



## Project Plan

Project Information			
<b>Project Acronym</b>	ourWikiBooks		
<b>Project Title</b>	ourWikiBooks		
<b>Start Date</b>	1 June 2010	<b>End Date</b>	30 April 2011
<b>Lead Institution</b>	University of Manchester		
<b>Project Director</b>	Alex Walker		
<b>Project Manager &amp; contact details</b>	Mark van Harmelen mark@cs.man.ac.uk		
<b>Partner Institutions</b>	None		
<b>Project Web URL</b>	ourwikibooks.cs.man.ac.uk		
<b>Programme Name (and number)</b>	Developing Community Content 13/09		
<b>Programme Manager</b>	Paola Marchionni		

Document Name			
<b>Document Title</b>	Project Plan		
<b>Reporting Period</b>			
<b>Author(s) &amp; project role</b>	Mark van Harmelen, Project Manager		
<b>Date</b>	31 Dec 2010	<b>Filename</b>	ourWikiBooks Project Plan v02
<b>URL</b>			
<b>Access is both</b>	Project and JISC internal	and	General dissemination

Document History		
Version	Date	Comments
V01	31 Dec 2010	For dissemination
V02	30 Jan 2011	With cover sheet



## JISC Project Plan

### *Overview of Project*

#### 1. Background

OurWikiBooks addresses key concerns in the continued professional development of computing teachers, and in the uptake of Computing as a subject at GCSE and A-level and in universities, through community co-development of Open Educational Resources.

Particularly, recent reports<sup>1</sup> from both Computing At School (CAS)<sup>2</sup> and the Council of Professors and Heads of Computing<sup>3</sup> acknowledge the challenges currently facing the discipline of Computing, in schools, HEIs, and industry. Most worryingly, there is lack of student take-up of and engagement with the subject at A-level and in HE. This is of significant concern in industry, where there is a predicted skills gap in the IT labour market. Because of the centrality of IT this is increasingly seen as a significant problem for the future development of UK economy.

The proposal here is to address systemic problems in the development of IT-knowledgeable members of the future workforce, particularly the following:

- Computing is seen as a boring subject by many school-age students
- There is a lack of learning materials that contribute to positive student learning experiences
- Schools often only have at most one computing teacher who can feel isolated and struggle to keep their skills updated, which in turn diminishes learning experiences and leads to negative student perceptions

We, together with schools and teachers we have contacted, see the possibility of intervention to address these cyclic problems; to engage teachers and school students in the generation of two interrelated sets of Open Educational Resources: classroom materials for teachers, and learning support materials for computing students.

We see an opportunity through this project to engage students and teachers in creating more imaginative educational materials, for them to participate in a deep learning experience through the creative process, and for reuse and extension of community content in subsequent learning activities. This will allow for an evolutionary approach to content development, so that the outcome of the project (i.e. eBooks) remains in step with the community's knowledge development.

Two forms of Web 2.0-based user-generated content are proposed. Firstly, wiki content that include embedded multi-media resources. Secondly, based on successfully generated and trialled wiki content, stand-alone e-books that are spun off from wiki content using open source software that has already been developed and is in use by the University of Manchester's School of Computer Science (UMCSc).

UMCSc is already active in helping address issues through its Public Engagement Strategy that includes a variety of projects with schools and support for other organisations, including CAS. As part of this strategy, UMCSc hosts the CAS North West regional hub for teachers. The project will further

---

<sup>1</sup> [http://www.computingatschool.org.uk/files/CAS\\_UKCRC\\_report.pdf](http://www.computingatschool.org.uk/files/CAS_UKCRC_report.pdf) and <http://www.cphc.ac.uk/docs/reports/cphc-itlabourmarket.pdf>

<sup>2</sup> <http://www.computingatschool.org.uk/>

<sup>3</sup> <http://www.cphc.ac.uk/>

engage the University of Manchester's School of Computer Science with schools and colleges in the North West and throughout the UK.

The University of Manchester's School of Education (UMEd) is a partner in the project and will supply further contacts with schools, expertise in developing and using collaborative web 2.0 environments in educational settings, and specialist evaluation skills that we will use in ongoing formative evaluation of the project.

