

Cover Sheet for Proposals (All sections must be completed)	<i>JISC Capital Programme</i>
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Name of Capital Programme: E-Learning (e-Learning; e-Infrastructure; Repositories and Preservation)		
Name of Lead Institution: University of Northumbria		
Name of Proposed Project: Accelerated Collaboration Network for E-Learning using Openfolio		
Name of Project Partners: Northumbria Learning		
Full Contact Details for Primary Contact: Name: Stuart English Position: Senior Lecturer Email: stuart.english@unn.ac.uk Address: University of Northumbria School of Design , Squires Building , Sandyford Road, Newcastle upon Tyne NE1 8ST Tel No: 0191 227 4631 Fax No: 0191 227 4655		
Length of Project: 2 years		
Project Start and End Dates: 01 October 2006 – 30 September 2008		
Total Funding Requested from JISC: £169.071		
Funding Broken Down over Project Years: Year 1: £71,237 Year 2: 85,059 Year 3: 12,775		
Total Institutional Contributions:		
Outline Project Description Openfolio is a unique tool for reflective practice and portfolio development with over 3000 members representing 140 design businesses and institutions in 26 countries. This proposal makes use of the existing Openfolio system to develop ‘open interest sharing’ and ‘accelerated collaboration networks’ by using keyword expertise and interests to build and develop collaborative topic groups (e.g . http://www.openfolio.com/groups/Design%20of%20Movement%20in%20Products/) . The function of each group is to provide a topic ‘hub’ for cross organisational virtual collaboration that also promotes the subject of the group through the internet (e.g. http://www.google.co.uk/search?hl=en&ie=ISO-8859-1&q=movement+in+products&meta=) The key value of the proposal is in earlier development of trust between interacting parties as a result of profiling individual’s capabilities, interests and motivations and enabling this to lead the development of research collaboration.		
I have read the Circular and associated Terms and Conditions of Grant at Appendix B (Tick Box)	YES *	NO

Accelerated Collaboration Network for e-Learning using Openfolio.

1.0 Summary of Bid

Openfolio is a unique tool for reflective design practice and portfolio development with over 3000 members representing 140 design businesses and institutions in 26 countries.

The system encourages users to reflect on their capabilities through portfolio evidence providing a searchable skills exchange forum to encourage international collaboration. In an earlier form the system won the UCISA 2001 web award for student participation, the judging panel commenting, "This site is a good implementation of a simple idea. The site is very easy to understand and use. It is highly student oriented and participative and provides a good vehicle for communication of design ideas."

JISC describes a learning portfolio as 'A collection of documents and other objects that can be shown as evidence to support claims a person makes about what they know, what they have achieved, and what they can do.' However the wider benefits are described by Morgan citing Mitchell 1994 who states that 'Evidence suggests that the use of portfolios encourages students to work cooperatively, to question and evaluate their own and others' work, and to develop their judgemental skills. Motivation becomes more intrinsic and less extrinsic.'

Openfolio aims to support active collaboration and now includes peer review and discussion facilities as well as group and resource management tools.

1.1 Accelerated Collaboration.

Often, collaborations occur and develop through personal networking, contacts made by chance or through organized meetings, where shared interests bring people together. The downside of this method is that networking is a time consuming process and even with Internet access there are problems finding the right people.

This proposal for 'open interest sharing' and 'accelerated collaboration' builds upon each lead enquirer's formation of a group(s), by using keyword expertise and interests to identify other group members to invite. The value of this is in forming more effective workgroups for e-learning opportunity development. A significant amount of time, from the point of opportunity identification to the deadline for action, may be used up in 'getting to know' parties within a proposed project community, and then agreeing aims and objectives before roles and responsibilities can be agreed and acted upon. However, this proposed networking system is organic, in that it not only introduces individuals, acting like a pollinating catalyst, but may also act in a repairing or budding facilitator. For example, if an active group member leaves, the system can help identify potential replacements. If a group develops divided interests as it grows in size, the system can help ensure that each sub-group may continue successfully, possibly by identifying additional members for the newly redefined interests to provide stability.

The key value of the proposal is in earlier development of trust between interacting parties as a result of profiling individual's capabilities, interests and motivations and enabling this to lead the development of research collaboration.

