# LIFECYCLE EVALUATION FOR EDUCATION

# EVALUATION REPORT



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# EVALUATION REPORT

# EXPLORING ONLINE RESEARCH METHODS IN A VIRTUAL TRAINING ENVIRONEMENT

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# 1. SUMMARY

This is the final evaluation report for the "Exploring online research methods in a virtual training environment" project, funded by ESRC Research Methods Programme (Phase 2, award no: RES-333-25-0001). The purpose of the report is twofold; firstly to reflect on whether the project has met the main aims outlined at the outset and secondly, to document the evaluation process.

This report provides an overview of the complete evaluation process:

- Section 2; describes the lifecycle approach to evaluation that was
- Section 3, describes of the series of evaluations that were conducted during the development of the website
- Section 4; describes the content evaluation that was undertaken at the end of the development phase
- Section 5; presents the conclusions of this report and a reflection on the overall evaluation process.

## 1.1 THE MAIN AIMS OF THE PROJECT

The main aims of the project are listed below:

- 1) To produce and evaluate a high-quality online portal providing training in online research methods
- 2) To act as a self-supporting online resource to enhance understanding of both the theoretical and practical aspects of online research methods including online questionnaires, and virtual synchronous and asynchronous interviews
- 3) To draw on a wide range of successful good practice case studies, cover associated ethical issues of online research, and provide important resource links and technical guidance.

There follows a quote from Dr Chris Mann (a prominent expert in this area of research), which provides a snapshot highlighting the aims have been met. The aims will be returned to and reviewed in more detail in the conclusion.

This is self-study online training of the very best kind: practical and hands-on; theoretically sound; technically exacting; supportive and inspirational. The opportunities and challenges of online research are presented by an interdisciplinary training team with comprehensive expertise in the methods discussed.

Dr Chris Mann (Oxford Internet Institute) November 2005

# 2. A LIFECYCLE APPROACH TO EVALUATION

Traditionally evaluation is undertaken towards the end of the development phase of an online learning resource, once all the content has been written. In contrast to this approach a lifecycle approach to evaluation (Meek & Sharples, 2001) was adopted for the project. The lifecycle approach presents evaluation as a central theme from the very early stages of development to the delivery of the teaching material.

During an early project team meeting (16<sup>th</sup> September 2004) the development team worked with the Evaluation Consultant using the 'Evaluation Lifecycle Toolkit' (Meek, 2005). This is a paper-based resource composed of a series of steps focusing on planning and undertaking evaluations. Tasks are completed during each step to produce an Evaluation Timeline. The Evaluation Timeline presents a visual representation of the evaluation lifecycle for the project and is annotated with:

- 1) Details of stakeholders
- 2) Information that stakeholders need from evaluations
- 3) Details of the evaluations that will be conducted at certain points in the lifecycle
- 4) A description of how evaluation results will be communicated

## 2.1 EVALUATION TIMELINE

The Evaluation Timeline (Appendix A) presents the evaluations that were originally planned in September 2004. A break down of the evaluation activities is outlined in Table 1, the colours reflect those used on the Timeline.

Description	Timescale	Interested stakeholders
Early heuristic evaluation, focusing on navigation, ease-of- use and look/feel of the website	October 2004	Design team. Outcomes fed back to the Educational Technologist, leading to changes in design
A small user study focusing on usability	December 2004	Design team. Outcomes fed back to the Educational Technologist, leading to changes in design
Follow-up user study focusing on usability	March 2005	Design team. Outcomes fed back to the Educational Technologist, leading to changes in design
Trialling with a group of first year postgraduates from University of Leicester	January-March 2005	Design team. Outcomes fed back to Academics and Educational Technologist, leading to changes in design
Content evaluation, recognised subject experts will review the academic content of the website	Autumn 2005	Design team. Outcomes fed back to Academics and Educational Technologist, leading to changes in design
User Study, students will be observed using the website and will be asked to feedback their experience.	Autumn 2005	Design team. Outcomes fed back to Academics and Educational Technologist. Leading to changes in design

■ Table1: Outline of the planned evaluations

The following sections describe the series of evaluations that were undertaken, the key findings and the resulting changes to the website that were implemented.