## 2. Aims and Objectives

The aims of the project are to:

- Produce high-quality, dynamic, collaboratively-created content for learning and teaching computing, with this content being made available to the computing education community in the UK and worldwide.
- Provide a proof of community-generated content for computing education, using North West schools, CAS, UMCS, and University of Manchester School of Education (UMEd).
- Broaden the project, encouraging, in the second half of the project and beyond, more teachers (and trainee teachers), schools, industrial partners<sup>4</sup> and universities to join the community.
- Provide qualitative and quantitative benefits to UMCS and the computing sector: (i) Assist in the delivery of UMCS's Public Engagement Strategy while (ii) simultaneously strengthening its existing links with the schools sector and (iii) helping encourage cross-institutional engagement within the sector while (iv) aiding student uptake of computing and computer science. To assist in this, three people in the project (one in the team, two in the steering committee) are part of UMCS's Public Engagement Team.

## 3. Overall Approach

The content will be developed in a Mediawiki installed and hosted by UMCS.

The wiki will operate as a space in which to collaboratively create and develop content. This collaboration will encourage the creation of relevant material that makes connections between syllabus requirements and cutting edge research in the field, thus demonstrating the potential impact of Computer Science to school students in contrast to traditional, curriculum driven materials.

Content can consist of a wide range of media (eg embedded animations) and the community will be encouraged to reuse existing multi-media material used in UMCS within the wiki, as well as generating their own content.

The platform will enable a continual development of these materials in keeping with content improvement and growth over time and the dynamic nature of computing and computer science.

Wiki content can be used directly or can be tailored to the needs of specific teachers, enabled by an open source tool (an e-book processor) developed by the UMCS. The e-book processor can be used to extract specific parts of a wiki, and produces output as an e-book (or e-textbook). Students can then use a copy of the book which they helped to produce and further annotate this for their own purposes.

For communication between the team and teachers we have available a variety of Web 2.0 and real-time communication tools. It is expected that the teachers will have preferences as to communication mechanisms to be used during collaborative processes, and the team will respond, making requested tools available.

The team will establish an outwards facing blog and accompanying web site to publicise the project.

School students will interact with the project via their teachers, and no direct contact is envisaged between school students and non-CRB registered university students and staff. Any unanticipated requirements for face-to-face contact between the team and school students will be undertaken by staff with CRB clearances (AW has clearance, AB is currently renewing hers).

There are already strong structures and relationships in place to ensure community formation: The public engagement activities undertaken by UMCS, including the annual UMCS UK Schools Animation Competition and technical workshops for both students and teachers, have forged close relationships with teachers of computing and ICT across the region and nationally. Many teachers have expressed a keen interest in progressing from distinct events to finding ways to work more collaboratively with HE and research groups.

The project will provide a platform, at an appropriate level of technology for the computing education audience, for exchanging knowledge across a range of contexts. The technologies used will enable this knowledge to be continuously updated and developed, crucial for such a dynamic subject, and for the knowledge to be presented and actively used and extended within specific contexts within the community. These processes will help create and grow a sense of ownership and purpose across the community of collaborators.

School students, teachers, academics and industry representatives will act as peer reviewers, with explicit moderator privileges being granted where needed. Training and support will be provided where necessary. Through the initial workshops, teachers will determine how the content creation activities may best be incorporated into their students' time, either within their scheme of work, with students researching and creating content during classes, or through after school clubs and homework.

The UMCS public engagement team work with the School's student volunteers who will create and peer review content both as part of their studies and their public engagement.

Having experience in community formation through technological platforms (more specifically, in helping such communities form), we are well aware of the interdependence between social and technical aspects of such work. It is intended that all collaborators will develop a sense of ownership of the wiki-based space, and that technical tools will be used as appropriate to, and in support of, community development.

By the end of the project scalable systems will be in place for collaborative content creation and delivery as structured online educational resources. These will continue to be hosted and maintained by the Advanced Professional Education group in UMCS as part of their 'business as usual' activities and the public engagement programme.

Communication for engagement and dissemination will include:

- An outward facing blog and appropriate mailing lists will be used to share ongoing developments throughout the project. We anticipate using mailing lists run by JISC, CAS, ALT, Becta, and the Specialist Schools and Academies Trust (SSAT).
- We will host regular video conference webinars throughout the project to widen awareness, in part involving contacts from UMCS and UME, and in part advertised more broadly.
- At the end of the project we will host a one day conference on the project and any related initiatives that arise. This will be hosted at the University of Manchester.

Content channels will include:

- Wiki and e-book outputs will be hosted in UMCS, using existing School servers. The School commits to keep these materials hosted for as long as there is visible demand.
- Where possible, it is intended to make content accessible within various OER repositories, such as JorumOpen and OERCommons.

