

## **QUALITATIVE DEMONSTRATOR SCHEME: CO- ORDINATOR'S FINAL REPORT**

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## 2 pages Executive Summary

The Qualitative Demonstrator Scheme (QUADS) aimed to develop and promote innovative methodological approaches to the archiving, sharing, re-use and secondary analysis of qualitative research and data, in all of its disparate shape and forms. A range of new models for increasing access to qualitative data resources, and for extending the reach and impact of qualitative studies were explored. The scheme also disseminated good practice in qualitative data sharing and research archiving. This was part of the ESRC's initiative to increase the UK resource of highly skilled researchers, and to fully exploit the distinctive potential offered by qualitative research and data.

The QUADS was a small initiative (some £500,000) over an 18 month period from April 2005 until December 2006. Five exploratory projects were funded together with a Co-ordination role. QUADS Co-ordination was based at ESDS Qualidata, directed by Louise Corti of the UK Data Archive and run on a small budget of £50,000 over 18 months. The role provided a pivotal role in fostering communication and understanding between the following demonstrator projects, and coherently managing and supervising the Scheme. The five projects funded under the Scheme were:

- **Representing Context in a Research Archive of Educational Evaluation Studies** (18 months) P. Carmicheal, M. James, J. Elliot and D. Bridges (Cambridge & UEA)
- **Smart Qualitative Data: Methods and Community Tools for Data Mark-Up (SQUAD)** (18 months) L. Corti and C. Grover (Essex and Edinburgh)
- **Negotiating the Long View: Archiving, Representing and Sharing a Qualitative Longitudinal Resource** (18 months) S. Henderson, J. Holland and R. Thomson (Southbank)
- **Methodological issues in qualitative data sharing and archiving** (18 months) Coffee, B. Dicks and M. Williams (Cardiff)
- **Collating and Preserving Primary Material on the Northern Ireland Conflict** (18 months) R. Miller and M. Melaugh (QUB & Ulster)

The scheme was set up to complement the UK Data Archive's national qualitative data service, ESDS Qualidata, following the growing interest in the methods, resources and tools for analysing or re-using existing qualitative data. In 1994, Qualidata was set up by the Economic and Social Research Council (ESRC) to provide a testbed resource for archiving and disseminating UK-based researcher's data. Some ten years on, we have seen dramatic progress in defining workable models and practice for archiving, safeguarding and providing access and re-using data. Additionally, and importantly, we have evidence of an emergence of new culture – secondary analysis of qualitative data. Not only are researchers routinely depositing data for sharing and are requesting access to other's data sources, but the body of literature devoted to debate surrounding the processes and methods is also starting to pile up (see [www.esds.ac.uk/qualidata/support/reusearticles.asp](http://www.esds.ac.uk/qualidata/support/reusearticles.asp)) The scheme enabled some important and untapped R&D work to be carried out to build on the knowledge already gained by Qualidata.

The five QUADS projects spanned a range of methodological, practical and technical issues touching on both similar and different aspects of archiving, representing and sharing qualitative data. Through the scheme we have seen elucidation of methodological and practical challenges peculiar to more complex data: longitudinal qualitative data; video data; educational conference data; and politically sensitive data. Each presents a case study of good practice in areas that compliment the traditional data sharing model adopted by international data archives. Four common challenges were identified for the QUADS scheme: defining and capturing data context; audio-visual archiving; consent, confidentiality and IPR; and web and metadata standards.

In order to approach primary data now and in the future, there is a need for that data to be accurately, richly and contextually described. The knowledge gained on context is perhaps the greatest achievement of the project. All of the projects in some way focused on the importance of defining and (re)capturing context raw qualitative data in relation to archiving and sharing of qualitative research; including substantive, methodological, historical, and political context. The synergies noted by the QUADS Coordination team at an early stage of the Scheme gave rise to a workshop which focused specifically on 'Defining Context for Qualitative Data'. The fascinating presentations were recorded and written up and I secured an edited collection in a 2006 special edition of the Online Journal Methodological Innovations. The papers offer concrete and pragmatic advice on context in different scenarios that go beyond the base-line standards that ESDS Qualidata they have been attempting to encourage among researchers. A model transcript was also agreed by the QUADS projects that captured minimal contextual information for a standard interview. ESDS Qualidata refers to these publications for guidance for data creators and publishers, and is producing a shortened best practice guide based on the findings.

The methods of archiving and sharing of digital audio-visual data from qualitative research is fairly new. As many of the QUADS projects were handling these kinds of data, the scheme provided an opportunity to share expertise on presenting and re-using such sources. The representation of audio-visual research data adds great power to textual output, and can be productively used to give better meaning to ethnographic write ups and dry quotes. However, all of the teams found working audio-visual data a challenge, not least for the ethical problems presented. Explicit consent from all parties concerned must be gained in advance if snippets for audio-visual materials are to be used.

Consent, confidentiality and copyright perhaps provide the greatest challenges for re-using qualitative data and many the QUADS projects addressed specific consent and copyright issues. Consent presented quite unique challenges depending on the nature of data under observation, e.g. video, longitudinal, children, politically-charged. Projects confronted the need to debate and come up with particular ethical solutions as data were being selected and presented. The main advantage in the case of QUADS projects was that most of the teams were purposefully in direct contact with the participants about the possibilities of data sharing and were thus able to negotiate avenues of 'consent' and assess the relative importance of anonymity. As such, the projects have provided good case studies of how to deal with the practicalities of sharing sensitive qualitative data.

Re-presentation of original data, methods and analytic interpretation and their interweaving requires agreed and exemplary standards and procedures. The scheme explored some new and formerly untested technical applications that can enhance the visibility and future usability of qualitative data. The QUADS workshop on access to online qualitative data, covering state of the art knowledge on web and data standards provided a useful forum to exchange ideas. Emerging innovations in qualitative methods have been touched upon in this scheme, including new data forms, sources, possibilities for research archiving and data mining and the potential for increased participation and access. Likewise, the end of scheme event showcased the demonstrators from the five projects and some additional partner projects that covered many of these cutting edge issues. Participants had the opportunity to hear about the projects and the teams experiences, and see the web sites and tools created by the projects. The projects afford unique case studies that can be used in the future to help inform those wishing to publish online and share qualitative data.

The projects' experiences of attempting to archive and writing up the experiences have contributed to epistemological debates about the implications of the reflexive practices of researchers in the research process for sharing and archiving data.

The QUADS Coordination was successful in its promotional mission, through: organising workshops that were well attended; producing a coordinated suite of informative and promotional items from each project and scheme-wide; and encouraging award holders to all prepare presentations at meetings and events; and publish in a special edition of a new journal edited by myself. The outputs (presentations, workshops, websites and publications) from the Scheme are impressive and already form good practice reference points that the Economic and Social Data Service, as the ESRC's flagship data service, will certainly promote and point both data creators and users to.

The general consensus from those both involved and interested in the scheme was that the encouragement, support, advice and monitoring offered by the QUADS Coordination team at Essex helped embed the new approaches and tools in the wider social science landscape. It provided value for money too. Furthermore, research capacity has been built in this innovative domain, through the workshops sharing expertise and promotion of user-friendly exemplars of qualitative data sharing and archiving. All staff working on the QUADS projects became well-acquainted with: metadata, data description; the technical aspects of archiving and re-presentation of data on the web; and ethical and consent issues to do with data sharing

Thinking beyond the life of the QUADS scheme at the end in September 06, the UKDA have agreed to host the QUADS site (and project sides if necessary), and provide basic ongoing promotional work. It is certainly in the interests of ESDS Qualidata to keep in close contact with the projects. Finally, QUADS Coordination has investigated future ideas for continued funding. Some of the projects have a more technical bent (Essex, Cardiff and Essex), that would merit ongoing support funding to enable tool refinement if these are to be extended beyond the basic demonstrator /proof of concept model to fully functional tools for use within the wider communities. A JISC grant has already been secured for an extension the SQUAD project and a multi-centre bid has gone in to ESRC for SQUAD-related text mining work. Essex and Cambridge are further collaborating on e-infrastructure ideas. The ground work carried out on longitudinal data archiving by SBU will be taken forward and developed further within the context of the ESRC supported Timescapes project.

## Part 1: The Co-ordinator's Role

### *Role of QUADS Coordination*

QUADS Co-ordination aimed to play a pivotal role in fostering communication and understanding between the ESRC Qualitative Data Archiving and Dissemination Scheme (QUADS) projects. One of the primary objectives of the Scheme was to facilitate communication of the Scheme's efforts to the broader spectrum of qualitative researchers, while appreciating that there exist various communities of practice with different data needs and methodological approaches to sharing and secondary analysis of qualitative research and data. Fruitful collaboration can be achieved through guided discourse, used to inform and help guide the progress of QUADS demonstrators, and to encourage the broader acceptance and take up of data sharing and re-use.