# **3. DEVELOPMENT EVALUATIONS**

## 3.1 INITIAL HEURISTIC EVALUATION (OCTOBER 2004)

An initial heuristic evaluation was undertaken in October 2004. Four evaluators conducted the evaluation. They were asked to review the website and highlight any usability problems, considering the set of heuristics (Beale and Sharples, 2002). This study highlighted issues related to navigation, page design and content.

Name	Role / Institution	Phase of evaluation
Professor Mike Sharples	Academic University of Nottingham	Development, early heuristic evaluation
Dr Liz Masterman	Academic University of Oxford	Development, early heuristic evaluation
Dr Stamatina Anastopoulou	Academic University of the Aegean	Development, early heuristic evaluation
Julia Meek	Evaluation consultant	Development, early heuristic evaluation

## ■ Table 2: Initial heuristic evaluators

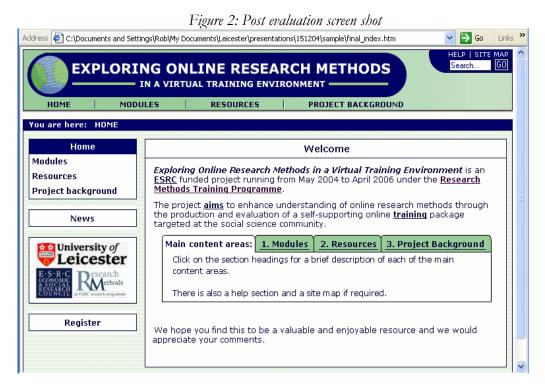
## 3.1.1 NAVIGATION / PAGE DESIGN

The evaluators expressed concern about the numerous ways of navigating through the website, these can be seen in *Figure 1*:

Address 🖉 C:\(	Documents and Settings\Rob\№	ly Documents\Leicester	\working docs\main_draft	_sites\octfiles201004\cc	ontext.htm 🛛 🎦 Go Links
				HELP   SITE MAP	SEARCH: Enter text GO
			SEARCH M	ETHODS	
HOME	INTRODUCTION	MODULES	RESOURCES	CONTACT US	
You are her	e: HOME » INTRODU	TION » PROJECT	INTRODUCTION >	CONTEXT	
		Context			Main menu
Research phase is o direct imp social scie consultatii identified, 1. The rese 2. The	The project is part of phase two of the ESRC <u>Research Methods Programme</u> . The focus of this phase is on training activities that will have a direct impact on the methodological skill base of social science research in the UK. Through consultation, a number of key points were identified, including: 1. The need for ongoing training for researchers at all levels. 2. The need for a close link between training and substantive research questions			<ul> <li>» Introduction</li> <li>1. Project intro</li> <li>Background</li> <li>Aims</li> <li>» Context</li> <li>Rationale</li> <li>Training</li> <li>Evaluation</li> <li>2. The process</li> <li>3. The feam</li> </ul>	
3. The trac	need for training throu litional types of training ies identified were:	gh practice, poter	ntially incorporating	a range of non-	Resources Modules Help

As illustrated in *Figure 1* the different means of navigating through the website were the top menu bar, side menu bar, hot links in the text, bottom menu bar. There was also a side menu bar, however this was only activated when you clicked on the option of the home page. Several of the evaluators drew attention to this and felt that is should be permanently available and that the normal position for a menu bar is the left hand side of the screen not the right.

As a result of the initial evaluation navigation through the website was redesigned. The left hand side menu bar is present on all screens and provides a consistent approach to navigation; the bottom menu bar was removed. As illustrated in *Figure 2*:



There remain different options for navigation e.g. tabs and hot links, but the user has the consistency of the left hand side menu bar.

The evaluators in the initial evaluation noted the high number of hot links in the text. The number of links (jumping users to different sections) were reduced as a result of the evaluation. The remaining hot links within the module text refer to papers/articles/websites of interest. Feedback from the academic evaluators who reviewed the content of the website (November 2005) highlighted that these were extremely useful.

## 3.1.2 CONTENT

The evaluators highlighted what appeared to be an imbalance in the content e.g. there was initially a lot of information about the project and very little module content. This was due to the fact that it was a very early version of the website and the content was in the process of being written. This has now been corrected as the content of the website has been added.

A report outlining these key issues was produced for the development team (Appendix B) and the website was amended. The design of the website was improved significantly as a result of the early heuristic evaluation.