The content produced as part of this project will remain openly accessible and free for reuse (see paras 8 and 74). Throughout the duration of the project we will actively investigate commercialisation opportunities with the aim to achieve self sustainability. A member of UMIP, the managing agent of The University of Manchester for intellectual property commercialisation, will be a member of our working group (see para 58). UMIP support will provide suggestions on utilising our value proposition to commercial third parties whilst we continue to provide content to end users freely.

Other material outputs include:

- Findings will be presented at conferences and through journal papers.
- To aid tool adoption, we will produce a concise guidebook for the use of the e-book processor.

The project outputs will be available to teachers and students in the UK and worldwide: The openly licensed content on the wiki will be available to be edited, reused, and re-combined according to the needs of specific teachers, and e-books may be produced using existing open source licensed e-book production system.

Post project sustainability rests on increased uptake, community growth and ongoing contributions to the work. The key elements of our sustainability strategy are:

- Ensure content quality and suitability, because this is widely acknowledged as a pre-requisite for content uptake in the web 2.0 world<sup>4</sup>.
- Make it as easy as possible to contribute via training supplied to teachers, with an emphasis on enabling the trained teachers to train other teachers and students.
- Start with a small cadre of well motivated teachers and work closely with CAS and the existing network of NW schools to build a core community during the project, using formative evaluation techniques to help improve both community co-work processes and output quality.
- Promoting the community, its process and its products across the UK are ways to achieve content growth and enhance sustainability by enlarging the community. We will seek to broaden involvement by recruiting schools, teachers, other universities and industrial partners in the latter half and after the project. In this UMCSsc has funding and personnel for outreach activities to sustain its post-project activities.

Where appropriate, we will work with National Co-ordinating Centre for Public Engagement and with other projects.

Whilst the community collaborating on this project has emanated from the public engagement activities of UMCSsc, the University of Manchester has several active public engagement programmes, and future developments from this project could be disseminated across a range of those activities, for example into the Widening Participation and Manchester Beacon<sup>5</sup> programmes, which can be used for research and other dissemination purposes.

We have reserved project days to ensure scope for working in partnership with JISC in dissemination and evaluation.

In order to inform ongoing project work, and to develop our sustainability strategy further, we will adopt a formative evaluation approach that uses an appropriate mixture of quantitative and qualitative methods:

- This will include an investigation of how collaborators have produced content and engaged in the collaborative process. This will sometimes involve teachers as evaluators, thereby contributing to shared ownership and sustainability.
- We will also enable formative feedback on the quality of content being created, both from the point of view of its end users, and, at a technical level, from the team and other UMCSsc personnel.

In order to inform the guide we will produce at the end of the project, in the final evaluation phase we will:

- Conduct interviews with stakeholders to gauge the usefulness of the project, which will provide us with rich qualitative data.

---

<sup>4</sup> D. Powazak, Design for Community, New Riders, 2002.

<sup>5</sup> <http://www.researchsupport.manchester.ac.uk/PublicEngagement/Default.aspx>

- Analysing the content produced in terms of its educational quality. We intend here to use and adapt tools, techniques and lessons learned from the 'Toolkit for the Impact of Digitised Scholarly Resources' and the final report thereon<sup>6</sup>.
- Aided by the 'history' functionality of Mediawiki (where every edit is preserved), we will undertake a short review of how selected pieces of content came to be created.

## 4. Project Outputs

The deliverables over the course of the project are:

- Wiki content: the collaborators will determine the most immediate need for particular topic areas and content development will focus on these.
- Online book example(s): Once sufficient content is produced, teachers will be able to use the wiki to e-book tool to produce online book(s) for themselves and for future students. Within the given time frame, it is anticipated that only one or two short topic-specific books will be produced. These will serve as exemplars.
- Interim reports as required, a final report, and publications.

## 5. Project Outcomes

The expected outcomes of the project are:

- A structured wiki based around GCSE and A-level syllabus themes with content and the capacity for future content addition.
- One or more e-books on specific topics that are spun off from the wiki content.
- Proof of concept for a tools and community structures that support community collaboration and OER principles.
- A cross-institutional community that has started functioning as a unified Community of Practice and can continue to grow as community content providers.

