

Ideas Factory Live: Internet

New media project - Kent



INTRODUCTION

*What are the ideas that will shape the 21st century?
Who's having them? Where do they come from? What do they mean for us?
And how can they be presented in a compelling interactive form for young people?*

IdeasFactory Live: Internet is a Channel 4 commission, working in partnership with the Institution of Electrical Engineers, Kent County Council and the Science Museum.

The project is part of the New Media strand of the Ideas Factory, Channel 4's ambitious initiative to support creative careers, delivered across a range of platforms - the Internet, on television and through a series of nationwide events.

The overall aims of the project are to:

- Encourage teachers to use ICT to develop innovative learning projects across the curriculum;
- Provide a model for education which is built on the potential of ICT, one that is cross-curricular, based on connectivity and not boundaried by the walls of the school;
- Engage young people in learn about, create and publish multimedia work for a specific purpose and audience;
- Develop young people's awareness of the range of careers in multimedia - in particular the role of electrical, manufacturing and information engineers in the creative industries - and to offer a resource who are interested in following these careers;
- Engage a web audience in the project as viewers, users and participants;
- Create a series of compelling interactive guides to brilliant and controversial ideas - who had them, how they happened and what inspired them - which will link with other areas of Ideas Factory content.

OUTCOMES

The project will:

- Train at least 10 kent-based secondary school teachers in using a web template and introduce them to a range of methods of using interactive communications technologies to deliver the curriculum.
- Create a downloadable web tool (template) which enables teachers to create interactive learning resources and school students to build their own web sites.
- Engage up to 300 14-16 yr olds in creating, publishing and maintaining multimedia websites which tell the story of a current 'big idea'
- Enable young people to produce work for and interact with a real audience through a presence in the Ideas Factory websites
- Create a set of lasting resources that can be made available through Ideas Factory and establish a methodology and approach that can be used by other teachers across the curriculum and with different age ranges
- Link young people who aspire to a career in multimedia to information, organisations, mentors, producers, peers, ideas and regional clusters of creative industries relevant to industry, as part of the wider Ideas Factory site.

PROJECT PLAN

The project should take place in five phases:

Phase 1 - Development - Summer Term 2002

- Consultation sessions with teachers to ensure that the project meets defined educational needs
- Liaison and synchronisation with the IdeasFactory build
- Specification and building of a prototype of the tool
- Choice of participating schools

Milestones

Agreement of functional and technical spec
Completion of prototype
Completion of school recruitment
Organisation of teacher training labs

Phase 2 - Teacher Training - Autumn Term 2002

- Teacher training labs, including masterclasses
- Testing of prototype
- Project Design
- Completion of toolkit, including web tool, and supporting resources e.g. sample lesson plans

Milestones

Masterclasses recorded
Completion of project designs by teachers
Completion of web support materials for teachers

Phase 3 - Delivery - Autumn Term + Spring Term 2003

- Selection of ideas for content
- Delivery of school projects with young people
- Ongoing Support meetings for teachers
- Recording of teacher and student video and text diaries

Milestones

Start and end of school projects

Phase 4 - Launch - Spring Term 2003

- Presentation of school projects online
- Audience interaction and selection of best projects
- Best work published as Exhiblets
- Brilliant Ideas archive available as a resource on IdeasFactory website

Milestones

Launch

Audience votes

Phase 5 - Science Museum Tell Station

- Creators of best site working in Science Museum to develop a Tell Station (an on gallery interactive whereby talking heads give information about a science issue and then you make up your mind and add it to the "experience")
- Recording and presenting this on the IdeasFactory website
- Tool available for download and use by other schools and IdeasFactory users

Milestones

Creation of the Tell Station

Tool launched online as downloadable resource

THE TOOLKIT

The toolkit for teachers needs to include:

- a template to create multimedia web pages
- sample lesson plans for using the template to teach Science at Key Stage 4
- support facilities for teachers, including an online forum
- an online tutorial

The tool needs to be something beginners feel comfortable with as a central aim of the project is to get people using multimedia who are not already using more advanced authoring software or interested in getting familiar with java and html.

The tool will be developed in accordance with the Channel 4 Interactive Technical and Development Guidelines.

PROJECT CONTENT

The theme of the project is Ideas - scientific, technological, social, artistic. The challenge for both teachers and young people involved will be to create multimedia programmes which engage a 14-25 yr old audience as active participants in thinking and learning about the ideas that may shape the future.

This theme:

- enables work across different areas of the curriculum
- is consistent with the overall themes of IdeasFactory and will generate content that will be relevant to all IdeasFactory users
- fits with themes in the Science Museum and on its website

Examples could range from genetically modified foods to the electric car, from new contraceptives to biodegradable packaging, from the Stuckist art movement to the Dyson vacuum cleaner. But the focus is on the idea...what people think about it, where it originated from, how its been taken up.

Teachers will need to create a learning resource that opens up a specific idea, engages young people in seeking information (for example using the web as a research tool) and creating and gathering the text, images and sound they need to make a multimedia Exhibit that will grab people's attention. On the way, they will need to learn about technical issues, copyright and web research methods as well as design and editing content.

