice Principal, Teaching and Learning, City of Wolverhampton College
- 6) Andy Allen, Training Officer, Denso Manufacturing UK Ltd
- 7) Dennis Williams, Ricoh UK Products Ltd
- 8) R.T.Smith, Human Resources Manager, Turner Power Train Systems

Professor Geoff Hurd  
Deputy Vice-Chancellor

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16 June 2006

To whom it may concern

**JISC 03/06 Capital Funding for e-learning  
SEAMLESS PROGRESSION AND ENGAGEMENT IN LEARNING FOR EMPLOYMENT IN  
THE ENGINEERING COMMUNITY WITHIN THE WEST MIDLANDS.**

This is to confirm University support for the above named bid.

The project builds on partnerships that already exist and will enable us to enhance the Foundation Year in Engineering by integrating the ePortfolio as a tool for personalised, flexible learning and collaborative learning.

In addition we will be able to extend our established links with employers to our school and college partners for them to gain work-based experience and credits and develop a model of seamless progression through the 14-19 age group.

Yours faithfully



Professor G. Hurd  
Deputy Vice Chancellor

# S. Peter's Collegiate School

Compton Park, Compton Road West  
Wolverhampton, WV3 9DU  
Tel: (01902) 558600 Fax: (01902) 558596  
E-mail: [speters@speters.org.uk](mailto:speters@speters.org.uk)  
Principal: The Revd HD. Bishop BA, DipTh, NPOH, FRSA

A Voluntary Aided  
Church of England



19<sup>th</sup> June 2006

## JISC 03/06 Capital Funding for e-learning SEAMLESS PROGRESSION AND ENGAGEMENT IN LEARNING FOR EMPLOYMENT IN THE ENGINEERING COMMUNITY WITHIN THE WEST MIDLANDS.

Dear Sir

This is to confirm our support for the above bid.

The project builds on the established partnership that exists within City of Wolverhampton:  
between schools, the College, and the University.

*As a Specialist College (Technology and Vocational) we were amongst the first cohort to run the Applied GCSE in Engineering. Central to this has been the marketing of engineering as a clean hi-tech activity, further supported by links with local employers; as a result of this the course has been popular with both students and parents. We are currently looking to expand our engineering provision through the Diploma which become available for piloting from September 2007. The project will enable us to provide an excellent, up to date and relevant insight in to the real world of engineering. Our students will benefit further from the work experience that will be offered. This should provide a real launch pad for further study and employment.*

*As a Specialist College we have well established links with schools across the city and region and are therefore well positioned to disseminate the good practice that the project would enable.*

We look forward to contributing to this project

Yours faithfully

*Kevin Harrison*

Kevin Harrison

Head of Technology

A DFES Designated "Leading Edge" School





Our reference WTW/LR  
21 June 2006

To Whom It May Concern

Mr W T Wolger BA MEd  
Head Teacher  
Stoke Park School and Community  
Technology College  
Dane Road  
Coventry  
CV2 4JW

Telephone 024 7645 0215  
Fax 024 7663 6129  
admin@stokepark.coventry.sch.uk  
www.stokepark.coventry.sch.uk

Please contact Mr W T Wolger  
Direct line 024 7645 0215  
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**JISC 03/06 Capital Funding for e-learning  
SEAMLESS PROGRESSION AND ENGAGEMENT IN LEARNING FOR EMPLOYMENT IN  
THE ENGINEERING COMMUNITY WITHIN THE WEST MIDLANDS.**

This is to confirm my support for the above named bid.

The project builds on a partnership that we already have with the University; our most recent work is collaboration on developing a virtual learning environment, which will include facilities to enable school pupils to take responsibility for improving and monitoring their health and fitness. We are currently working closely with the University to develop the staff use of both the VLE and their ePortfolio.

As a Specialist Technology College we were the first school in Coventry to pilot GNVQ Engineering and to develop engineering links with the local universities. We look forward to contributing to this project. Our students will benefit from the work experience and the practical insight into engineering that will be offered.