# 3.2 USABILITY EVALUATION (DECEMBER 2004)

A small user study was conducted December 2004, focusing on usability. Three participants were observed using the website.

Name	Role	Phase of evaluation	
Colin Hyde	Researcher and Outreach	User study	
	Officer, East Midlands Oral	December 2004	
	History Archive, University of		
	Leicester;		
Kate Moore	Cartographic and GIS Officer,	User study	
	Department of Geography,	December 2004	
	University of Leicester		
Tim Vorley	PhD researcher, Department of	User study	
	Geography, University of	December 2004	
	Leicester		

■ 7	Table	3:	Participants	in	the	user	studv	
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The participants were asked to think aloud, enabling a record of their reactions to be noted. This evaluation highlighted the need to separate instructions to the users from the module content. This is illustrated in the before and after screen shots presented in *Figure 3* and *Figure 4*:

#### Figure 3: Pre-user study screen shot

Sampling issues	Home	
	Project background	
Introduction	» Modules	
One of the most hotly debated topics with respect to online questionnaires is that of	2. Questionnaires	
sampling related matters. Key issues are shown below.	Introduction	
Click on each sub-heading for more information. Within each section, there are	Adv/Disadvs	
eferences to sources and further reading. You can view the full reference by clicking on the name. You can then add comments to these references and include them in a	» Sampling	
personal references list.	Resources	
instructions on how to use the list are included in the activity, but if you would like to read more information on how to do this before you begin, or if you experience problems, select the 'instructions' link at the bottom of the page.		
Recruitment		

It can be seen in *Figure 3* that the instructions are lost in the general text. The instructions start with the second paragraph "*Click on* ..." they are very difficult to pick out from the surrounding text.

As a result of the recommendations from the study the design of instructions were amended. This is illustrated in Figure 4, where the instructions are clearly visible in the light blue text box.

Home	Sampling issues		
Modules			
2. Questionnaires	Introduction		
Aims & outcomes Introduction	One of the most hotly debated topics with respect to online questionnaires is that of sampling related matters. Key issues are shown below.		
Adv/Disadvs » Sampling	Click on each sub-heading for more information which will appear on this page. Within each section, there are references to sources and further reading. You can view		
tesources	the full reference by clicking on the name. You can then add comments to these references and include them in a personal references list.		
Project background	Instructions on how to use the list are included in the activity, but if you would like to read more information on how to do this before you begin, or if you experience problems, select the 'instructions' link at the bottom of the page.		
	Recruitment		
	Sampling		

Figure 4: Post-user study screen shot

The study also led to the introduction of arrow graphics and status bar instructions to clarify the links opening onto the same page. This is illustrated by the arrows on the screen shot

above, the indicates that further text can be read.

There was also a refinement of the instructions for the personal references list in the modules. And the introduction of a method of storing selected references, to allow references to be maintained across different pages.

A follow-up usability evaluation was conducted, March 2005.

Name	Role	Phase of evaluation
Judith Guevarra Enriquez	PhD Student, University of	User study
	Aberdeen	March 2005
Selina Lock	Information Librarian,	User study
	University of Leicester	March 2005
Liz Towner	Educational Development and	User study
	Support Centre, University of	March 2005
	Leicester	

■ Table 4: Participants in the user study

The three participants were observed and asked to think aloud. This study illustrated that the previous changes had been successful, problems with instructions and links were not apparent.

The series of evaluations undertaken during the early stages of development ensured that the look and feel of the website is professional and the website is easy-to-use. The effective design of the website was highlighted by many of the academics involved in the later content evaluation, illustrated by the series of quotes below:

The layout and design of the website, the level of detail in its content, the use of examples and references, and the all-round navigation of the modules makes this a valuable resource.

Claire Hewson

My general impressions of the site are very good. The layout is straightforward, navigation around the site was simple, and I found the whole thing easy to use.

Colin Hyde (East Midlands Oral History Archive)

## 3.3 TRIALLING WITH A GROUP (JANUARY – MARCH 2005)

A group of 1st year postgraduate (PhD and Masters) students, following a 10-week course on research methods (University of Leicester) were given access to a cut down version of the website. The website consisted of three pages from the questionnaires module e.g. Introduction, Advantages and disadvantages and Sampling. The students were asked to complete a questionnaire (Appendix C).