PROJECT PARTICIPANTS

There would be three levels of 'players' within the project:

- the project participant
- the web user
- the figurehead/celebrity/expert

The project is aimed at:

Teachers - initially secondary teachers in Kent teaching Science at Key Stage 4, then expanding out to Kent secondary teachers of English, ICT, History and PSHE. Once the Kent Multimedia project is complete, the tool will be available for teachers nationwide with support materials to use it to deliver across the secondary curriculum. Once launched online, the project is likely to appeal to:

- teachers looking for new ways to teach specific areas of the curriculum especially those that are seen as 'hard to teach';
- teachers who want to develop more cross-curricular work;
- teachers who are new to using ICT;

- teachers who are ICT literate but who haven't the time to learn complex multimedia authoring tools;
- teachers who want to develop links between schools and between their students and the world beyond the school.

Young People - initially Yr 10, then to a wider 14-24 age range as the toolkit becomes available online.

Once the project is launched online, its audience will include:

○ Young People - aged 16-25, especially those who:

- want to develop multimedia skills
- are interested in a multimedia career
- want to interact with other young people using multimedia and to engage with the schools projects
- are interested in the design of multimedia learning materials
- want to build their own 'Exhiblet' using the template
- want to find out about examples of the successful development of ideas.

○ Teachers and others who work with young people (e.g. youth workers) who:

- want to learn more about the use of ICT as an educational tool
- want to create their own learning resources using the downloadable tool
- want to link up with models of using ICT as a learning resource
- need to find learning resources to support their work
- want to connect with other teachers interested in using ICT
- want to develop their ICT skills

We expect the core audience to be predominantly in the 16-34 age range.

ONLINE USER EXPERIENCE

The work created by young people and teachers will need to be built into a compelling online experience for IdeasFactory users. The project will form part of the IdeasFactory's Multimedia section. Online, teachers, designers of learning materials and those who work with young people will be able to:

- Follow the experience of teachers creating and using the learning resource through the online diaries of two of the teachers

- Provide feedback, ideas and questions to those teachers (via BBS), sometimes in response to calls for advice from the teachers themselves ('What should I do next?')
- Explore the online masterclasses
- Download the multimedia tool and start making learning resources or Exhiblets themselves
- Use the site's community functions to exchange ideas

The more general youth audience will be able to:

- Contribute to young people's sites by responding to specific calls for experience or information
- Rate the finished sites - and select the best
- Follow the winning group creating the Rapid in the Science Museum ('Will they do it in time?')
- Look at how the Rapid works with the museum audience once exhibited by checking into a webcam in the Wellcome Wing
- Download the multimedia tool and start making exhiblets themselves
- Find out more about multimedia careers through the Multimedia Careers area of IdeasFactory, which could include diagnostic tools, profiles, key organisations, job descriptions and placement opportunities.

If the Feedback Engine proposed in Hi8us/Maverick's Storysites proposal is built, it could be used to enable aspiring multimedia creatives (both teachers and young people) to share and feedback on each others'-work. The best work created by the audience could be published on the site.

DELIVERING THE CURRICULUM

It is essential that teachers see the project as an effective means of delivering the National Curriculum, opening up new approaches to subject areas and key skills.

As outlined in this document, the project is particularly relevant to the Science, ICT, English, History and PHSE curricula. It opens up substantial opportunities for cross-curricular work.

Examples of curriculum area (other than ICT) that the project covers are:

Science

In Key Stage 4, Ideas and Evidence in Science - Attainment Target One:

- a) how scientific ideas are presented, evaluated and disseminated

- b) how scientific controversies can arise from different ways of interpreting empirical evidence [for example, Darwin's theory of evolution]
- c) ways in which scientific work may be affected by the contexts in which it takes place [for example, social, historical, moral, spiritual], and how these contexts may affect whether or not ideas are accepted
- d) to consider the power and limitations of science in addressing industrial, social and environmental questions, including the kinds of questions science can and cannot answer, uncertainties in scientific knowledge, and the ethical issues involved.

We would suggest that the project is initially piloted in the Science curriculum, and depending on the school, extended into other curriculum areas where appropriate.

English

In Key Stage 4 - Knowledge, skills and understanding in Writing (En3) and Reading (En2):

- En2 Understanding texts
 - 1b to analyse and discuss alternative interpretations, ambiguity and allusion
 - 1c how ideas, values and emotions are explored and portrayed
 - 1d to identify the perspectives offered on individuals, community and society
 - 1e to consider how meanings are changed when texts are adapted to different media
- En3 Writing for a purpose
 - 9a to imagine, explore and entertain, focusing on creative, aesthetic and literary uses of language.
 - 9b to inform, explain and describe, focusing on conveying information and ideas clearly.
 - 9c to persuade, argue and advise, focusing on presenting a case and influencing the reader.
 - 9d to analyse, review and comment, focusing on considered and evaluative views of ideas, texts and issues.

These are an example of Key Skills relevant to the project - but this is not an exhaustive list and there are other subject areas and skills the project could cover.