2.0 Introduction

The cross-institutional use of e-learning to support lifelong learners is argued to depend on effective collaboration networking for more successful knowledge transfer. Often, collaborations occur and develop by reliance on personal networking, through contacts made by chance or organized meetings, where identified shared interests suggest value in inviting inclusion into the personal network. The downside of this method is that networking can be a time consuming process.

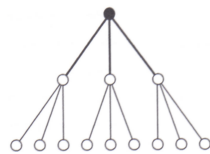
Even with Internet access there are problems finding the right people, or the right learning experiences. Typically the Internet may enable a surfer to identify a person by name, position, and where they work, or a course or project by its promotional material. Unless, a description and evidence of expertise is provided, the 'enquirer' is left to assume from what information they are able to glean, what these people's interests are and what these learning projects are achieving.

Openfolio presently provides a means by which e-learning by 'interest sharing' may be made more 'open' and 'inclusive', in addition to which the intent to collaborate effectively may be 'accelerated'. The new 'Group' function of Openfolio means that any interested party who locates an individual with a shared interest may also form a group, identify a related group, or identify other individuals sharing experiences around similar interests.

This proposed 'open interest sharing' and 'accelerated collaboration' builds upon each enquirer's formation of a group(s), by using keyword expertise and interests to identify other group members to invite. The value of this is in forming more effective workgroups for e-learning opportunity development. A significant amount of time, from the point of opportunity identification to a deadline for action, may be used up in 'getting to know' the parties within a proposed project community, and then agreeing learning aims and objectives before roles and responsibilities can be agreed and acted upon. However, this proposed networking system is organic, in that it not only introduces individuals, acting like a pollinating catalyst, but may also act in a repairing or budding facilitator. For example, if an active group member leaves, the system can help identify potential replacements. If a group develops divided interests as it grows in size, the system could help form each new sub-group, possibly by identifying additional members for the newly redefined interests to provide stability.

3.0 The Openfolio Concept

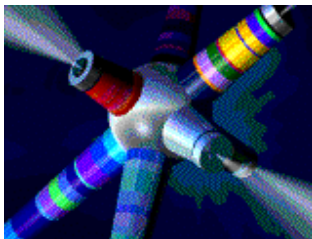
Openfolio is a portfolio development and collaboration system that enables users to reflect on their capabilities and share their skills, interests and experience through portfolio evidence. Member's portfolios are searchable and the system includes peer review and discussion facilities. The fundamental concept of Openfolio is based around a set of paradigms or rules of engagement designed to create organic, self-generating and self-adapting learning structures. This is an object-oriented strategy (oriented around the individual learner) and the resulting organisational learning structures tend to be chaotic in their nature:



*Figure 1: Learning structures
Openfolio describes chaotic learning structures more like the one on the left than the one on the right*

3.1 Openfolio as a reflective learning tool

Users of Openfolio are encouraged to consider their **learning journey**. To explore their past learning in the form of their experience. To describe their current position by identifying their skills, expertise and capabilities. And to consider the direction of their journey by describing their interests and motivation. Each learner describes a rich collection of attributes and expertise through which the learner can engage with other learners.



*Figure 2: Cooper 1996
This model represents the individual learner at the centre and the aspects of their learning along each spike.*

3.2 Openfolio as a peer review tool

Openfolio nurtures peer review through an integrated rating and commenting system that encourages learners to be active in their learning community.

*Figure 3 :Mentoring or tutorial support
Encourages learners to be 'active'*

3.3 Openfolio as an organisational tool

The system which draws on complexity theory for its rules of engagement is designed to grow organically creating a cross organisational learning network. . This diagram encapsulates the construction of a typical topic group .with learning portfolios around the outside and group topic in the centre.



*Figure 4: Integrated Organic Network
The outer spheres represent the richness of individuals expertise that contribute to the central project or topic*

3.4 Openfolio as a shop window for expertise

The system provides easily searchable portfolio and topic sites for example:

<http://www.openfolio.com/groups/Design%20of%20Movement%20in%20Products/>

In a 'Google' search for 'Design of Movement in Products'

[http://www.google.co.uk/search?hl=en&ie=ISO-8859-](http://www.google.co.uk/search?hl=en&ie=ISO-8859-1&q=design+of+movement+in+products&btnG=Google+Search&meta=)

[1&q=design+of+movement+in+products&btnG=Google+Search&meta=](http://www.google.co.uk/search?hl=en&ie=ISO-8859-1&q=design+of+movement+in+products&btnG=Google+Search&meta=) this site is returned first of 49 million.