The QUADS was a small initiative (some £500,000) over the 18 month period. Five exploratory projects were funded together with a Co-ordination role. The QUADS Co-ordination was based at ESDS Qualidata (PI and Director, Louise Corti), run on a small budget of £50,000 over 18 months) provided a pivotal role in fostering communication and understanding between the following five demonstrator projects, and coherently managing and supervising the Scheme. The Coordination team facilitated promotion and publicity via a web site, printed materials, a discussion list for information communication and exchange, and by hosting forums to engage projects in debate, sharing developments and to show working demonstrators. It engaged with stakeholders and gave presentations at key events and encouraged publication and dissemination of project findings. There are three part-time staff who are running QUADS Co-ordination, all who also work for ESDS Qualidata at Essex.

The five projects funded under the Scheme were:

- **Representing Context in a Research Archive of Educational Evaluation Studies** (18 months) P. Carmicheal, M. James, J. Elliot and D. Bridges (Cambridge & UEA)
- **Smart Qualitative Data: Methods and Community Tools for Data Mark-Up (SQUAD)** (18 months) L. Corti and C. Grover (Essex and Edinburgh)
- **Negotiating the Long View: Archiving, Representing and Sharing a Qualitative Longitudinal Resource** (18 months) S. Henderson, J. Holland and R. Thomson (Southbank)
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- **Collating and Preserving Primary Material on the Northern Ireland Conflict** (18 months) R. Miller and M. Melaugh (QUB & Ulster)

This scheme was set up to complement the UK Data Archive's national qualitative data service, ESDS Qualidata, following the growing interest in the methods, resources and tools for analysing or re-using existing qualitative data. In 1994, Qualidata was set up by the Economic and Social Research Council (ESRC) to provide a tested resource for archiving and disseminating UK-based researcher's data (ESDS Qualidata, 2006). Some ten years on, we have seen dramatic progress in defining a workable model for archiving, safeguarding and providing access. Additionally, and importantly, we have evidence of an emergence of new culture – secondary analysis of qualitative data. Not only are researchers routinely depositing data for sharing and are requesting access to other's data sources, but the body of literature devoted to debate surrounding the processes and methods is also starting to pile up.

The QUADS coordination award was cash limited to £50,000 thereby enabled a minimal level of staffing over a period of 18 months. Money was earmarked for Scheme events, meetings and travel. The key role of Coordination was to: liaise with QUADS projects, gathering structured information and updates; setting up communication channels for all project staff including mailing lists and a secure web site; initiate, coordinate and undertake publicity and promotion; and holding project meetings. Site visits were also conducted and three public scheme events were also organised within the 18 months life of the Scheme.

### ***QUADS Award Aims, Objectives and Achievements***

*To help promote innovative methodological approaches to the archiving, sharing, re-use and secondary analysis of qualitative research and data, through coordination and promotion of QUADS projects.*

The five projects spanned a range of methodological and practical issues touching on both similar and different aspects of qualitative data archiving, sharing and analysis. The QUADS Coordination was

successful in its promotional mission, through: organising workshops that were well attended; producing a coordinated suite of informative and promotional items from each project and scheme-wide; and encouraging award holders to all prepare presentations at meetings and events; and publish in a special edition of a new journal edited by myself. The general consensus from those both involved and interested in the scheme was that the encouragement, support, advice and monitoring offered by the QUADS Coordination team at Essex helped embed the new approaches and tools in the wider social science landscape. It provided value for money too. Furthermore, research capacity has been built in this innovative domain, through the workshops and sharing expertise in qualitative data sharing and archiving. All staff working on the QUADS projects became well-acquainted with: metadata, data description; the technical aspects of archiving and re-presentation of data on the web; and ethical and consent issues to do with data sharing.

### **Main Objectives**

#### *1. To facilitate communication and collaboration of QUADS projects within the scheme*

The QUADS was a relatively small window in which to achieve the R&D promised in the projects deliverables. As such it was critical to establish areas of commonality and overlap, as projects undertook initial literature reviews and get up to speed on qualitative data archiving and sharing. QUADS Coordination facilitated communication and collaboration of QUADS projects successfully. This was accomplished via a web site; a secure project site for sharing information; periodic face-to-face projects meetings, progress reports for advisory committee meetings, and a project discussion list for information communication and exchange. One forum specifically for projects was hosted to engage projects in debate, sharing developments and to show working demonstrators, and the two public events required projects teams to attend, do a formal presentation and prepare content for promotional materials. Publishing in the special edition journal required all to collaborate.

#### *2. To coordinate an Advisory Board and seek guidance from the wider user community*

QUADS Coordination role established an Advisory Committee early on consisting of a group of academics and significant researchers all with some expertise in qualitative methods. These included:

Gill Ereaut	Linguisticlandscapes	Dorothy Sheridan	University of Sussex
Prof. Nigel Fielding	University of Surrey	Louise Corti	University of Essex, QUADS
Prof. Jennifer Mason	University of Manchester	Dr. Libby Bishop	University of Essex, QUADS
Dr. Sue Heath	University of Southampton	Vicky Crossley, ESRC	

This group proved to be extraordinarily keen, helpful and proactive, providing some key feedback at meetings and networking suggestions.

#### *3. to provide networking with sister initiatives, such as ESDS, NCRM and NCeSS and constituent nodes and projects*

The QUADS Coordination team liaised early on with the three related RRB investments. These centres of expertise were consulted on matters that touched their areas of work, and projects were encouraged to speak with the relevant people at each of the Centres. An example of joint working was the close collaboration of three of the projects with ESDS Qualidata and technical staff at UKDA. The Northern Ireland, SouthBank and Cardiff projects worked closest to learn about and implement some of the internationally agreed procedures and standards used in data archiving and dissemination. QUADS promotional materials were distributed at all ESDS events and linked to from the website. The NCRM and NCeSS centres were consulted about the ongoing projects and where synergies existed between groups, they were encouraged to meet. The SQUAD project worked closely with NCeSS, speaking at the NCeSS conference and a follow up bid in the areas of text mining has been submitted in spring 2007. The Cambridge node also liaised with NCeSS. The Cardiff project worked closely with the NCRM QUALITI node, holding a joint event. ESDS, NCeSS and NCRM were routinely circulated details of QUADS events to promote.

#### *4. To provide publicity and promotions strategy for QUADS and QUADS projects*

QUADS Coordination facilitated promotion and publicity via a web site, printed materials, and by hosting events. It also engaged with stakeholders and gave presentations at key events and encourages publication and dissemination of project findings. In all over the 18 month period, about 40 outputs were produced and presentations at around 45 events were given, which suggests high productivity (See Sections 3 and 4 and Appendix C). The high level of P&P activity benefited from the QUADS Coordinating team being based at the UKDA, a well-established focal point in a network of national and international data providers and distributors for the social sciences. UKDA runs the direction, management and PR for the Economic and Social Data Service on which QUADS Coordination productively piggy-backed.

## Part 2: Schemes Specification and Objectives

The main aim of QUADS was to develop and promote innovative methodological approaches to and new models for the archiving, sharing, re-use and secondary analysis of qualitative research and data. The Programme was part of the ESRC's initiative to increase the UK resource of highly skilled researchers, and to fully exploit the distinctive potential offered by qualitative research and data.

The scheme's objectives were as follows:

1. *disseminate good practice in qualitative data sharing and research archiving*
2. *develop new models of qualitative research archiving and data sharing (complementing the ESDS Qualidata approach) which tackle in innovative ways the epistemological, ethical, methodological and practical challenges raised by the re-use and re-analysis of qualitative material*

In all, these five projects all contributed quite significantly to achieving greater knowledge of some of the lesser researched forms of archiving, representing and sharing qualitative data. In my opinion, each presents a case study of good practice in areas that compliment the traditional data sharing model adopted by international data archives (e.g. the UK Data Archive). Through the scheme we have seen elucidation of methodological and practical challenges peculiar to more complex data: longitudinal qualitative data; video data; educational conference data; and politically sensitive data. The projects' experiences of attempting to archive and writing up the experiences have contributed to epistemological debates about the implications of the reflexive practices of researchers in the research process for sharing and archiving data. Likewise, many of the projects confronted the need to debate and come up with particular ethical solutions as data were being selected and presented. The advantages here are that most of the teams were in direct contact with the participants and thus able to negotiate avenues of 'consent' and assess the relative importance of anonymity. All of the projects worked in close collaboration with ESDS Qualidata in the areas of anonymisation practice, context, website design and presentation, XML mark-up, ethics and vocabularies.

Likewise, the scheme explored some new and formerly untested technical applications that can enhance the visibility and future usability of qualitative data. The outputs (presentations, workshops, websites and publications) from the Scheme are impressive and already form good practice reference points that the Economic and Social Data Service, as the ESRC's flagship data service, will certainly promote and point both data creators and users to. The ground work carried out on longitudinal data archiving by SBU will be taken forward and developed further within the context of the ESRC supported Timescapes project.