TRAINING AND SUPPORTING TEACHERS

The project would train teachers by:

- Running two weekend residentials in Interactive learning
- Organising monthly support meetings of participating teachers
- Creating an intranet bulletin board/Q&A within IdeasFactory which teachers can access for online help. This could become the basis of a handbook for the use of the multimedia tool after the initial Kent-based project

THE SCIENCE MUSEUM

As identified in earlier meetings, the Science Museum has a number of exhibition formats which the project could link to.

Antenna

Antenna covers Science News and is housed in the Wellcome Wing. It is sponsored by the magazine Nature and the EPSRC. Exhibition formats include:

Rapids cover current science news. They consist of three boards, the largest introducing a question (e.g. "Would you fly on Concorde" - framed by a question mark) or a controversial statement (exclamation mark), accompanied by a screen based book style guide to the issue, built from a template which allows for 4 chapters of information.

Both Rapids and Features are available in an adapted form on the science museum website (www.sciencemuseum.ac.uk)

Exhiblets are short online multimedia exhibitions which draw assets from other museum collections around the UK. They cover inventions, ideas and people, for example on the Science Museum website there are currently Exhiblets about the flyer Amy Johnson, the history of devices to measure time and the invention of the typewriter.

The Science Museum's involvement with the project offers the opportunity for young people to create multimedia work for a real audience and purpose - either for the Science Museum website or for the Wellcome Wing. The project will be able to create much richer content for the IdeasFactory about careers in Multimedia by following young people getting to grips with the difficulties of making work for a specific venue and audience. For example, designing multimedia for the Antenna audience has a set of constraints which has been extensively evaluated by the Museum. Visitors tend to use the exhibits for a maximum of 2 minutes. Up to 75% of the comments entered in Tell Stations

are graffiti. The discipline of creating for a specific purpose and audience will increase the project's relevance to both the English and ICT curricula. How do people use the exhibits? What attracts their attention? How can the information be written and designed to minimise graffiti and maximise engagement?

Tell Stations are multimedia information stations in which "talking heads" offer different points of view and pieces of information about a current science issue that will affect the public. The public can then add their feelings or views on the subject. They are installed throughout the Museum. **It is most likely that this would be the main place where the Science Museum would be happy to have involvement from our winners.**

We would recommend that:

- We explore further the possibility that young people work towards a format appropriate for the Exhiblets - and that the best of these become Exhiblets on the Science Museum website. (They would also form a multimedia library of 'brilliant ideas' for the IdeasFactory website.)
- There is involvement of a member of the Science Museum education staff in one of the Teachers labs - running a masterclass on 'multimedia for a museum space' and possibly as a mentor for the projects.
- The team who creates the best exhibit (judged perhaps by the audience and/or a panel) goes on to be involved in making a Rapid for the Wellcome Wing. This process would be filmed and young people's diaries used as part of IdeasFactory's resources on Multimedia Careers. The young people visiting the Museum could observe and evaluate how visitors use the multimedia exhibits.

MULTIMEDIA CAREERS

The project will contribute content to the Multimedia Careers area, including:

- profiles of people who work in creating multimedia learning materials;
- masterclass content from the Teachers' labs.

The Careers area of IdeasFactory is likely also to cover:

- a diagnostic tool;
- an overview of multimedia careers;
- profiles of multimedia producers, designers and engineers;

- placement opportunities;
- links to further training and courses;
- careers advice.

It should cover technicians, electrical and information engineers as well as the arts side of multimedia.

THE PARTNERSHIP

In addition to 4Learning, the project involves a partnership with leading organisations in a range of different and complementary fields:

Institution of Electrical Engineers

IEE is the largest professional engineering society in Europe and has a worldwide membership of just under 140,000. It exists to promote the advancement of electrical, electronic and manufacturing science and engineering. The IEE's aims for the project include:

- raising the visibility and standing of electrical, manufacturing and information engineering - for example the role of electrical, manufacturing and information engineers in the creative industries;
- promote the value of the profession to the wider community;
- supporting the teaching of technology and science;
- encouraging young people to think about a career in electrical, manufacturing and information engineering and providing them with the resources, information and role models to do so.

The IEE's contribution to the project would include:

- funding
- support from its schools activities managers;
- content on careers in electrical, manufacturing and information engineering.

Science Museum

The Science Museum has an extensive education programme both online and offline. The Museum's contribution to the project would include:

- possibly including some of the work by school students as Exhiblets in the Science Museum website;

- inviting the creators of the best work to the Museum to take part in a day workshop to put a Rapid exhibition together for exhibition both in the Museum and online.
- possibly an educator/facilitator from the Science Museum to attend the teachers' Labs;
- small acknowledgements for the school and IdeasFactory on the work in the Museum

Kent County Council

Kent County Council will be the pilot area for the tool and the host for the e-workshops. Kent's Advisory Service publishes a series of resources for teachers on using ICT, for example <http://www.kented.org.uk/ngfl/webskills/index.html>. The Council's objectives for the project are:

- to support teachers to develop their use of ICT in the curriculum
- to develop teachers' skills
- to enable young people in Kent to find out about careers in multimedia
- to lead an initiative of national profile

Kent County Council's contribution to the project would be:

- to publicise the project to teachers and schools
- to advise on selection of teachers and schools