Yours faithfully

*W T Wolger*

Mr Bill Wolger  
Head Teacher

To: Whom it may concern.

**JISC 03/06 Capital Funding for e-learning.  
Seamless Progression and Engagement in learning for Employment in the  
Engineering Community within the West Midlands.**

This is to confirm my support the above named bid.

The project builds upon our existing partnerships with Wolverhampton College and Wolverhampton University. Wednesfield High is a Specialist Engineering College and is engaged with a number of initiatives that seek to promote Engineering, to all pupils and all levels. We currently offer Engineering at NVQ level 2, GCSE, Btec level 1 and GCE A level. The school has expressed interest in being part of the new Specialised Diplomas delivery in Engineering and IT for launch in 2008.

We are developing e-learning strategies through VLEs and keen to be part of the pioneering work being undertaken by the College and University.

Yours faithfully

Peter Harriman  
Wednesfield High School

J/S/JJ

21 June 2006

Dr Alison Halstead  
Dean of Learning and Teaching  
University of Wolverhampton  
Walsall Campus  
Gorway Road  
Walsall  
WS1 3BD

Dear Alison

Thank you for the outline of the JISC "Engineering" project. The college warmly welcomes the opportunity to support this project.

The development of clear career paths for young people into higher level engineering is a goal that we share. The project allows for an innovative mode of delivery, clear advice and guidance, and mentoring. We feel the project will enhance our commitment to partnerships across the levels of education.

As an Engineering CoVE, the college is well placed to support the project. In addition we have a long history of school/college partnership work relating to engineering. Currently we are working with two schools to deliver the Young Apprenticeship course.

The college is pleased to whole-heartedly support this project and we wish you every success.

Yours sincerely



**JOHN STRETTON**  
Vice Principal - Teaching and Learning



Awarded Excellence



INVESTOR IN PEOPLE

# DENSO

DENSO MANUFACTURING UK LTD.  
Queensway Campus, Horionwood,  
Telford, Shropshire TF1 7FS  
Telephone: (01952) 608400  
Fax: (01952) 675222

To whom it may concern,

**JISC 03/06 Capital Funding for e-learning  
Seamless progression and engagement in learning for employment in  
the engineering community within the west midlands**

This letter is to confirm the support of DENSO Manufacturing UK Ltd for the above named bid.

The Company recognises the technical skills shortage apparent in industry. It also views the above named bid as an appropriate response. The bid will help to challenge the common perception of engineering and will address the problems of low numbers of young people entering engineering professions.

Please contact the Company if you would like to discuss this offer of support.

Yours faithfully



Andy Allen  
Training Officer  
*For and on behalf of DENSO Manufacturing UK Ltd*

[a.allen@denso-mfg.co.uk](mailto:a.allen@denso-mfg.co.uk)  
01952 675218

**RICOH UK PRODUCTS LTD  
PRIORSLEE  
TELFORD  
TF2 9NS**

To whom it may concern

**JISC 03/06 Capital Funding for e-learning  
SEAMLESS PROGRESSION AND ENGAGEMENT IN LEARNING FOR  
EMPLOYMENT IN THE ENGINEERING COMMUNITY WITHIN THE WEST  
MIDLANDS.**

This is to confirm my support for the above named bid.

The project builds on a partnership that we already have with City of Wolverhampton College, the University and our work with the recently introduced a virtual learning environment. We are currently working closely with the University to develop the staff use of both the VLE and their ePortfolio.

The students I am sure will benefit from the work experience that will be offered. RICOH UK PRODUCTS LTD look forward to contributing to this project

Yours faithfully

Dennis Williams  
Senior HRD Officer

Date: 19<sup>th</sup> June 2006

To whom it may concern

**JISC 03/06 Capital Funding for e-learning**

**Seamless Progression and Engagement in Learning for Employment in the Engineering Community within the West Midlands**

This letter is to confirm the support of Turner Powertrain Systems for the above mentioned project.