3. *explore ways of improving the quality of contextual information which complement the ESDS Qualidata approach*

The knowledge gained on context is perhaps the greatest achievement of the project. All of the projects in some way focused on the importance of defining and (re)capturing context raw qualitative data in relation to archiving and sharing of qualitative research; including substantive, methodological, historical, and political context. The synergies noted by the QUADS Coordination team at an early stage of the Scheme gave rise to a workshop which focused specifically on 'Defining Context for Qualitative Data'. The fascinating presentations were recorded and written up and I secured an edited collection in a 2006 special edition of the Online Journal Methodological Innovations. The papers offer concrete and pragmatic advice on context in different scenarios that go beyond the base-line standards that ESDS Qualidata they have been attempting to encourage among researchers. A model transcript was also agreed by the QUADS projects that captured minimal contextual information for a standard interview. ESDS Qualidata refers to these publications for guidance for data creators and publishers, and is producing a shortened best practice guide based on the findings.

4. *encourage researchers to explore the use of stored and shared video, visual and audio data sets*

All of the projects utilised audio-visual data, and three of them worked to find suitable ways of representing them. The representation of audio-visual research data adds great power to textual output, and can be productively used to give better meaning to ethnographic write ups and dry quotes. However, all of the teams found working audio-visual data a challenge, not least for the ethical problems presented. Explicit consent from all parties concerned must be gained in advance if snippets for audio-visual materials are to be used. The Cardiff project explicitly set out to consider the changing and increasingly multimodal qualitative research domain; and to offer practical solutions in relation to preparing data for re-use. This included exploring the potential of hypermedia and the hyperlink as a tool to enable meaningful archiving of visual data.

5. *promote understanding of the potential benefits and challenges of information and communication and e-science technologies in relation to media shifts and the changing nature of qualitative research*

Three of the projects looked explicitly at the potential of more advanced technologies such as those being assessed by the e-social science community. Essex, Cambridge and Cardiff all liaised with NCeSS and NCRM and relevant nodes to share lines of enquiry. At the time, many of the NCeSS projects were all in the very

early stages, and having been involved with NCeSS and the commissioning of projects, my feeling is that we still need to wait a while before any useable tools and methods are embraced by qualitative researchers. Media shifts are not that evident, and we have only seen the greater uptake of employing CAQDAS software (minimal IT) in the last couple of years. However, the need for ongoing collaboration is critical, and QUADS has enabled some great insights into the *potential* for how qualitative research data can be exposed and utilised in the future. In the spirit of keeping up the technical momentum, Essex (me) already have technically-oriented JISC grant and have submitted a grant with NCeSS in the area of text mining (following from the SQUADS projects) and the Essex and Cambridge teams are looking to collaborate on a forthcoming e-infrastructure bid.

*6. explore and extend the relationship between qualitative data producers, users and re-users and to demonstrate innovative and effective practice in these domains*

The interaction between creators and users was at the forefront of many of the QUADS projects. Some actively sought to form communities of users, e.g. Southbank and Northern Ireland. All of the outputs are geared towards usability and thus the teams all relied on testing their websites and demonstrators on users. Workshops were used for this, and the end of scheme workshop worked very well in successfully demonstrating the outputs from the Scheme (working websites, software and so on). The other area of great potential uncovered by many of the projects is the use of these kinds of resources for teaching and training. Not only can new researchers use the resources to learn about collecting and documenting data well enough to make it future-proof and shareable, but they can also explore behind the scenes of a real-life research project – the harsh realities and so on - an area that is often glossed over in final reports and short methods chapters.

*7. encourage the involvement of non-academic users and potential users of qualitative methods in opportunities to be methodologically innovative and to widen understanding in non-academic communities of the value and uses of qualitative data*

Not all of the projects focused on non-academic users. Archivists (public records) and software providers were involved along the way, and they attended the end of scheme Showcase Day. Perhaps the greatest example of other user communities is the Northern Ireland work to collate records of the troubles. Lay material on the conflict collected by politically committed individuals was identified and has been catalogued. The historical value of the materials will have broader appeal to the public of NI. Certainly the presentation of multi-media data and commentary from research using the web offers far greater accessibility than the academic journals, thus widening the potential user base. Archivists, e.g. for the British Library, were very interested in some of the web presentational aspects of the data developed by projects.

*8. promote innovative ways of speeding the process of adoption of methodological advances in relation to qualitative research archiving, data sharing, re-use and re-analysis, particularly in the transfer of experience between researchers operating in different substantive research areas and national research communities, and in the training of new researchers*

The Scheme has created a much wider awareness and appreciation of the methodological, practical, technical (and diplomatic) skills required to a) acquire and prepare data and b) create and maintain a robust infrastructure for qualitative data archiving and dissemination. All the projects agreed that both PIs and their staff alike have acquired an amazing amount of knowledge in a short space of time. Thus capacity has almost certainly been built in some of the key centres that have worked, and continue to work, with qualitative research data. Research capacity has been gained through workshops and promotion of user-friendly exemplars and demonstrators of qualitative data sharing and archiving.

All staff working on the QUADS projects became well-acquainted with: metadata, data description; the technical aspects of archiving and re-presentation of data on the web; and ethical and consent issues to do with data sharing. These rich experiences will hopefully be passed on to new projects (e.g. Timescapes). Many of the projects cemented a productive and dynamic relationship with ESDS Qualidata involving learning on both sides, for which some is still ongoing. The momentum will be kept up by ESDS Qualidata who aim to incorporate the new methods into advice and training for researchers and groups creating, presenting and archiving data.

*Achievement fallen short of expectations*

I don't think the Scheme fell short of expectations at all, and, if anything, greatly exceeded them. Given the relatively unresearched arena of the work involved, the main hindrance to projects, in the early phases, was in recruitment. The specialist nature of skills required (technical, qualitative research, archiving, and metadata) for a single part-time or short-lived post, made it almost impossible to find the 'right' person. Many of the projects experienced delays in recruiting key research staff, unless they had pre-named candidates. The rich knowledge gained by these staff along the way has been quite unique, and it is therefore unfortunate that some of them have gone off to other projects in different institutions, which do not necessarily utilise these skills.

The only other area I have pointed out (under reflections of the scheme in part 6) is the lack of thought by ESRC about future sustainability of this kind of innovative work that reaches outside the traditional ESRC research finding models to technical developments and the compilation of ongoing web-based archival resources.

*Examples of outstanding science from the Scheme*

The Scheme was a small 'demonstrator' initiative funded at half a million, and much of the work was highly innovative, exploring areas about which we have less than adequate knowledge in some depth. Examples of what I see as outstanding science are:

1. elucidation of a model and practical strategies for Qualitative Longitudinal methodology by the Southbank team;
2. exploration and elucidation of the meaning of context for qualitative data, with some productive cases; studies and writings eg the Methodological Innovations Online Special Edition) for reference;
3. systematic adaptation of Natural Language Processing (NLP) and text mining tools to social science data;
4. testing new forms of repository software to re-presentation data– including audio visual objects

*Examples of high-impact activities that have brought the Scheme to non-academic groups.*

The two main activities that have reached out to non-academics are the Online Resources workshop and the end of scheme workshop. Participants from outside academia attended, including archivists, technical staff from the public sector and commercial organisations, and some software providers.



### Part 3: Scheme Activities

#### *Scheme-wide activities*

The Scheme set up a web site at [www.quads.esds.ac.uk](http://www.quads.esds.ac.uk), a secure web site for staff only and a project staff mailing list. There was an Advisory Committee who met three times over the course of the 15 months.

The project teams met five times in all, face-to-face at an introductory programme meeting and twice by tele-conference. Projects were expected to deliver short briefing reports, data samples and web site demos for reporting to the Advisory Committee at each meeting. They also prepared talks for the workshop on Context for Qualitative Data in May 2006 material and for the end of scheme Showcase Day in September 2006. This required a lot of coordination from Essex but all teams did deliver on time. Representatives from each project also attended the November 2005 seminar organised by QUADS coordination on Online Qualitative Resources in London.

The three significant events that incorporate both scholarly exchange and to some degree training, are described briefly:

#### *1. Online Qualitative Data Resources: Best Practice in Metadata Creation and Web Standards*

On 15 November 2005 ESDS Qualidata hosted its first workshop as co-ordinators of the Qualitative Archiving and Data Sharing Scheme (QUADS). The event focused on: the fundamentals of presenting qualitative data resources on the web; longer-term sharing and archiving; and promoting standards including building sustainable web sites, harmonising data descriptions, and marking up data content. Web standards are important - good practice in web design and usability builds on compliance with World Wide Web Consortium (W3C) guidelines and Web Content Accessibility Guidelines. Equally, metadata plays a crucial role in the identification, retrieval, management and long-term storage of digital qualitative data. Consensus is needed to ensure common ways of describing resources, so that resource discovery strategies, for example, can be pooled.