Overall the feedback from students was very positive they were happy that the activities and texts were pitched at the right level. The feedback they provided led to changes to the website e.g. the brainstorming in the advantages/disadvantages was rejected, as the students found it uninspiring and the tutor agreed with their comments.

# 3.4 HUERISTIC EVALUATION AND FINAL CONTENT REVIEW (MAY – OCTOBER 2005)

A further heuristic evaluation was conducted in May 2005 (Appendix D), this ensured that the issues highlighted by the initial heuristic evaluation had been addressed and provided a final check that the website was easy to navigate and use. The evaluation highlighted that:

- 1) There had been a significant overall improvement since the November 2004 heuristic evaluation the look and feel of the website was good and easy to use
- 2) Page design, navigation and control over how text is viewed were highlighted as positive features
- 3) The learning activities were also considered to be a key feature of the site
- 4) A number of minor issues were highlighted for improvement e.g. broken links.

The evaluation confirmed that the screen design and navigation were consistent and robust.

During the final stages of development the development team undertook a detailed review May to October 2005, of the completed website. Members of the team were allocated a module to review and they fed back any problems to the Educational Technologist.

The aim of this final process of review was to ensure that:

- 1) All links worked
- 2) The text was accurate and clear
- 3) Features within the website functioned correctly e.g. references list.

Once the team were satisfied that the website was complete, access to the website was given to the academics involved in the detailed content evaluation, this is described in the next section.

# **4.CONTENT EVALUATION (NOVEMBER 2005)**

Recognised subject experts Dr Chris Mann and Dr Parvati Raghuram were contracted as consultants to undertake a detailed review of the content of the web website. The website was divided between the consultants based on their area of expertise.

Other prominent academics from a range of discipline areas were also contacted and asked if they would review the website. The table below lists the evaluators involved and the area of the website they evaluated.

Evaluator	Role / Institution	Scope of evaluation
Chris Mann	Academic	Content, focusing on the
	Oxford Internet Institute	Introduction, Interviews and Ethics
Parvati Raghuram	Academic, Lecturer in	Content, focusing on the
	Geography	Introduction and
	Open University	Questionnaire design
Christine Hine	Academic, Senior Lecturer	Content, focusing on Ethics
	specialising in Virtual	
	Ethnography	
	University of Surrey	
Martyn Denscomb	Academic, Professor of Social	Content, focusing on the
	Research	website in general
	De Montfort University	
Chris Taylor	Academic	Content, focusing on
	Cardiff University	Questionnaire design
Claire Hewson	Academic, Lecturer in	Content, focusing on the
	Cognitive Psychology	website in general
	University of Bolton	
Christine Gratton	Academic, E-Learning Co-	Content, focusing on the
	ordinator	Technical guide
	University of Nottingham	
Jane Hanford	Market Researcher	Content, focusing on the
	Nokia	website in general
Rob Negrine	Clinical Researcher	Content, focusing on the
	The Women's Hospital,	website in general
	Birmingham	
Colin Hyde	Researcher and Outreach	Content, focusing on the
	Officer	website in general
	East Midlands Oral History	
	Archive	

Table 5: Evaluators involved in the content evaluation

The evaluators were asked to provide feedback on:

- 1) Impressions; To provide a short description of their general impressions of the website
- 2) The academic content; they were asked to ensure that the material provided covered all the areas they would expect to see
- 3) Technical problems; To provide details of any technical problems experienced e.g. broken links
- 4) Scenarios of use; How they might use the website?

The evaluators' feedback on the areas listed above is summarised in the following sections. The complete set of evaluation reports is provided (Appendix E).

## 4.3 GENERAL IMPRESSIONS OF THE WEBSITE

The website received a very positive response from all the evaluators involved. They were very impressed at the amount of detail and the extensive range of references. They all highlighted that they had not come across a similar resource in the past and saw this as a very valuable training resource. The unique nature of the website is illustrated in the quote below:

As far as I know this is the first site that brings together the issues, critiques, learning resources such as readings and links and practical advice. Those contemplating online research can use the site as a one-stop resource. Hence, this is a unique resource for a range of users in the research community, trainers, students and practitioners.