Besides providing a technology focus, the project aims to encourage critical thinking about the social and ethical implications of computing technology through taking the focus away from consumption of information and enabling students to create their own content, with expert guidance, for use across educational contexts and in so doing support the development of lifelong learning skills.

## 6. Stakeholder Analysis

*<List key stakeholder groups and individuals that will be interested in your project outcomes, will be affected by them, or whose support/approval is essential, both within your institution and in the community, and assess their importance (low/medium/high).>*

Stakeholder	Interest / stake	Importance
pupils	More interesting courses	high
teachers	More motivated pupils and CPD	high
university students	Public engagement commitment	low
project team	Success	high
University of Manchester (and other universities)	Better and enlarged CSc intake	high
CAS	Furthering the Computing in schools agenda	high

<sup>6</sup> <http://microsites.oii.ox.ac.uk/tidsr>

## 7. Risk Analysis

*<List factors that could pose a risk to the project's success, assess their likelihood and severity, and how you will prevent them from happening (or manage them if they if they occur). Cover the types of risks listed and any others that apply.>*

Risk	Probability (1-5)	Severity (1-5)	Score (P x S)	Action to Prevent/Manage Risk
Staffing	1	2	2	Can replace staff
Organisational	1	1	1	Not needed
Technical	1	1	1	Not needed
External suppliers	0	0	1	Not needed
Legal	0	0	1	Not needed
Lack of schools/pupil generated content	2	5	10	We have instituted a watching and helping brief

## 8. Standards

Name of standard or specification	Version	Notes
HTML XHTML CSS Flash	Various	

## 9. Technical Development

At this stage development has finished.

## 10. Intellectual Property Rights

IPR and copyright will be firmly oriented towards reuse and adaptability. The e-book processor is already open source licensed, and we will use an open licence (likely Creative Commons) for all material produced by the community. This will ensure that the content created by the community is freely available for them to use and evolve in ways that they see fit.

## *Project Resources*

### 11. Project Partners

Nil – MvH is supplied to the project in his UofM role, not his Hedtek Ltd role.

### 12. Project Management

The project will be managed by MvH, who has managed more than 30 technical and socio-technically focussed projects, including several JISC Projects. These project range from small projects to projects with a budget of over a million pounds per annum.

There will be lightweight weekly face-to-face team meetings, and discussions with the JISC Programme Manager at key stages. As is appropriate for a community-based project, the project will be managed in an agile and responsive style. All JISC project management recommendations will be adhered to.

The project includes a steering committee. The steering committee will meet quarterly to steer the project and sign off major deliverables and reports to JISC.

## Team

### **Dr Mark van Harmelen – Honorary Research Fellow, School of Computer Science, University of Manchester and Director, Hedek Ltd – OurWikiBooks Project Manager**

Mark is a computer scientist who is expert in user content generation in Web 2.0 and e-learning support environments, Web 2.0, web architecture and online communities. Mark is a highly experienced project manager, and is particularly skilled at building agile and self-organising teams.

### **Dr Andrew Whitworth – Lecturer, School of Education, University of Manchester**

Course Director for the MA: Digital Technologies, Communication and Education in the School of Education, University of Manchester. Author of 'Information Obesity' (Chandos, 2009) and several other works on the teaching of ICT, information literacy, and e-learning. Formerly at the School of Computing, University of Leeds, and a member of ACOM, a team which taught ICT and Computing electives to undergraduates in many different subjects. Drew will concentrate on evaluation aspects.

### **Amanda Banks – Teaching Fellow, University of Manchester**

After several years as a software engineer in the telecommunications industry, Amanda was awarded a PGCE in Secondary ICT Education and was a school teacher for a number of years before joining the Advanced Professional Education team in Manchester in 2006. In her current role she is responsible for developing online course material for distance learning in MSc Computing courses. She is a member of the UMCS Sc Public Engagement Team lead by Toby Howard (cf Steering Committee). Amanda will perform various roles, including being the primary interface between UMCS Sc, schools and teachers.

### **Cormac Lawler – Teaching Fellow, School of Education, University of Manchester**

Cormac has recently completed a PhD in the University of Manchester on the process of setting up and developing Wikiversity, a sister project to Wikipedia, focused on developing learning materials and learning communities. He is currently teaching a course on 'Teaching and Learning with Emerging Technologies' on the MA: Digital Technologies, Communication and Education programme in the University of Manchester.