Marking up of data, using universal (eXtended Markup Language (XML)) standards, enables richer and deeper navigation, searching and retrieval at the data content level. Mark-up, at the data level, enables coded textual documents, links from text to audio excerpts, and researcher annotations, to be retained. Mark-up is also important for longer-term storage and preservation and more complex collaborative research and e-science type exploitation.

The QUADS Coordination team presented an overview of the merits of metadata for social science and proposed an XML community standard (schema) that is applicable to most qualitative data. Feedback on the schema was encouraged. To add an applied dimension to the day, four projects, currently creating online resources for qualitative data collections using XML, provided an informal overview of their work. This workshop enabled a greater understanding of what resources are required to web-enable qualitative resources. The Oral History Society invited the team to talk at a data they were holding about Oral History on the Web.

#### *2. Capturing context for qualitative data.*

On 3 May 2006 QUADS Coordination held a workshop in London to address the issue of defining and capturing data context. Defining how to provide context for raw data to make it more 'usable' is a complex and sometimes contentious topic that has been the focus of some heated debates within the qualitative data community. ESDS Qualidata spent 10 years working in the area of sharing qualitative data, and has done much to establish informal ways of documenting raw data, such as interview texts and field notes. In addition to written materials arising out of the project, interviews with depositors have proved to be one of the most effective ways of capturing context. Contextual needs for 'raw data' depend on the particular intended usage: description; comparative research, restudy or follow-up study; augmenting new data collection; re-analysis or secondary analysis; verification; research design and methodological advancement; or teaching and learning. Situating data in its context requires both micro and macro level features to be considered including: how the research question was framed; the research application process; project progress; fieldwork situations; analyses, processes and output/publication activities. For example, when undertaking a replication or restudy, detailed information on sampling procedures, fieldwork approaches and question guides is essential.

Four other groups who were also looking at QUADS type activities were invited to join the day and present. The key output from this day was the publication of all the papers in a series of papers published in the first issue of the new journal [Methodological Innovations Online](http://www.esds.ac.uk/methodological_innovations_online), edited by Louise Corti (Corti, 2006). The second output was a minimal agreed set of elements that define context for metadata as it relates to different kinds of data, adopted by ESDS Qualidata for formal data description

### *3. Final end of scheme Demonstrator Workshop*

This was held on 28<sup>th</sup> September at the Museum of London, which was rather an inspiring setting. All of the projects addressed both methodological, information and technical matters, and QUADS Coordination identified four common challenges: defining and capturing data context; audio-visual archiving; consent, confidentiality and IPR; and web and metadata standards. Capturing degrees of context enables informed re-use of data. QUADS devised and recommending a minimum set of contextual constructs that would be necessary to document a collection of qualitative data to enable informed secondary use. The methods of archiving and sharing of digital audio-visual data from qualitative research are fairly new, and, as many of the QUADS projects were handling these kinds of data, the scheme provided an opportunity to share expertise on presenting and re-using such sources. Consent, confidentiality and copyright perhaps provide the greatest challenges for re-using qualitative data and many the QUADS projects have addressed specific consent and copyright issues.

Finally, in order to approach primary data now and in the future, there is a need for that data to be accurately, richly and contextually described. And in turn, re-presentation of original data, methods and analytic interpretation and their interweaving requires agreed and exemplary standards and procedures. Emerging innovations in qualitative methods must be anticipated, including new data forms, sources, possibilities for research archiving and data mining and the potential for increased participation and access. This end of scheme day showcased the demonstrators from the five projects and some additional partner projects that cover many of these cutting edge issues. Participants had the opportunity to hear about the projects and the teams experiences, and see the web sites and tools created by the projects. All the projects afforded unique case studies that can be used in the future to help inform those wishing to publish online and share qualitative data. Presentations and a suite of high quality in-house designed promotional materials was produced.

Finally, outside of these three meetings, project staff did seek guidance and visit UKDA to learn about internationally agreed best practice in data archiving.

#### *Strategy, actions and achievements in promoting contacts and learning among different disciplines or approaches represented in the Scheme*

While QUADS was a very small initiative, QUADS Coordination decided to actively invite a number of groups out there who were also known to be grappling with issues surrounding archiving and re-using qualitative data. Indeed, some were unsuccessful QUADS applicants! Groups who were already conducting more systematic investigations into archiving and secondary analysis issues and who showed interest in linking with the initiative were encouraged to participate in the workshops and events. All of the following attended and presented at least one of the workshops.

- Graham Gibbs (University of Huddersfield) The Climbié Online Corpus
- Maggie Mort (University of Lancaster), Foot and Mouth Archive
- Val Gillies (London South Bank University)
- Mike Savage/Niamh Moore (University of Manchester)
- Pat Thane (Institute for Historical Studies, London)

The five QUADS projects themselves covered a range of disciplines: Cambridge (Education and Technology; SouthBank (Youth studies); Northern Ireland (Crime and Social Order); Cardiff (Education, and Science Policy); Essex and Edinburgh (Social Science, Technology and Computational Linguistics). The linking with the other projects mentioned above the enabled QUADS to branch into the disciplines of history (Thane), family studies (Gillies) and health policy (Mort).

Discussion forums, especially the Context workshop helped bring out the peculiarities of the pertinent matters across the various substantive research areas. Consent and ethics was also an area that, while common to all projects, presented quite unique issues depending on the nature of data under observation, e.g. video, longitudinal, children, politically-charged.

QUADS Coordination also attempted to make links early on with key centers in the UK with the aim of collaboration and possible joint workshops. These included:

- NCeSS and e-science
- National Centre for Research Methods
- Text Mining centre
- data archives
- digital preservation experts

- metadata experts and projects

Some of the projects did engage in joint activities by sending staff to QUADS events. In this way it is hoped that education about data sharing and archiving has reached these groups.

*Strategy, action and achievements in building research capacity within the Scheme*

The Scheme has created a much wider awareness and appreciation of the methodological, practical, technical (and diplomatic) skills required to a) acquire and prepare data and b) create and maintain a robust infrastructure for qualitative data archiving and dissemination. All the projects agreed that both PIs and their staff alike have acquired an amazing amount of knowledge in a short space of time and have enhanced their methodological and technical skills as they relate to this field. They became well-acquainted with: metadata, data description; the technical aspects of archiving and re-presentation of data on the web; and ethical and consent issues to do with data sharing. Thus capacity has almost certainly been built in some of the key centres that have worked, and continue to work, with qualitative research data.

Two of the key research staff in QUADS projects have gone on to take up new roles where they are utilising their knowledge gained under this scheme. The capacity building for the SBU team has been enormous and has put the ESRC supported Timescapes project in great stead. ESDS has recently 'lost' 60% of its key Qualidata position (Libby Bishop) to the Timescapes Hub based at Leeds, which will enable the practical archiving side of the project to move very swiftly. The Cambridge team have been able to expand their applied and technological knowledge of the Fedora repository and of describing large paper-based collections.

*Strategy, actions and achievements in linking the Scheme to research activities outside the UK*

As the Scheme was short-lived, and the Coordinator's budget very tight, no major efforts were dedicated to linking with centres outside the UK. However collaboration came about though using some ESDS Qualidata key data archiving contacts in Europe. Two people from Europe were used to referee the QUADS journal outputs on context (Andreas Witzel of the Life Course Centre, Bremen) and Arja Kuula of the Finnish Social Science Data Archive, Tampere.

Promotion of the scheme was made to the international network of social science data archives (IASSIST) and an article on QUADS was published in the IASSIST international journal. Papers were also given at the NceSS and Association Of Survey Computing (ASC) international forums in 2006. Other papers were given a limited number of international events by the projects (See Appendix C). The SQUAD project made collaborations with CAQDAS vendors and an Australian group in an agreement to help define a data exchange format for qualitative data (which has been taken forward).

#### **Part 4: Publications and Outputs at Scheme level**

The Coordination role took every opportunity to promote QUADS where possible. This was achieved primarily through the ESDS machine, which reaches a wide audience across the social sciences: talking about the project at relevant events and circulating leaflets. The QUADS projects have also attended meetings and conferences at which they have promoted their own and the QUADS scheme. In December 500 copies of a glossy QUADS brochure was printed and circulated quite widely (<http://quads.esds.ac.uk/quads.pdf>)

News articles and conference talks were focused on awareness of the scheme's existence and aims, while the projects also produced brochures, information sheets and final outputs. Around 40 publications, articles and web resources were produced (See Appendix C). All of the projects did produce their own websites featuring their demonstrator resources and samples of data. These vary in nature with the Southbank and Cardiff projects websites being quite exemplary in the presentation of their work and data exemplars. The Northern Ireland project produced a very good catalogue template with exemplars. The Cambridge web presence is hosted via an intranet making it a less accessible web presence (an account is needed). The SQUAD project has less of an established web presence, as the focus was on behind the scenes processing tools, and is incorporated into ESDS Qualidata development web materials.