Dr Parvati Raghuram (Open University)

Many evaluators took the opportunity to highlight the area or feature of the website they most admired. A selection of these are presented in the following quotes:

In particular, I like the way the different sections opened and closed (as good a way of handling large chunks of text as I've come across), the notes from the case-studies and the Q&A sections are useful, the interactive learning elements work well, and the ability to collect a 'basket' of references is also useful.

Colin Hyde (East Midlands Oral History Archive)

My general impression of the website, and the online questionnaire module in particular, is excellent. The layout and design of the website, the level of detail in its content, the use of examples and references, and the all-round navigation of the modules makes this a valuable resource that will, I am sure, be of use to many social scientists.

Chris Taylor (Cardiff University)

The site offers a kind of one-stop shop for the relative newcomer to online research and the pitch of the modules seems appropriate, I felt the hyperlinks to other online research methods websites a star attraction of the site.

Martyn Denscombe (De Montfort University)

## 4.2 ACADEMIC CONTENT

The main focus of this phase of the evaluation was to review academic content. Therefore, the evaluators were asked to focus on the content. The website was divided between the two primary evaluators (Dr Chris Mann and Dr Parvati Raghuram), who had been contracted to undertake the review. The other evaluators (drawn from a range of disciplines) mainly asked to review the website in general, with the exception of Christine Gratton who was asked to focus on the Technical Guide.

As reports from the evaluators were received the development team reviewed them and the changes were prioritised. It is not feasible to include all comments from the evaluators on the academic content in this section (complete reports have been included in the appendix). A list of general points have has been provided below to summarise suggestions that emerged form the content evaluation. It should be emphasised that all the evaluators were very impressed with the website; they felt that the content was detailed and the design of the website dealt with large amounts of text very efficiently.

#### 4.2.1 EVALUATORS SUGGESTIONS THAT HAVE BEEN IMPLEMENTED

- 1) The introductory section was revised to provide clearer pointers to the sections in the main body of the material
- 2) A clearer section outlining how the website and the modules can be used was included
- 3) Minor changes and additions were made to the academic content
- 4) A full website map and module index were added to allow navigation direct to module content

- 5) Glossary links were added and more links were included between module pages
- 6) Additional references and links to other websites, specified by evaluators were added
- 7) Linking back to ESRC guidelines were added
- 8) Sections were moved to more prominent positions e.g. Accessibility and Internationalisation section
- 9) Clear guidance on how the website should be cited has been added
- 10) As the website deals with a large amount of text it was suggested that it would be useful to recommend the width that the browser should be set to optimise its readability.
- 11) Pointers to the glossary and extension of the "Glossary" were made
- 12) A disclaimer was added on current links available

It was beyond the scope of the project in terms of time and resources to implement all suggested changes. A list of broader changes that could be the basis for extending the website further in the future are listed below:

- 1) Translating the website into Chinese and Japanese, as they show the greatest growth in internet languages
- 2) Researchers write a textbook to complement the website
- 3) Shopping basket to collect links
- 4) Continuance funding to keep the links updated
- 5) Adding a module on 'Online Ethnography'
- 6) FAQ's being linked to the modules rather than a stand alone section
- 7) Inclusion of a progress bar as you work through a module

## **4.3 TECHNICAL ISSUES**

The evaluators found no major technical problems. They all agreed that the website was easy to navigate and well designed. They did list some minor technical issues e.g. broken links, which have been dealt with by the Educational Technologist.

### 4.4 SCENARIOS OF USE

As part of their feedback the evaluators were asked to outline how they would use the website. The various uses suggested are listed below and described in the following section:

- 1) Training Resource
- 2) Research
- 3) Developing Websites

# 4.4.1 TRAINING RESOURCE

Providing a detailed training resource was the primarily objective in developing the website. Dr Parvati Raghuram provided a detailed review of the groups that would benefit from the website and how the website would fit into the training guidelines established by the ESRC research methods training programmes and the Joint Skills Statement, outlined in the quote below:

This is an excellent web resource. In particular it will be useful for:

a) Advanced undergraduates, postgraduates and more established researchers intending to use online research methods will find the resource useful, especially, the technical guidelines, the detailed discussion of advantages and disadvantages and the reference lists.

b) Those learning research methods as part of their generic training will find the programme is thorough in its coverage and meets the guidelines set out in the ESRC's framework for research methods training. It goes through some of the key issues that have been identified as central to the: principles of research design, data collection and data analyses methods and also offers those going through the programme an opportunity to weigh up the advantages and disadvantages of each method (E5, 6 and 7).

c) Those delivering training as part of various ESRC research methods training programmes will find it a useful resource in their programme for advanced training in quantitative and qualitative methods (E 9). As this is an area where many institutions are currently short of resources, a much more definitive recognition of the contributions that this resource makes in this area would be good.

