



Making websites usable

Virtual Visitors and Real Readers

At-Bristol

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Martin Bazley

ICT4Learning.com

Introduction

- Consultancy/websites/user testing [ICT4Learning](http://www.ICT4Learning.com)
- Chair of E-Learning Group for Museums
- Until Apr 06: E-Learning Officer, SEMLAC
- 7 years at Science Museum, London: Internet Projects; previously teaching for 8 years
- Main interest is in ICT supporting learning, and helping to make it work well for:
 - elearning producers
 - learners
 - funders

What's coming up

- **Part 1: about websites and e-learning**
 - about e-learning, what websites are for, etc
 - activity: analyse some websites

- **Part 2: about user testing and evaluation**
 - techniques
 - activity: card-based user testing
 - activity: website observation
 - Activity: redesign a site

Part 1 – websites etc

- About e-learning
- About how people learn
- Analysing existing websites:
 - Who for?
 - What for?
 - How will they use it?
- Making e-learning effective

About e-learning

- e-learning = **learning** where digital technology is integral to its effectiveness
- Not just websites: non-networked too e.g. digital camera to postcard; animating ideas
- Learning is a creative process:
seeing information ≠ learning
- Key factor is degree of **involvement** of learner

How people learn most effectively

People learn best through:

- Social and collaborative learning
- Problem solving
- Imitating people
- Being part of a team or group

(21st Century Learning Initiative)

How can websites support these?

The Generic Learning Outcomes

Inspiring Learning for All GLOs:

- Knowledge and understanding
- Skills
- Values and attitudes
- Creativity, inspiration and enjoyment
- Activity, behaviour and progression

www.InspiringLearningForAll.org.uk

As well as Knowledge/Skills, websites and ICT based events can be extremely effective for the last 3 – so aim for these too









Who for what for ...

- **Who for?** (audience)
 - Need to be clear from start
e.g. 'for teachers of yr5/6 in local area with whiteboards'
- **What 'real-world' outcomes?** (learning outcomes)
 - What will they learn or do as a result?
e.g. plan a visit to museum, learn that Romans wore funny clothes, discover that they enjoy using a digital camera...
- **How will they use it?** (learning experiences)
 - What do they actually **do** with the site?
e.g. work online or need to print it? - in pairs or alone? - with or without teacher help?

Who for what for ...

- Website appraisal
 - For each example note first impressions
- **Who is it for?**
- **What are the real world outcomes?**
- **How will they use it?**

Some examples

- [Romans in Sussex](#)
- [Flights of Inspiration](#)
- [Did you Know](#)
- [Britons at War](#)
- [1001 inventions](#)
- [Currier Museum of Art Online Curriculum](#)
- [Visual Media](#)
- [Gunpowder Plot](#)
- [Churchill Speech interactive](#)
- [Compass](#) (collections access with tours and search)
- [Making the Modern World](#) (engaging encyclopedia with learning modules)
- [Spinning the Web](#) (learning-journey style access)
- [Tate Online course](#) (VLE-style self-paced learning)
- [Bedford Bytes](#) (highly specific classroom-oriented learning materials)
- [Victorian Learning Journey](#) (multi-channel learning programme)
- [MLA SE Online learning guide](#)
- [Hopping down in Kent](#)
- [Digital Schools](#)

- **User testing:**
- [Science Buzz](#)
- [Life of a Rock Star](#)

Who for what for ...

- Why do elearning projects sometimes fail to address these 3 basic questions?
 - Lack of awareness
 - “It’s really for anyone and everyone to use however they like...”
 - “It’s obvious [to us] what it’s about ... I don’t know why they had trouble understanding it...”

Who for what for ...

- Why do elearning projects sometimes fail to address these 3 basic questions?
 - Too few models of good practice to follow – need case studies (MLA and elearninggroup.org.uk)
 - Priorities:
 - finding answers takes money, time and expertise
 - “there simply isn’t time to research all this”
 - “we got the money to produce to this specification: we can’t change our key audience now”

Who for what for ...

- How can you ensure you do get these right?
 - Build questions into the planning process
 - Evaluate/test regularly
 - Get informal feedback whenever possible – and act on it
- Who is it for?
- What are the real world outcomes?
- How will they use it?
- Also When, Where, Why?

Making e-learning effective

3 key factors

- Understanding **audience**
- **Learning experience** and **learning outcomes** – right for audience and clearly stated
- **Evaluation** – esp in classroom or home (observe in ‘natural habitat’ wherever possible...)









Part 2 – user testing etc

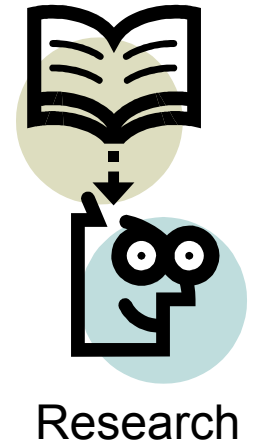
- Overview: when to do it and why
- activity: card-based user testing
- activity: website observation
- activity: redesign site

When to evaluate and why

- Before funding approval – project planning
- Post-funding - project development

Before funding – project planning

- ***Evaluation of other websites**
 - Who for? What for? How use it? etc
 - awareness raising: issues, opportunities
 - contributes to market research
 - possible elements, graphic feel etc



- ***Concept testing**
 - check idea makes sense with audience
 - reshape project based on user feedback



Focus group

Post-funding - project development

- ***Concept testing**

- refine project outcomes based on feedback from intended users



Focus group

- ***Refine website structure**

- does it work for users?