In addition to the key deliverables as website demonstrators, all of the project have produced Guides that help the user understand both the data and tools presented. A lay Guide to XML was produced by the SQUAD team (at the request of the Advisory Committee) which has proven to be useful in demystifying some of the 'frightening' technical jargon to social researchers. Also a model transcript, ratified by projects and the Advisory Committee was a significant output by the SQUAD team. A learning DVD created by the Southbank team for the Open University provided another exciting opportunity of how to utilise data for teaching and learning.

The QUADS and scheme and projects were also promoted at around 45 different events over the 18 months (see also Appendix C.) This is quite a sizable promotion to a range of audiences in and outside of the UK. Presentations from the three QUADS workshops are available (and will continue to be so) from the Website.

Two collections of materials should be highlighted. The first is the edited collection of papers collated from the second QUADS workshop on 'Defining Context for Qualitative Data'. Seven papers plus a long introduction were included in a 2006 special edition of the Online Journal Methodological Innovations, edited by Louise Corti. Four of contributions were from QUADS project teams. The papers consider issues around the effective archiving and further (re)use of raw qualitative research data, with a particular focus on the issues of how context is defined and (re)captured. Merely storing and archiving raw qualitative data is clearly insufficient as the context in which it emerged is of utmost importance to its interpretation and as a consequence, emergent standards of secondary qualitative data analysis. By focussing on the defining and capturing of context of raw qualitative data the papers presented here go some way to producing some concrete and pragmatic advice on how this might best be done. These are available at: <http://sirius.soc.plymouth.ac.uk/~andyp/index.php>.

The second collection is a suite of high quality promotional materials that were produced for the end of scheme Showcase day in September 06. Posters, 2-sided fact sheets and guides to the demonstrator resources were produced with a similar look and feel, which were praised by the attendees on the day, and have been used subsequently as model templates by the NCRM. They are available at <http://quads.esds.ac.uk/news/showcase.asp>.

## Part 5: Management

### *Co-ordinator's budget*

The QUADS coordination award was cash limited to 50,000 thereby enabled a minimal level of staffing over a period of 18 months. The rest of the budget was devoted to some consumables, meetings, travel and scheme events. The initial bid from Essex for the Coordination role was some 9k more than the budget ceiling, set firmly at 50k. The additional 9k proposed by Essex included full workshop participation costs and high quality printing of publicity materials. These items were dropped from the budget in a revised reduced bid. However, the costs of the final event were scaled down and in this respect, it did not suffer.

For the QUADS Coordination role, the Director and the Web and Promotions Officer were employed for the duration of 18 months. I directed the Coordination function, provide the central point of contact with the ESRC and the PIs on QUADS projects, initiate progress and final reports, and took a lead in initiating outreach and promotional activities. The remaining two core staff, the Research Coordinator and clerical posts were part-time posts. Due to the interlocking of my own roles – Head of ESDS Qualidata, Scheme Coordinator and PI for one of the QUADS grants (SQUAD) significant opportunities for synergy, piggy-backing and cost savings arose for all three of the projects.

There was a travel underspend in the first year, partly as video conferencing (very productively) was used for two of the projects meetings. This was used, with agreement from the ESRC and the Advisory Committee, to pay for a colour QUADS brochure and travel for Louise Corti to promote and present papers at the international data archivists' annual conference (IASISST) conference in Ann Arbor May 2006.

### *Co-funding secured*

For the short span of this Scheme no additional co-funding was secured.

### *Challenges, problems, unexpected events faced as Co-ordinator*

There were relatively few problems during the life of this scheme. Many of the projects had delayed start dates due to extended contractual negotiations, and the NI team only started in July.

The only major challenge I had anticipated was scheme-wide project communication, but on the whole it worked well. At time it did require a fair bit of management, oversight and pressurising to comply with my Coordinator's demands of regular reports and updates! (projects were asked to submit short progress reports to coincide with Advisory Committee meetings. With such short-lived projects on relatively small budgets, some only just over a year, reporting and engaging in debate can present a distraction from head-down development work. Thus the desire to participate maybe have been competing with time-limited deliverables for the project. Indeed, in months 2 to 6, contact with the projects was limited as many were in their critical 'heads down' phase.

Setting up a secure project site to hold project bids, overviews, updates and data samples was a good idea, but not utilised as much as it could have been by projects. The Advisory Committee said they used it. Perhaps a WIKI might have been a better.

Some concerns were raised about the Cambridge project's communication with QUADS co-ordination, as their work on data digitisation and data description seemed to be happening without much consultation with the other experts in this field. The Co-ordinator made a site visit to help the information flow. The also Cardiff project held a user workshop where no-one from the QUADS projects or Co-ordination team were invited, which was an error on their behalf. I put this down to the fact that the PI, Amanda Coffee, took an extended period of leave half way through the project's life and as a result the management was probably not as thorough.

The biggest challenge was one of QUADS Coordination staff (web and admin support) going on long-term sick a month before the End of Scheme Showcase in July 2006. Access to his email was denied and a lot of effort was spent in getting the organisation of the event back on track. The Day certainly did not suffer as a result.

As Scheme Coordinator I pressed for some specific end of project deliverables from each team - because there are some quite detailed technical issues that have been confronted, but also because the investigations have provided exemplars of best practice that must not be lost – for example buried in an end of award report. These were:

1. Technical reports and step by step guides (some already produced for the end of scheme workshop)

2. Addressing particular questions in the end of award reports:
  - a. areas the projects wished to pursue but had no time or capacity
  - b. skills gained and where are the 'experts' going?
  - c. future spin offs and further funding to develop resources or methods investigated if the need is seen
  - d. website and maintenance of functionality – where will the websites be held?
  - e. how can the exemplars and ideas be widely used and taken up and who is the target audience?
  - f. offer some specific use cases

The reports do allude to some of these issues, but maybe these kinds of factors could be asked about more specifically in future end of award reports.

## **Part 6: Reflections on the Scheme and the Co-ordinator's role**

*The Scheme, the policies underpinning it, the processes by which it was commissioned and managed, the Co-ordinator's role and how this was supported by the Board and the ESRC Office*

Overall, the Scheme was a highly innovative move by RRB to commit to a short-fire qualitative data sharing and archiving initiative, over and above its investment in ESDS. The process by which it came about was perhaps more mysterious. ESDS Qualidata, the body supported by RRB and charged with qualitative data archiving for the ESRC, knew nothing of the commissioning of the Scheme, and it was a surprise when it was advertised. Unfortunately this highlights lack of good communication on behalf of ESRC, but this often seems to be the case in the area of RRB resources.

Perhaps more surprising was the lack of approach by RRB to ESDS Qualidata to consider participating in the Coordination role. The wider community certainly expressed confusion over the relationship of the QUADS scheme to the core work of ESDS Qualidata. Every applicant to the QUADS Scheme contacted Qualidata at the application stage, and almost every one either used them as a referee or added in plans for joint collaboration working or formal consultancy. If the Coordinators role has been won by another centre (only one other competitor), the Advisory Committee felt that the Scheme would not been far less successful.

The other frustrating factor was the liaison with ESRC. The ESRC Officer appointed to QUADS changed about four times over the first few months, with practically no guidance in from months 2 to 4. No RRB liaison was appointed throughout the whole life of the project, as a result of Jennifer Mason stepping down from the Board. It was therefore a little problematic having no guidance on the Scheme's actual expectations or steer from ESRC in this respect. We were very fortunate to have an excellent Advisory Committee on which Jennifer Mason sat.

With such a short life time of this Scheme, contract researcher staff are often lost at the end of the award. This was the case here, and perhaps more could have been done to consider a follow up to the Scheme closer to the end of the awards to help retain such expertise. It was hard enough to recruit them! As mentioned earlier, almost all projects had to start later than anticipated due to the problems of securing the right key staff early on.

Regarding the exit strategy, almost no thought went into this by ESRC. A pertinent issue is one of sustainability of the resources, technologies and tools developed under this scheme. Some projects have been investigating more novel ideas, which in our Advisory Committee's opinion, would merit further development. These are the SQUAD Project (Corti and Grover, Essex and Edinburgh) and the Educational Archives/Fedora project (Carmichael, Cambridge and UEA). It is very fortunate that ESDS Qualidata, under the web presence and preservation role of the UK Data Archive) have agreed to host (as long as the ESDS is supported) the web sites, data and outputs from the projects - not only because the work is directly of benefit to ESDS Qualidata's own ESRC mission, but also UKDA because it has a professional longer-term digital preservation role.