Figure 5: Topic 'hub' attracts expert collaborators through optimization of internet search engine results

4.0 Project Description

The value of OpenFolio's Accelerated Collaboration Networking system to innovation through e-learning, in terms of theory building and practical application development, are numerous. The intent of this programme is to develop the capacity of the network, to further develop the capability of the system in line with enhancement feedback, and provide training for the users.

Network capacity is anticipated to be developed through the identification and engagement of users. Engagement of users will require acknowledgement of value, e.g. with an interest group already active, or opportunity to run a new interest group. Secondly it will require some initial commitment of time for the individual to develop a portfolio of experience and interests on OpenFolio to enable other users to get to know them academically and professionally. Thirdly, success of the interest groups depends upon maintained involvement of core parties, and lifespan of the interest. It is expected that the longer term groups may develop and evolve the topic of interest, rather than necessarily closing down and interest to start a new one. OpenFolio already has a significant user base (3025), but to enhance this there is an opportunity to get other Universities, Regional Development Agencies and multinational companies onboard as 'institutional' users.

As interest groups identify limitations or opportunities for enhancement, the system manager will log proposals and priorities for development. Present opportunities identified involve (some subtle changes to the search engine which further assists the connectivity of interests?)

While OpenFolio carries guidance, for more effective engagement, and especially as the system develops, it is predicted there will be an increasing need for training. While OpenFolio was initially

designed for users in design and visual communication professions, in its e-learning capacity it has a much broader potential, and it is likely to be the less IT and visually literate who may value introduction to the interface.

Opportunities for e-learning users are likely to come from three main sources:

Informing stakeholders in new product and service development.

Industrial collaborators may use this system to connect with and develop opportunities with academic institutions and their collaborative learning projects. In contribution to staff Personal Development Plans through such a portal for lifelong learning, this system provides the vehicle to share knowledge in a more meaningful way, because of the visual interaction and the way that newcomers are enabled to familiarise themselves with individuals in the project community.

Supporting undergraduate project development and evaluation.

A collaborative networking system would enable projects to become better informed, for developmental decision-making and identifying willing reviewers and evaluators of concepts and designs for products and services.

Developing and supporting postgraduate research programmes.

Researchers would more easily be able to identify and engage others in their programmes of research, resulting in joint project work, more effectively written co-authored papers, and encourage more effective bid writing.

Other opportunities will be identified through further consideration and engagement with such a system, but the key point of value is a more meaningful experience of e-learning through earlier development of trust between interacting parties as a result of the system's provision of a greater sense of individual's identities, interests and motivations.

4.1 Project Timetable

September 2006	Confirmation of pilot collaborators
September 2006	Service distribution agreement between Northumbria University, Openfolio author and Northumbria Learning is signed by all parties.
1 st October 2006	Project start
October 2006	System training for pilot group of organisations. Establishment of pilot group topic site.
October – December 2006	System testing with pilot groups identified in 7.0. This will involve the development of staff learning portfolios and the establishment of a number of pilot topic groups.
November 2006	Promotion and dissemination of pilot service at Design Research Society Conference Portugal 1-4 November 2006
November 2006	Advertisement of Research associate position. 12 month contract to commence February 2007.
January 2007	Feedback and pilot review report. This will identify areas for the development of the Openfolio service.
January – June 2007	System development in line with pilot group feedback. Ongoing use of system by pilot group of organisations.
February 2007	Recruitment of Research Associate on 12 month contract February 2007 – February 2008
April 2007	System development report and confirmation of new system deliverables for July 2007
May – June 2007	Organisational plan for large scale system trials. Marketing plan.
June 2007	System function and reliability testing
July 2007	New system implementation report
September –	Large scale system trials. This will involve staff training in at least 20

December 2007	organisations and will lead to large scale use of the system.
January 2008	Evaluation report summarising large scale system trials and identifying areas for further attention.
February- April 2008	Detailed service refinements culminating in technical report.
May 2008	Preparation of marketing materials
June - September 2008	Dissemination of service across sector. This will involve presentations and the distribution of marketing materials. It is envisaged that by this stage topic groups will help to promote the system by promoting themselves.
October 2008 onward	The service will be maintained by the University of Northumbria and Northumbria learning. New service agreement to be signed.