The programme also helps to meet some of the requirements set out by the Joint Skills Statement. For instance, it can be pegged under A (research skills and techniques) 3 (a knowledge of recent advances in one's field and in related areas) and 4 (an understanding of relevant research methodologies and techniques and their appropriate application within one's field).

I would suggest that it is offered as part of generic training packages for advanced postgraduate students.

Dr Parvati Raghuram (Open University)

Other evaluators also outlined how they would use it with their students, illustrated by the quotes below:

I will probably direct history students to the Ethics section, as much of this applies to any form of research involving interviewing.

Colin Hyde (East Midlands Oral History Archive)

I'll certainly recommend it to students etc. I'm not sure how many will work through the whole thing, but I'm sure many will dip into it and find it invaluable. Those who do complete the whole thing will gain a vast amount from it. I think both kinds of user will want to cite your work and your advice – there should be clear guidelines on how they should do so on the site.

Christine Hine (University of Surrey)

I would recommend this site to research students (undergraduate and postgraduate) and other researchers. I can see how useful this would be as a resource to researchers thinking about using online research tools and those that actually want to implement an online questionnaire

Chris Taylor (Cardiff University)

When the site goes live I will use it with my masters degree students in Business courses.

Martyn Denscombe (De Montfort University

I...would have no hesitation in recommending it to anyone who is thinking of developing an online survey.

Chritine Gratton (University of Nottingham)

Recommend to students and colleagues as an initial portal into learning more about online research methods, and as a resource for access to further more specialist, detailed sources.

As a reference guide for myself.

Possibly use as a teaching resource for online research methods courses. The clear statement of learning objectives, aims, exercises, etc. makes it very feasible for use in this way.

Claire Hewson (University of Bolton)

#### 4.4.2 RESEARCH

Many evaluators described how the site was useful for supporting research; many described how they would use it to support their own research:

I would personally find the site useful in my own work in terms of the good range of web links and the very useful section on software for synchronous interviews... There was a real sense of the website anticipating the diverse needs of researchers and helping individuals to clarify and develop their ideas/requirements.

Dr Chris Mann

For gathering background information for research, answering questions when stuck in setting up/ organising a project.

Dr R Negrine

## 4.4.3 DEVELOPING WEBSITES

Several evaluators highlighted the importance of the **Technical Guide** section of the website as a key feature:

I think the Technical Guide is absolutely excellent. It is clear, well written and easy to navigate...Overall – a super resource.

Christine Gratton (University of Nottingham)

Also, the technical section is a useful reference for developing websites, regardless of whether they're for research or not.

Colin Hyde (East Midlands Oral History Archive)

# 5. CONCLUSIONS

This concluding section considers whether the original aims set out by the project team have been met. This is followed by a section reflecting on the lifecycle approach to evaluation adopted by this project. The final section presents a series of recommendations for the future.

## 5.1 THE MAIN AIMS OF THE PROJECT

The original aims set out by the project were:

- 1) To produce and evaluate a high-quality online portal to provide training in online research methods
- 2) To act as a self-supporting online resource to enhance understanding of both the theoretical and practical aspects of online research methods including online questionnaires, and virtual synchronous and asynchronous interviews
- 3) To draw on a wide range of successful good practice case studies, cover associated ethical issues of online research, and provide important resource links and technical guidance

To judge whether these aims have been met the reports from the external evaluators were reviewed. Points relevant to the aims were noted and other key features highlighted by the evaluators were listed. These are presented in the key features list below, the first three points relate directly to the aims above, the remaining items relate to other key features noted by evaluators.