But, the issue of longer-term sustainability of excellent web resources must be considered by ESRC. I am aware of the Chris Skinner proposal that has gone forward to ESRC to investigate this major issue as it relates to NCRM/RMP outputs. But the matter also has much wider application to all resource creation projects supported by ESRC funding.

## **Annex A: Projects and their Progress**



**Award Reference:** RES-346-25-3003

**Title:** Representing Context in a Research Archive of Educational Evaluation Studies

**Award holders:** P. Carmichael, M. James, J. Elliot and D. Bridges

**Institutions:** Cambridge & UEA

**Amount:** 92,781

**Project website:** [www.caret.cam.ac.uk/quads](http://www.caret.cam.ac.uk/quads)

### **Aims and methods**

The project aim was to establish a digital research archive of educational case studies drawing on the work of participants from around the world in the 'Cambridge Conferences', on educational evaluation, which have been taking place since 1972. The intention of the project was not only to develop an archive of context-rich and significant case studies, but also to model a replicable process by which other archives could be developed in fields where complex, case-based data need to be securely archived but also retrieved, extended and combined in innovative ways

### **Objectives**

Objectives of the project included:

1. the identification of a suitable set of education case studies drawn from those developed by the participants in the "Cambridge Conferences" on Educational Evaluation, along with data locating those studies in historical, policy and methodological context;
2. the construction of a digital repository ('DSpace') containing electronic versions of case study data and contextual data, together with a collaboration and learning environment ('Sakai');
3. the development and application of an appropriate descriptive metadata scheme for the description of the case study and contextual data through systematic analysis and collaboration with participants in the project;
4. the publication of the archive in a range of forms including web-based resources for public access and e-learning materials;
5. the provision of electronic and documentary support for the development of further archives of similar scope and design.

### **Progress achieved**

The project constructed a demonstrator research archive and a set of online resources, tools, interfaces and processes to support secondary analysis and other research, teaching and the development of qualitative archives. Once the ten or so case studies of paper-based archives were selected, the team confronted many issues in dealing, for the first time, with and collating, digitising and presenting large paper research archives. QUADS Coordination felt that advice should have been sought early on from data archivists (e.g. UK Data Archive), who have been working with these kind of collections for years and are well aware of the issues. They also spent a significant amount of time constructing a 'grounded', domain-specific descriptive vocabulary to complement and extend existing keyword sets and vocabularies. This was interesting, yet possibly could have been better linked into other social science vocabulary expertise, such as the UKDA HASSET thesaurus and the multi-lingual European ELSST thesaurus used by all the European social science data archives. The exploration of data context was useful, with the team gathering and presenting context-rich materials alongside data.

The project invested a fair degree of effort in assessing the technical infrastructure originally planned for archiving, the DSpace Digital Repository platform and Sakai, but changed the Fedora Digital Repository Archive. Investigation suggested that this open source platform enabled a more flexible and extensible collection structure, and exposure of records via the Open Archive Initiative (OAI). The system allows not only resource description and discovery, but provides a basis for resources to be presented to the widest possible range of users through a range of web interfaces. The opportunities offered by these kind of repositories are that they can store a wide range of data types (audio, video, images, texts etc) while also separating data, metadata and any 'semantic' layers, and thereby enhancing exploratory and presentational power of the archive. Interestingly enough the UK Data Archive are also investigating the use of Fedora for a linked-to-data document repository, and collaboration is ongoing with the Cambridge group. On a technical level, the project benefited quite significantly from being embedded within CARET, and Patrick Carmichael's involvement in the ESRC Teaching and Learning Research Programme.

The best feature of this project was the team communication and documentation of the project. Because the Camtools Virtual Collaboration Environment was used (hosted at CARET) the archive was integrated with a wiki tool, which was utilised for the collaborative development of the vocabulary, 'walkthroughs' and for analysis, together with other communication tools. Thus the split site teams used these virtual tools for organising and managing the project, and for mounting shared methodological thoughts and issues. I hope these outputs will be made available as some kind of best practice guide (which could be part of ESDS

Qualidata guides on qualitative data archiving). Access to the Wiki by QUADS Coordination or the Advisory Committee along the way was not forthcoming, which was felt to be a shame. However, I am in agreement with the investigators who believe that this model of providing an archive interface and other online tools inside an access-controlled environment has the potential to support varied research communities including archive users, reusers and contributors. Archive-centred online environments could form an element of other projects' archiving and dissemination plans, as well as exposing data for secondary analysis and reuse in various contexts.

Award Reference: RES-346-25-3019

**Title:** Smart Qualitative Data: Methods and Community Tools for Data Mark-Up (SQUAD)

**Award holders:** L. Corti and C. Grover

**Institutions:** University of Essex & University of Edinburgh

**Amount:** £92,709

**Project website:** [www.esds.ac.uk/qualidata/online](http://www.esds.ac.uk/qualidata/online)

### **Aims and methods**

The SQUAD project aimed to explore methodological and technical solutions for exposing digital qualitative data to make them fully shareable and exploitable. First, the project dealt with specifying and testing non-proprietary means of storing and marking-up data using universal (XML) standards and technologies, and proposed a standard that would be applicable to most forms of qualitative data. The second strand investigated optimal requirements for contextualising research data (e.g. interview setting or interviewer characteristics), aiming to develop standards for data documentation and ways of capturing this information. The third strand tested natural language processing technology to develop and implement user-friendly tools for helping prepare and archive marked-up qualitative data for both traditional digital archiving and to enable collaborative research and data linking.

### **Objectives**

The five main objectives were:

1. to specify and test non-proprietary means of storing and 'marking-up' data using universal (XML) standards and technologies, and propose an XML community standard (schema) that would be applicable to most qualitative data;
2. to investigate optimal requirements for contextualising research data (e.g. interview setting and interviewer characteristics), aiming to develop standards for data documentation and ways of capturing this information;
3. to develop and implement fully documented user-friendly tools for semi-automating (through the application of natural language processing technology) some of the very laborious processes already used to prepare qualitative data for both traditional digital archiving and more adventurous collaborative research and linking multiple data and information sources;
4. to research free, non-commercially based tools for online publishing and archiving marked-up data and associated linked research materials (Qualitative Data Mark-up Tools (QDMT));
5. to provide awareness-raising and basic training provision through the production of easy-to-follow guidelines and user-friendly step-by-step guides with exemplars centred on the use of these tools and the standards they utilise.

### **Judgement of progress achieved**

The most significant progress achieved here was the bringing together of two disparate academic activities: social science data creation and analysis and computational linguistics: natural language processing and text mining. In this project computational linguists, sociologists and data archivists were brought together to exchange ideas and test out technologies on new data forms. This is one of first times such a significant collaboration has taken place in the UK. The Edinburgh team were equally excited by the opportunity to work with a new research discipline.

The most successful outputs from the SQUAD project have been: a) the development and agreement of a standard 'model' transcript and mark-up criteria, b) the application of named entity recognition NLP tools to qualitative interview data and using this to create basic automated anonymisation tools; and c) an in-depth investigation into the meaning of providing context for qualitative data.

The model transcript is now being used by other projects and has been of interest to the Surrey CAQDAS Networking Group as it has positive implications for import into CAQDAS software packages. The Text Encoding Initiative (TEI) group was consulted to help produce the key base-line characteristics of a typical transcript, e.g. ID, speaker, turn takers, date of interview, and some other basic biographical identifiers. The work on the named entity tools was slower than anticipated, namely as the tools have been designed for identifying characteristics (e.g. names, places, companies, dates) in text like newspaper articles and pharmaceutical reports. A lot of training of the system had to be done to suit typical social science research data. Likewise, the anonymising tool was built from scratch and involved some investigative work to assess the suitability of some baseline systems. The complex technical interfaces to these tools, means that one task was to configure and adapt them to a windows Graphic User Interface (GUI) front-end so that an average PC user could work with them. While this project developed a basic workable demonstrator, as a beta tool, further work would be needed to make them useable for the average person preparing data (researcher or data archivist) for their own analysis or at a later stage for archiving

The SQUAD project helped provide the impetus for the QUADS Scheme to hold a meeting on context where projects all investigated and presented issues of context for their own types of data. As PI of the SQUAD project, I found these papers to be so stimulating and innovative I proposed the idea of a thematic collection of papers and secured a special journal edited collection of papers on data context, with some really excellent contributions (the fact that I was PI for both QUADS Coordination, SQUAD and Director of ESDS Qualidata, may have enabled much greater synergy than might have otherwise been realised).