4.2 Intellectual Property Rights

IPR in Openfolio resides jointly with it's author and with the University of Northumbria. A service distribution agreement will be signed by IP owners at the commencement of the project.

4.3 Sustainability

It is intended that the Openfolio service will be maintained for use across the sector after the completion of this project. Ongoing support for the service will be based on a new service agreement to be signed in October 2008.

5.0 Budget

	Direct Staff Costs	Grade	No	Basis	Year 1	Year 2	Year 3	Total
	These are basic staff rates			Pay type				
4	Researcher 30,114	Grade 6 - Pt 3	0.5	basic + super + NI NI Pension Total	Salary 1,189 2,103 14,881	199 351 3,108	2,332 4,138 36,584	15,304
4	Academic 17,064	Grade 8 - Pt 2	0.2	basic + super + NI NI Pension Total	Salary 778 1,167 8,466	137 203 1,843	1,527 2,304 20,895	8,642
4	Academic 7,754	Grade 7 - Pt 6	0.1	basic + super + NI NI Pension Total	Salary 332 523 3,942	55 87 791	664 1,047 9,465	3,877
4	Academic 5,810	Grade 6 - Pt 2	0.1	basic + super + NI NI Pension Total	Salary 227 397 2,854	40 69 620	447 784 7,041	2,942
4	Academic 4,573	Grade 8 - Pt 4	0.05	basic + super + NI NI Pension Total	Salary 214 312 2,296	36 52 475	421 617 5,612	2,315
	Total Staff				32,439	40,322	6,836	79,598
	Running Costs			Variable by Year		9,200	9,200	0
	Development Costs			0		0		18,400
	Equipment			Year 1	0	0	0	0
1	Direct Total				41,639	49,522	6,836	97,998

Overheads	0%	Allocated Staff Costs	0	0	0	0
fEC Estate Cost Non Lab			3,569	4,285	716	8,570
fEC Estates Total			3,569	4,285	716	8,570
fEC Indirect Costs			26,029	31,252	5,223	62,503
Project Cost (Full economic cost)					71,237	85,059
169,071						12,775
Surplus	0%		0	0	0	0
Total funding required					71,237	85,059
					12,775	169,071
Actual Grant						135,257
Funding Gap			(71,237)	(85,059)	(12,775)	(33,814)

6.0 Key Personnel

Stuart English is programme leader for the distance learning MA Design Practice at Northumbria University and is the author of the Openfolio system.

Trained as an Industrial Designer Stuart Co-founded Glenelg Product Design in 1990 www.glenelgdesign.com and has worked the field of Product Design Innovation for 20 years, collaborating with a wide range of organisations including At & T, Britax, Sony, Electrolux, Antler, Thermos, Lewmar Marine, Morphy Richards, Boots and Dubois-Amaray.

At Northumbria University he has been active in enhancing e-learning since 1995

http://northumbria.ac.uk/sd/central/ar/its/l_and_t_enhancement/exgoodprac/student_communication/onlinecomm/ and his academic roles have included Course leadership on the BA(hons)

Design For Industry and MA Design Practice <http://vision.unn.ac.uk/madesign/practice.html> as well as holding the post of Design School Director for Design Learning Innovation.

English's research challenges the designer's capacity to be both innovative in terms of product designs and design processes. His approach confronts theory with practice and vice-versa. His practice has facilitated new product development through an inclusive approach based on design led entrepreneurship. This addresses multi and cross-disciplinary contexts bounded by clarity of market objectives and has led to numerous filed patents.

His theoretical research has led to the development of design collaboration tools and software e.g. the creation of a professional network for designer's reflective practice and portfolio development at www.openfolio.com

Malcolm Bell is Academic Adviser with Northumbria Learning at Northumbria University in Newcastle upon Tyne, UK.