One-to-one tasks

- ***Evaluate initial look and feel**

- graphics, navigation etc



Focus group

Post-funding - project development 2

- ***Full evaluation of a draft working version**
 - usability AND content: do activities work, how engaging is it, what else could be offered, etc



Observation of **actual use of website**

by **intended users**,

using it for **intended purpose**,

in **intended context** – classroom, workplace, library, home, etc

Post-funding - project development 3

- **Acceptance testing of 'finished' website**
 - last minute check, minor corrections only
 - often offered by web developers



- **Summative evaluation**
 - report for funders, etc
 - learn lessons at project level for next time

Activity: card-based sorting

- Produce first guess at a structure
- Refine immediately based on internal consistency, likely misunderstandings, common patterns of use, etc
- Then test resulting structure on potential users with a card-based sorting activity:
 - case study photos
 - activity

Activity: website observation

- Observe use of website by potential user
- Get balance right:
 - Allow them to follow own path, preferred interaction style, etc BUT
 - ensure key points covered
- Decide in advance
 - what can/cannot be changed
 - key priorities

Activity:website observation 2

- Record session?
 - Offputting, takes a long time to analyse – time better spent doing another observation
- Usual areas to focus on:
 - Finding/getting to areas on site (navigation consistency, visual language, etc)
 - Relationship between site and user – ideally easy to use but engaging; positive feeling
 - Relative priority of key messages/items of content – how to get balance right

Activity: redesign site

- Analyse a site for strengths, deficiencies.
- Decide on its USP and style likely to be effective for target audience, then:
- Redesign it
 - on paper, or
 - in Powerpoint
- Gives real insight into the issues involved, before you get too emotionally involved in your own project

User testing - notes

- The worst person to conduct (or interpret) user testing of your site is...
 - **you!**
- Can be done cheaply – tips on how to do it available (MLA SE guide):
www.ICT4Learning.net/onlineguide
- Useful to have an external viewpoint
- First 5mins in a genuine setting tells you 80% of what's wrong with the site
- etc



e-learning group

for museums, libraries and archives



about learning with digital technology

Home

Meetings

About Us

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The **eLearning Group for Museums, Libraries and Archives** is an informal, rapidly growing group through which those interested in projects using digital technology share ideas, help and inspiration. There are currently around 550 people subscribed to the **email list**.

Need focus group input?

Have a project or topic you would like some input on? Let us help you set up an informal **meeting**. All you need is room

Developing and evaluating websites: 11 Oct

Developing and evaluating websites: a user-focused, practical approach

11 Oct 2006 at the Wallace Collection, London >[more](#)

Each year we hold a number of free of charge, informal themed **meetings**, with attendance limited to 15, as well as one or more larger

www.elearninggroup.org.uk

For help or to discuss ideas further:

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Websites for schools

‘Serve the National Curriculum’ or ‘extend or enhance’?

‘enhance’ sounds good but **most teachers want:**

1. **curriculum specific** – by all means cross-curricular but with one scheme of work or topic as ‘headline’ (think ‘marketing’)
2. **ready-to-use** – teachers may want to adapt to their own situation (esp second time round), but most will not have time – offer at least one ready to use version
3. **minimal preparation** and with time commitment (preparation time and class time) clearly specified
4. **flexible/adaptable/extensible** where possible

Websites for schools

- Adaptable: documents **better in Word than PDF** (Adobe Acrobat) format, because:
 - teachers can open Word documents instantly. Acrobat Reader software download will put off many from proceeding; and slow to open
 - Easier to copy and paste text from Word than PDF files, especially images
 - PDF files look nicer when printed because page layout is preserved – but this is less important in a school environment

Foundation and KS1 (3-7yrs)

Production of materials for this age range is particularly tricky:

aim at teachers not children, so...

good bank of images, videos or other

mainly **visual** assets

think of interactive whiteboards

Key Stage 2 (7 to 11 years old)

- keep no of words on each page to a minimum, say 50 in total
- illustrate key ideas visually as well as verbally and use audio if possible
- do not assume that the teacher can be over their shoulder at all points – so keep the instructions and processes simple
- try to use language, images, ideas, and settings that will appeal to the target audience

Key Stage 3 (11 to 14 years old)

- For KS2 a cross-curricular approach is OK (for example they may use the same site for Geography and Science) but:
- At KS3 cater for a single subject (and scheme of work)
- (Can offer suggestions for cross-curricular working, but remember generally each teacher teaches only one subject each.)

'Lifelong learners'

- for (non-specialist) interest level think of 12 yr olds
- Identify a particular audience with **specific interests/motivations for using your site**
- then focus on constraints to allow successful design to proceed.
(In a formal learning setting constraints often implicit in the course, physical set up etc.)

Specialist researchers

- Fact-oriented, less graphics and design, more text and specifically relevant images, with good search facility
- Examples of specialist researchers:
 - HE students and staff
 - experts in this subject area of site

Inspiring Learning for All

By planning learning opportunities using digital technology (aka e-learning) as part of ILfA...

- focus stays on **learning** rather than technology
- can aim for **balance** of learning outcomes across types of learning opportunities
- can consider how best to 'sell' project ideas within institutions, to funders, to target audience, etc



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