### **Chris Page – Systems Developer, School of Computer Science, University of Manchester**

Chris is the designer and lead developer of the open source software for e-book and online course production, wiki2course. He will install and configure tools for the project, and provide technical help to the team and community.

## Project management time and training needs

Approximately 20 days over the life of the project.

No training needs.

## 13. Programme Support

Only general help as is appropriate for the typical JISC project.

## 14. Budget

The budget is not attached, for FOI reasons. JISC staff will find it in the original bid.

## Detailed Project Planning

### 15. Workpackages

See Appendix B.

### 16. Evaluation Plan

In order to inform ongoing project work, and to develop our sustainability strategy further, we will adopt a formative evaluation approach that uses an appropriate mixture of quantitative and qualitative methods:

- This will include an investigation of how collaborators have produced content and engaged in the collaborative process. This will sometimes involve teachers as evaluators, thereby contributing to shared ownership and sustainability.
- We will also enable formative feedback on the quality of content being created, both from the point of view of its end users, and, at a technical level, from the team and other UMCSsc personnel.

In order to inform the guide we will produce at the end of the project, in the final evaluation phase we will:

- Conduct interviews with stakeholders to gauge the usefulness of the project, which will provide us with rich qualitative data.
- Analysing the content produced in terms of its educational quality. We intend here to use and adapt tools, techniques and lessons learned from the 'Toolkit for the Impact of Digitised Scholarly Resources' and the final report thereon<sup>7</sup>.
- Aided by the 'history' functionality of Mediawiki (where every edit is preserved), we will undertake a short review of how selected pieces of content came to be created.

Timing	Factor to Evaluate	Questions to Address	Method(s)	Measure of Success

### 17. Quality Plan

One of the major outputs of the project is to assess if pupils can make textbooks of the same quality as their existing textbooks, and a quality plan for content would be inappropriate.

### 18. Dissemination Plan

Communication for engagement and dissemination will include:

- An outward facing blog and appropriate mailing lists will be used to share ongoing developments throughout the project. We anticipate using mailing lists run by JISC, CAS, ALT, Becta, and the Specialist Schools and Academies Trust (SSAT).
- We will host regular video conference webinars throughout the project to widen awareness, in part involving contacts from UMCSsc and UMEd, and in part advertised more broadly.
- At the end of the project we will host a one day conference on the project and any related initiatives that arise. This will be hosted at the University of Manchester.

Content channels will include:

---

<sup>7</sup> <http://microsites.oii.ox.ac.uk/tidsr>

- Wiki and e-book outputs will be hosted in UMCS, using existing School servers. The School commits to keep these materials hosted for as long as there is visible demand.
- Where possible, it is intended to make content accessible within various OER repositories, such as JorumOpen and OERCommons.

The content produced as part of this project will remain openly accessible and free for reuse. Throughout the duration of the project we will actively investigate commercialisation opportunities with the aim to achieve self sustainability. A member of UMIP, the managing agent of The University of Manchester for intellectual property commercialisation, will be a member of our working group (see para 58). UMIP support will provide suggestions on utilising our value proposition to commercial third parties whilst we continue to provide content to end users freely.

Other material outputs include:

- Findings will be presented at conferences and through journal papers.
- To aid tool adoption, we will produce a concise guidebook for the use of the e-book processor.

The project outputs will be available to teachers and students in the UK and worldwide: The openly licensed content on the wiki will be available to be edited, reused, and re-combined according to the needs of specific teachers, and e-books may be produced using existing open source licensed e-book production system.

Post project sustainability rests on increased uptake, community growth and ongoing contributions to the work. The key elements of our sustainability strategy are:

- Make it as easy as possible to contribute via training supplied to teachers, with an emphasis on enabling the trained teachers to train other teachers and students.
- Start with a small cadre of well motivated teachers and work closely with CAS and the existing network of NW schools to build a core community during the project, using formative evaluation techniques to help improve both community co-work processes and output quality.
- Promoting the community, its process and its products across the UK are ways to achieve content growth and enhance sustainability by enlarging the community. We will seek to broaden involvement by recruiting schools, teachers, other universities and industrial partners in the latter half and after the project. In this UMCS has funding and personnel for outreach activities to sustain its post-project activities.

Where appropriate, we will work with National Co-ordinating Centre for Public Engagement and with other projects.

Whilst the community collaborating on this project has emanated from the public engagement activities of UMCS, the University of Manchester has several active public engagement programmes, and future developments from this project could be disseminated across a range of those activities, for example into the Widening Participation and Manchester Beacon<sup>8</sup> programmes, which can be used for research and other dissemination purposes.