We are a Company which designs, develops, manufactures and sells transmissions for heavy duty off-highway vehicles primarily for construction and agricultural markets. We employ 370 people. Although the West Midlands area has a long tradition of high quality manufacturing, the fact that this sector has been shrinking for the past 20 years or so, dramatically illustrated when there are high profile factory closures, means that like many other similar Companies we experience difficulty in finding high potential young people who are attracted to our industry.

We already work in partnership with the City of Wolverhampton College, particularly with the recently opened Lean Academy, based within our factory, which besides its aim to promote world class manufacturing also endeavours to engage the attention of school pupils towards a career in engineering or manufacturing.

This new initiative, developing the learning round computer simulations and racing cars is exactly the sort of programme that will grab the attention of young people and allow them to see both the design and technical side of engineering and also give them the opportunity to visit a modern manufacturing facility to dispel the poor and unfair image factory work currently suffers from. It is just the sort of initiative this area needs, and I do hope our local College is successful with their bid.

Yours truly,



R. T. Smith  
Human Resources Manager

Training  
Support letter for W-ton college

**TURNER POWERTRAIN SYSTEMS LIMITED**

RACECOURSE ROAD • WOLVERHAMPTON • WEST MIDLANDS • WV6 0GT • ENGLAND  
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REGISTERED OFFICE: RACECOURSE ROAD • WOLVERHAMPTON • WEST MIDLANDS • WV6 0GT • REGISTERED IN ENGLAND NUMBER 310964

Date: 19<sup>th</sup> June 2006

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ANNEX 1

**FEC Costing - SEBE JISC bid**

		Basic	On-costs	Total	80% FEC Funding
<b><u>Directly Allocated</u></b>					
Project Manager - Principal - 330 hrs	£50,855	-	-	20,342	14,239
Project Manager - Principal - 330 hrs	£50,855	-	-	20,342	14,239
E-Portfolio Coach - Senior - 198 hrs	£42,167	-	-	10,120	7,084
CAD Trainer - Senior - 198 hrs	£42,167	-	-	10,120	7,084
VLE Coach - Senior - 198 hrs	£42,167	-	-	10,120	7,084
Administrator - Scale 2 - 0.20fte		-	-	2,695	1,886
<b>Estates Cost - Non Lab - £2,644 x Total Research FTE</b>		-	-	4,019	2,813
				<u>77,758</u>	<u>54,431</u> 70%
<b><u>Directly Incurred</u></b>					
School Staff Employers		-	-	12,000	8,400
Travel		-	-	3,500	2,450
Equipment		-	-	5,000	3,500
Partnership Workshops		-	-	3,000	2,100
Dissemination		-	-	1,500	1,050
Evaluation		-	-	1,500	1,050
Other		-	-	1,500	1,050
				<u>40,000</u>	<u>28,000</u> 70%
<b>Indirect Cost - £41,307 x Total Research FTE</b>		-	-	62,787	43,951
				<u>180,545</u>	<u>126,381</u> 70%
Expected Shortfall in funding to be covered by University contribution					<u>54,163</u>
Estates Funding @ 50%					(1,407)
Indirect Funding @ 50%					(21,975)
<b>Expected Total Shortfall</b>					<u>30,781</u>
<b><u>Match Funding</u></b>					
Project Manager - Principal - 495 hrs	£50,855	-	-	30,513	
Project Manager - Principal - 495 hrs	£50,855	-	-	30,513	
E-Portfolio Coach - Senior - 297 hrs	£42,167	-	-	15,180	
CAD Trainer - Senior - 297 hrs	£42,167	-	-	15,180	
VLE Coach - Senior - 297 hrs	£42,167	-	-	15,180	
Administrator - Scale 2 - 0.20fte		-	-	4,042	
<b>Total Match Funding</b>				<u>110,609</u>	

**Notes**

Hours are calculated per year out of a total of 1,650 for Research Active Staff.

Total Research FTE is the total of PI, CI and Researcher hours - In this case Internal Staff working on the Project.

Estates and Indirect costs are calculated based on Total Research FTE.