The work done by the short SQUAD project has enabled some of the innovative technical ideas proposed in the original bid to be taken forward. First Louise Corti was successful in gaining a grant from the JISC under the Repositories Programme to work further on a non-proprietary data exchange standard for qualitative data. The new Data Exchange Tools (DEXT) project started in December 2006 and is based on work accomplished in SQUAD and has all the major CAQDAS vendors signed up. The second area is automated text summarisation, for which there is now fruitful collaboration of the UK Data Archive and the National Text Mining Centre (NACTEM) in Manchester. Recently a joint bid to ESRC has been submitted between NCeSS, NACTEM and UK Data Archive to explore further applications text mining tools to qualitative textual data.

**Award Reference:** RES-346-25-3014

**Title:** Negotiating the Long View: Archiving, Representing and Sharing a Qualitative Longitudinal Resource

**Award holders:** S. Henderson

**Institutions:** South Bank

**Amount:** £89,632

**Project website:** [www.lsbu.ac.uk/inventingadulthoods](http://www.lsbu.ac.uk/inventingadulthoods)

### **Aims and methods**

'Making the Long View (MLV)', as it is now known, aimed to assess the feasibility of archiving a large QL study (the *Inventing Adulthoods* dataset) by exploring creative ways of overcoming the ethical and practical difficulties involved. This dataset resulted from a qualitative longitudinal (QL) study of young people moving from adolescence to young adulthood in five contrasting areas of England and Northern Ireland during an important period of social change (1996 – 2006). The rich biographical material aimed to provide a unique window on aspects of young people's lives and to offer methodological potential for prospective QL methodology and biographical and case history approaches. The project aimed to: conceptualise and explore and how to construct an ethically-sound 'mini' showcase archive of case data based on the young participants and additional contextualising data; to begin establishing a network of users for the dataset; and to disseminate findings from the project.

### **Objectives**

1. To develop innovative, participatory methods for re-negotiating informed consent for the archiving, sharing and representation of a partial data set; including the development of ethical and practical criteria for selection and for anonymising all data for each case;
2. To explore and develop participatory, ethically sound, innovative methods (visual/audio/textual) for contextualising these case data; and strategies for representing the QL resource in innovative ways, involving Qualidata, other archivists and practitioners in the archiving, sharing and representation of qualitative data in a collaborative process;
3. To establish the potential for secondary analysis of the resource by networking and a scoping exercise to establish potential academic and non-academic users and exploring different forms of doing this;
4. Disseminate the findings of each aspect of the project (innovative data archiving, representing and sharing) effectively. Produce a by-task breakdown of QL archiving costs;
5. Identify effective methods and channels for disseminating the resulting exemplar to academic and non-academic users; including the identification of further funding opportunities for producing practical applications.

### **Progress achieved**

A showcase archive of ten biographical cases was prepared and will be deposited with the UK Data Archive and the new ESRC Timescapes project at Leeds. A multi disciplinary, multi-institutional team of data users has also been established as a result of the involvement in the *Timescapes* Study and there appears to be interest in this resource.

I feel that this project investigated successfully some not insignificant issues particular to data from young people and over time. These were: a) ethical barriers to the sharing of qualitative data and the meaning and gathering of consent b) appreciating relevant context in re-use; and c) refining methods for cleaning and anonymising QL data. Progress was certainly made in contextualising the case data, with useful consultation with both users and ESDS Qualidata. A very useful conceptual framework was elucidated, in understanding the significance of **time** in the potential usability of the data - biographical, historical and research time. In this respect, the findings from this demonstrator project will give a huge leg-up to the Timescapes work (Southbank are part of the consortium).

The excellent web site is a documentation of the methods used on the original study and the process and progress of the research. Indeed, the web site represents the data in such a way that offers immediate potential for access for re-use and secondary analysis - it provides a taster and introduction and aims to be a portal to successive levels of data. The dissemination strategy was quite impressive in that: the website was richly and informatively populated; scholarly articles were published; and an audio-visual teaching resource was created with the OU. The team are pursuing collaboration with ESDS Qualidata to produce teaching and training materials based on the showcase archive once it is formally deposited. ESDS Qualidata's Manage Libby Bishop (also employed on the QUADS project) is taking on a 60% key role in Timescapes from spring 2007, thus continuing the productive collaboration between the two ESRC-supported qualitative data archiving centres.

On balance, given the short time frame, this project a strategic contribution to theoretical and methodological development in several priority areas: data archiving and sharing, resourcing policy and practice, secondary analysis of qualitative data, QL methodology, qualitative research methods.

**Award Reference:** RES-346-25-3010

**Title:** Methodological issues in qualitative data sharing and archiving (MIQDAS)

**Award holders:** B. Dicks and A. Coffee

**Institutions:** Cardiff

**Amount:** £84,646

**Project website:** [www.cardiff.ac.uk/socsi/hyper/QUADS](http://www.cardiff.ac.uk/socsi/hyper/QUADS)

### **Aims and methods**

The main aim of the demonstrator project was to critically and empirically address the methodological implications of archiving and (re)presenting substantive multimodal qualitative research that exploits the full possibilities of contemporary information and communication technologies. Using a pre-existing multi-media dataset, the team placed particular emphasis on investigating how to utilise multimedia digital technologies in qualitative data sharing.

### **Objectives**

Key objectives of the project are:

- To enhance the transfer of new methodological practices for the storage, analysis and representation of multimodal qualitative metadata.
- To produce web based guidelines, supporting information and exemplars to assist researchers in making their qualitative data, designs and methodological decisions available for re-use and archiving.
- To produce an interactive working model (a methodological trail) of an existing project, dataset and analysis prepared for re-use in such a way as to allow future users to track the research design, methodological choices and decisions.
- To examine the potential of XML schemas and stylesheets for displaying and transforming qualitative multimedia data records in digital and online form.

### **Progress achieved**

The project went some way to identifying way to facilitate archiving, sharing and re-use of qualitative multi-media datasets. Useful work was done on what kind of methodological information was required to be overlaid onto relevant empirical records, for re-users to be able to understand how and where the production and co-creation of data and analysis had shaped data-sets. The findings included screen-design issues that are shown in the Cardiff team's interactive web-based outputs.

Another key area that the team worked on was on helping refine a framework for communicating data – based on methodological contextual information (e.g. research relations, field contingencies, theoretical assumptions and concepts, field instruments, and analytical frameworks); substantive contextual information (i.e. cultural, socio-economic, political and institutional relations plus their instantiation in fieldwork interactions) and media-related context in the field, in recording technologies and in analysis. Cardiff based their approach on the Ethnographic Hypermedia Environment (EHE) for the electronic, screen-based authoring of a multimedia ethnographic project, including hyperlinked data analysis and representation, for which they are best known. Using this approach, they demonstrated that hyperlinking can function as a key contextualising and communication too. As data, context and analysis cannot meaningfully be separated in qualitative research, web links can be used to demonstrate their integration, whilst preserving the distinction between data-record itself and contextual information or authored analysis. The *Methods Trail* concept is probably the best output from the project.

Other areas investigated by the project was the ethical and legal issues as they relate to multimedia data, which confronted the peculiarities of video data collected in a public-space. Finally, the project looked (briefly) at the suitability of XML for qualitative and multimedia data, and collaborated with ESDS Qualidata to help feed into an XML schema for standardised searching at a level appropriate for qualitative datasets. However the Guide produced on XML (which aimed to summarise the extant literature and outlines some of the data mark-up initiatives currently being developed.) was not greatly innovative and could have better utilised substantial work undertaken by both ESRC Qualidata and the SQUAD project. The SQUAD project produced a similar document at an earlier stage of the project. Unfortunately the workshops to test the Methods trail and Online Guide were not advertised to the QUADS Scheme, so none of the Co-ordinating team or other project members attended.

All in all the project enriched our knowledge of some of the issues facing data sharing, archiving and web representation of multi-media data.

**Award Reference:** RES-346-25-3013

**Title:** Collating and Preserving Primary Material on the Northern Ireland Conflict

**Award Holders:** Robert Miller

**Institutions:** Queen's University Belfast and University of Ulster

**Award amount:** £81,116

**Website:** [www.ark.ac.uk/qual/conflict/](http://www.ark.ac.uk/qual/conflict/)

### **Aims and methods**

The conflict in Northern Ireland over the last 35 years has generated a vast body of qualitative material such as interviews, video and audio recordings, photographs etc. that can be utilised to address the issues of violence and reconciliation. Effective use of the bulk of this material, however, has been thwarted by its wide dispersion and the lack of any central index or cataloguing system. This project aimed to produce a comprehensive collated catalogue of primary qualitative material on the Northern Ireland conflict and facilitate access to the material for the purposes of primary and secondary analysis.