We have reserved project days to ensure scope for working in partnership with JISC in dissemination and evaluation.

## 19. Exit and Sustainability Plans

Project Outputs	Action for Take-up & Embedding	Action for Exit
Wiki books	As next table	As scenario for taking forward

<sup>8</sup> <http://www.researchsupport.manchester.ac.uk/PublicEngagement/Default.aspx>

		below
Existing OS software	Dissemination	As existing dissemination activities by UofM CSc

Project Outputs	Why Sustainable	Scenarios for Taking Forward	Issues to Address
Wiki books	Use in schools	Continuing activities by UofM CSc, CAS	

## Appendixes

### Appendix A. Project Budget

FOI constraints prevent reproduction here.

### Appendix B. Workpackages

WP 1	Project initiation	10 days	May 2010 lead MvH
Project inception activities: Initial outreach to schools and teachers via established channels, co-ordinate and deal with responses setting up the initial group of collaborators. Set up regular meetings with CAS, and for the steering committee. Install and configure wiki on existing servers in the first week.			
WP 2	Develop and deliver training	12 days	May – Jun 2010 lead AB
Develop and deliver workshops to (i) introduce initial collaborators (ii) ensure proficiency in the wiki and Web 2.0 communication tools, installing communication tools as appropriate (iii) introduce different output formats and (iv) discuss structure and focus for content. Consideration of (a) which elements of schools' syllabuses that could incorporate content creation as integral student activities, (b) where links with current research exist, and (c) how research could be presented to augment content.			
WP 3	Content consensus, preparation of initial structure, wiki 'pump-priming'	15 days	May – July 2010 lead CL
With the participation of school-based stakeholders (teachers and students) reach decisions on topics for initial content production and their initial structure. Initial structure put in place for content. Provision of existing re-usable learning resources by UMCSc. Based on outcomes from workshops in WP 2, install any additional wiki plugins. With a core of teachers collaboratively provide illustrative initial content to prime WP 4			
WP 4	Creation, growth and refinement of community content	30 days	Jul 10 – Mar 11 leads AB or CL
After 'pump priming' in WP 3, the major part of wiki content creation and enhancement is by the external community, teachers and their students, in collaboration with the team and other UMCSc personnel who provide both a technical reference service and specialist contributions. In this WP the team also encourages communication between collaborators, monitors content volume, provides ongoing technical support as needed, and engenders external community formation across schools.			
WP 5	Training in more advanced topics	12 days	Dec 10 – Jan 11 leads CL or CP
For teachers and UMCSc contributors: (i) Advanced moderation and editing, taking appropriate techniques from Wikipedia and Wikiversity processes, and (ii) generation of interactive e-book content			
WP 6	Generation of interactive e-books	5 days	Feb – Mar 2011 lead CP
Generation of one or two interactive e-books. Because of the relatively short time for writing these are expected to be short and topic specific, and serve as the basis for further development. If the community choose to work on certain material (eg to develop programming skills) then the community would likely have leveraged a rich body of pre-existing UMCSc materials and produce longer works.			

WP 10	Further development and enactment of the sustainability strategy	20 days	Mar 2011 lead MvH
Production of a final report covering project enactment and outputs, with a guide, based on experience, in how to repeat the process in other subject areas.			

WP 10	Final Report and 'project replication' guide	20 days	Mar 2011 lead MvH
Production of a final report covering project enactment and outputs, with a guide, based on experience, in how to repeat the process in other subject areas.			

WP 11	Management	30 days	May 10 – Mar 11 MvH
WP 9	Liaison, sustainability and dissemination	10 days	May 10 – Mar 11 lead AB
Monitoring progress against plan, agile re-planning, facilitating internal team and stakeholder communication, and liaison with teachers, schools, CAS, and appropriate parties in HMCSs. Prevising community building and sustainability activities, eg hosting distributed meetings, encouraging planning activities for the future, and building commitment. Dissemination of outputs to schools outside the North West, including invitations to join a growing network of schools to augment the community.			

WP 11	Formative (and summative) evaluation	30 days	May 10 – Mar 11 MvH
Monitoring progress against plan, agile re-planning, facilitating internal team and stakeholder communication, and budget control. Time-efficient liaison with external parties, including the JISC Programme Manager. Interim reporting as required.			