Malcolm's background is in initial teacher education where he specialised in mathematics education and ICT. Until recently Malcolm was been a member of the multidisciplinary team, Online Services, which was responsible for the implementation and development of the Blackboard VLE at Northumbria. As well as supporting the effective development and engagement of e-learning across the institution, his current work includes managing and supporting the development of a range of on-line distance learning courses. He now works as an academic adviser for Northumbria Learning, a subsidiary of the University which provides a hosted VLE solution for a number of HE, FE, educational and training establishments in the UK and elsewhere as well as developing a range of software solutions for education. Malcolm acts as one of the Northumbria University's peer reviewers for critical assessment of the quality of on-line and distance learning courses. In addition, he is Northumbria's lead on an EC-funded collaborative project with four other European institutions exploring effective ways of using blended learning with large cohorts.

Rob Leeman graduated with a first class honours degree in Transportation design at Northumbria University and studied MA in Transportation design at the School of applied sciences in Pforzheim Germany. After graduating he went on to work for Toyota Design at the Hachioji studio in Tokyo before joining BA (Hons) Transportation design team at Northumbria in 2004. <http://vision.unn.ac.uk/transport.html>

Nick Spencer graduated with a first class honours degree in Design for Industry and is currently undertaking a PhD research project investigating mental activities in design. Nick joined the BA (hons) Design for Industry team in 2002 and has responsibility for student placements.

Jonathan Halliday Is a consultant with specific expertise in Java programming.

7.0 Collaborators

We expect to collaborate with the following organisations during the early part of the project.:

Sheffield Hallam University
Huddersfield University
Central St Martins
UWIC
Philips
Black and Decker
Eve Products
ONE North East
Yorkshire Forward

8.0 Openfolio Examples

8.1 Example Portfolios

- <http://www.openfolio.com/users/nataliatsvetkova> Russia
- <http://www.openfolio.com/users/marknelson> USA
- <http://www.openfolio.com/users/matthewposter> USA
- <http://www.openfolio.com/users/cecageorgieva> Bulgaria
- <http://www.openfolio.com/users/wilmakwan> Canada
- <http://www.openfolio.com/users/eduardomira> Spain
- <http://www.openfolio.com/users/chenhooi> Malaysia
- <http://www.openfolio.com/users/paulogoncalves> Brazil
- <http://www.openfolio.com/users/l913038> China
- <http://openfolio.unn.ac.uk/users/j933251> Greece
- <http://openfolio.unn.ac.uk/users/j933260> Greece
- <http://www.openfolio.com/users/siljegranhaug> Norway

8.2 Example Topic Groups with search results

'Design of Movement in Products'

<http://www.openfolio.com/groups/Design%20of%20Movement%20in%20Products/>

Google search: <http://www.google.co.uk/search?hl=en&ie=ISO-8859-1&q=movement+in+products&btnG=Search&meta=>

'Transportation Design Exhibition'

<http://www.openfolio.com/groups/Transportation%20Design%20Exhibition/>

Google search: <http://www.google.co.uk/search?hl=en&ie=ISO-8859-1&q=transportation+design+exhibition&meta=>

'MA Design Practice'

<http://www.openfolio.com/groups/MA%20Design%20Practice/>

Google search: <http://www.google.co.uk/search?hl=en&ie=ISO-8859-1&q=ma+design+practice&btnG=Google+Search&meta=>

9.0 Summary of Project Objectives

The project identifies five key objectives in the arenas of. learning portfolios and topic groups:

- Evidence
- Reflection
- Peer Review
- Collaboration
- Dissemination

9.1 Portfolio objectives

- Development and communication of a dynamic learning portfolio
- Exchange forum for skills, interests and experience
- Presenting capabilities to a wider community
- Information gathering and sharing
- Communication forum transcending geographic restrictions within working partnerships.
- Academic, professional and personal mentoring
- Giving and receiving feedback.

'Evidence suggests that the use of portfolios encourages students to work cooperatively, to question and evaluate their own and others' work, and to develop their judgemental skills. Motivation becomes more intrinsic and less extrinsic.' (Morgan citing Mitchell 1994)

From the learners perspective the use of portfolios:

- "Helps students to know the extent and the limits of what they know". (Baume)
- Provides evidence of the student's learning claims.
- Encourages learners to reflect on their process and capabilities.
- Develops learner's intrinsic motivation.
- Encourages collaboration.

9.2 Measured Outcomes

The project will:

- Involve at least 25 organisations and at least 125 new users.
- Create at least 125 reviewed learning portfolios
- Create at least 20 topic groups prominently visible in search engine results
- Generate regular system review reports
- Offer a service to the sector on completion of the project