## 5.2 KEY FEATURES

- 1) The website provides an excellent resource for training, meeting key training guidelines specified by ESRC and the Joint Skills Statement. The website can be used for both face-to-face training and online dissemination and is a useful resource for researchers at all stages in their career.
- 2) The website includes modules on online questionnaires, interviews, ethics and a technical guide
- 3) There is extensive reference to papers, websites, resources which the learner can collect and export to other bibliographic software e.g. Endnote
- 4) This is a totally new resource; there is no other training of this kind widely available. All evaluators commented that they had not come across a similar resource
- 5) The website is professional presented, well designed and easy to navigate

This comparison between the main aims of the project and the key features highlighted by the external evaluators illustrate that the aims set out at the start of the project have been clearly met.

## 5.3 THE LIFECYCLE APPROACH TO EVALUATION

The project team working with an Evaluation Consultant adopted a lifecycle approach to evaluation. This approach introduces evaluation from the start of the project, during an early team meeting the evaluations that would be conducted throughout the lifecycle of the project were sketched out on the Evaluation Timeline (Appendix A).

The initial heuristic evaluation was conducted within weeks of the development starting, once the basic design of the website had been drafted. The design of the website was improved significantly as a result of the early heuristic evaluation and user study. These critical changes to the interface and navigation could not have been undertaken as easily if evaluation had been left until later in the development process when the bulk of the content would have been complete. This illustrates that adopting a lifecycle approach, employing early and regular evaluations throughout the development phase was very beneficial.

Evaluation has been a constant process throughout the development of the website, this continual process of review and reflection has ensured that the design of the website and academic content have been thoroughly reviewed. One element of the evaluation in the first draft of the Timeline, September 2004, User Study (Autumn 2005) did not proceed. This study was not conducted, as the content evaluations were not complete. The content evaluations had been extended to include a wider range of evaluators. The development team did not want to present the website to a user group before the changes recommended by these evaluators had been incorporated.

## 5.4 RECOMMENDATIONS FOR THE FUTURE

The "Exploring online research methods in a virtual training environment" project, funded by ESRC Research Methods Programme (Phase 2, award no: RES-333-25-0001), has developed a website that has been extremely well received by a group of academic evaluators. The two key recommendations for the future of this resource are:

- 1) It is critical that the website is maintained, links and references are kept updated
- 2) It will be important to develop further training activities based on the website

Some additional recommendations from the academic evaluators were:

- 3) Translating the website into Chinese and Japanese, as they show the greatest growth in internet languages
- 4) Researchers write a textbook to complement the website

#### REFERENCES

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Meek, J (2005) unpublished PhD thesis

# JULIA MEEK- EVALUATION CONSULTANT

### **EMPLOYMENT HISTORY / EVALUATION EXPERIENCE**

#### 1998-2005 The University of Birmingham

PhD research

### 1997-2000 The University of Birmingham

Mathwise Coordinator

## 1995 – 1997 University of Wales, Aberystwyth

Development Officer - CAL and Educational Technology

Over ten years working in higher education firstly developing computer based learning material and then supporting academics develop, integrate and evaluate the use of learning technology in their teaching.

#### 1998-2005

PhD research: The Evaluation Lifecycle Toolkit (Toolkit) was designed and developed as part of this research, as a practical resource for evaluation. The Toolkit is composed of a series of steps focusing on planning and undertaking evaluations. Tasks are completed during each step to create the evaluation lifecycle for the project, visually presented through an Evaluation Timeline.

This research has provided the opportunity to gain experience in understanding and using a range of evaluation methods; including heuristic evaluation, cognitive walkthrough, desirability toolkit, interview, user diary, questionnaire, focus group and the use of grounded theory as a method of data analysis.

#### 2004-2006

External evaluator for the "Exploring online research methods in a virtual training environment" project, funded by ESRC Research Methods Programme (Phase 2, award no: RES-333-25-0001) based at the University of Leicester.

#### 2005-

External evaluator for the JISC funded "Interactive Logbook" project based at the University of Birmingham.

#### 2005-

A member of the evaluation team for the Culture Online funded "My Art Space" project.

## CONTACT DETAILS

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## APPENDIX

Appendix A; Evaluation Timeline

Appendix B; Heuristic Evaluation Report, November 2004

Appendix C; Student Questionnaire

Appendix D; Heuristic Evaluation Report, May 2005

Appendix E; Content evaluations from external evaluators