### **Objectives**

1. A comprehensive collated catalogue of primary qualitative material on the Northern Ireland conflict;
2. An indexed retrieval system for the catalogue holdings, accessible through ESDS Qualidata and ARK;
3. Negotiation of terms of access to catalogue material, both that retained by third parties and that held in the ESDS Qualidata archive;
4. Transfer of material to digital format and deposition in the ESDS Qualidata archive, particularly in instances where the material is 'at risk' of being lost;
5. Establishment of dissemination arrangements beyond the end of the project.

### **Progress achieved**

This project formed an excellent and worthwhile extension to the ARK Project (Social and Political Archive for Northern Ireland), and took advantage of ARK's recognised expertise in the dissemination of social science information on Northern Ireland to the general public. The establishment of an collection-level the catalogue will offer, when eventually richly populated, the discovery of qualitative material on the Northern Ireland 'Troubles' that are held in archives and collections. The catalogue includes information about the project, the kind of data collected, where it is held and how to contact the holder of the information. While many of the items catalogued relate to research material collected by qualitative social science researchers, other kinds of materials (lay sources if you like), that were not collected specifically for qualitative research, provide good archival sources for qualitative analysis. The extent and variety of potential material that the archive will try to make available provides scope for innovative approaches to qualitative analysis that could be quite ground-breaking in a methodological sense.

The team worked closely with ESDS Qualidata and the UK Data Archive to ensure that descriptive standards for research data collections were comparable. The NI research into context for these kind of politically-charged data collections was also an excellent output, and the article prepared for the QUADS-initiated prepared Methodological Innovations Special Issue on data context, a very useful contribution.

ARK have been fortunate in securing a ESRC Large Grant to cover their infrastructure for 5 more years meaning that the online website for the catalogue can be maintained at least until then. People will be able to register a potential new entry for the catalogue and offer contact details thereby providing an opportunity (in a less proactive way) to collate more details of collections out there. ARK have greater aspirations for the site which might offer the chance to see or hear the actual material via their web browser, but this will undoubtedly depend upon gaining a significant tranche of dedicated funding.

## Annex B: Co-ordinator's Activities

*Include all significant activities run from the Co-ordinator's office, showing date, lead person and nature of activity.*

<b>Activity</b>	<b>Date</b>	<b>Whom</b>
Inaugural projects meeting	May 2005	Louise Corti
Site visit from Cardiff	July 2005	Libby Bishop
Site visit, Southbank project	May 2005	Louise Corti
Poster session, IASSIST Conference, Edinburgh	May 2005	Louise Corti
Projects meeting	July 2005	Louise Corti
Advisory Committee meeting	September 2005	Louise Corti
Site visit, Cardiff project	September 2006	Nadeem Ahmad
Site visit, Cambridge project	October 2005	Louise Corti
Seminar on online resources, London	November 2005	Louise Corti
Projects meeting	November 2005	Louise Corti
Site visit, Essex/Edinburgh project	Jan 2006	Louise Corti
Advisory Committee meeting	March 2006	Louise Corti
Workshop on context, London	May 2006	Louise Corti
Site visit from Cardiff	May 2006	Libby Bishop
Poster session, IASSIST Conference, Ann Arbor	May 2006	Louise Corti
Advisory Committee meeting	July 2006	Louise Corti
End of scheme showcase day, London	September 2006	Louise Corti
Editing of Methodological Innovations journal for QUADS articles, Louise Corti	September – November 2006	Louise Corti



## Annex C: Scheme Publications and Outputs

### QUADS Scheme-wide

#### *Publications*

Corti, L. (ed.) (2006) 'Making qualitative data more re-usable: issues of context and representation' *Methodological Innovations Online*, Vol. 1, No. 2 (2006). Available at: <http://sirius.soc.plymouth.ac.uk/~andyp/index.php>

Corti, L. (2006) Qualitative Archiving and Data Sharing: Extending the reach and impact of qualitative data, in IASSIST Quarterly, 2006

- QUADS Glossy Brochure: <http://quads.esds.ac.uk/quads.pdf>
- UKdatabytes articles
- Article in Newsletter of the British Psychological Society for the Qualitative Methods in Psychology Section, December 2006
- Article in NCRM Newsletter Methods News, October 2005
- Article on QUADS in Qualiti (NCRM-node) newsletter, December 2005
- Article in Social Sciences Newsletter of the ERC, June 2006
- ESRC brochure:
- Promotional outputs for end of scheme workshop: <http://quads.esds.ac.uk/news/showcase.asp>

### Projects

#### *Publications*

Bishop, E. (2006) 'A proposal for archiving context for secondary analysis', in *Methodological Innovations Online*, Vol. 1, No. 2 (2006)

Carmichael, P. (forthcoming 2007) 'Qualitative secondary analysis using Internet resources' in N.Fielding et al (eds) *Sage Handbook of Online Research*

Corti, L., Wathan, J. and Cole, K. (forthcoming 2007) 'The provision of access to data for secondary analysis' in N.Fielding et al (eds) *Sage Handbook of Online Research*

Dicks, B. Mason, B., Williams, M. and Coffey, A. (2006) 'Ethnography and data reuse: issues of context and hypertext', in *Methodological Innovations Online*, Vol. 1, No. 2 (2006)

ESDS Qualidata (2006) Guide to XML, University of Essex

ESDS Qualidata (2006) Guide to SQUAD tools, University of Essex

ARK (forthcoming) 'the Heathwood Archive', A DVD collection of daily news broadcasts and documentaries on Northern Ireland from 1980 to 2001, University of Ulster

Henderson, S., Holland, J. and Thomson, R. (2006) 'Making the Long View: Perspectives on context from a qualitative longitudinal (QL) study', in *Methodological Innovations Online*, Vol. 1, No. 2 (2006)

Henderson, S. Holland, J. McGrellis, S. Sharpe, S. and Thomson, R. (2006) *Inventing Adulthoods: A biographical approach to youth transitions*. London, Sage.

Peter McLoughlin, Mark McNally, and Robert Miller (forthcoming 2007) 'Ark (Northern Ireland Social and Political Archive): the Northern Ireland Qualitative Catalogue and Archive on the Conflict', *Irish Political Studies*, 22 (2).

Author L. CORTI, QUADS Coordinator's Report to ESRC, May 2007

McLoughlin, P. and Miller, R. (2006) 'Whatever You Say, Say Nothing': The Issue of 'Macro-Context' in the Construction of a Catalogue and Archive of Qualitative Material on the Northern Ireland Conflict', in *Methodological Innovations Online*, Vol. 1, No. 2 (2006)

Milosavljevic, M. Grover, C. and Corti, L. (2007), Smart Qualitative Data (SQUAD): Information Extraction in a Large Document Archive , RIAO 2007 Proceedings (forthcoming)

Poesio, M. Kabadjov, M. Goux, P. Kruschwitz, U and Corti, L. (2006) 'Anaphora Resolution-Based Anonymization Module' , Proceedings of the LREC, 2006

ESDS Qualidata (2006) 'Searching and sharing qualitative data: the uses of XML', University of Essex. Available at: <http://www.esds.ac.uk/support/guides/xml.pdf>

ESDS Qualidata (2006) 'Guide to SQUAD tools' , University of Essex

MIQDAS (2006) 'Online Guide for preparation of data for sharing', University of Cardiff, available at: <http://www.cf.ac.uk/socsi/hyper/QUADS/guide.html>

MIQDAS (2006) 'Possibilities of multi-media qualitative data archiving using XML available at: [http://www.cardiff.ac.uk/socsi/hyper/QUADS/working\\_papers.html](http://www.cardiff.ac.uk/socsi/hyper/QUADS/working_papers.html)

MIQDAS (2006) 'Qualitative data archiving and reuse: mapping the ethical terrain' available at: [http://www.cardiff.ac.uk/socsi/hyper/QUADS/working\\_papers.html](http://www.cardiff.ac.uk/socsi/hyper/QUADS/working_papers.html)

Youdell, D. and Carmichael, P. (forthcoming 2007) 'Ethical Frameworks for Virtual Research Environments', *Research Intelligence*

#### **Websites and multi-media products created**

[quads.esds.ac.uk/](http://quads.esds.ac.uk/)  
[www.lsbu.ac.uk/inventingadulthoods](http://www.lsbu.ac.uk/inventingadulthoods)  
[www.cf.ac.uk/socsi/hyper/QUADS/](http://www.cf.ac.uk/socsi/hyper/QUADS/)  
[quads.esds.ac.uk/projects/squad.asp](http://quads.esds.ac.uk/projects/squad.asp)  
<http://www.ark.ac.uk/qual/conflict/>  
[www.caret.cam.ac.uk/quads](http://www.caret.cam.ac.uk/quads) and <http://camtools.caret.cam.ac.uk>

Young Lives DVD (2007), Angel Eye, Open University course on Youth (KE308 [www.open.ac.uk/courses](http://www.open.ac.uk/courses))

#### **Promotion of QUADS Scheme and projects at events (presentations)**

- Atlas-ti developers, Berlin May 05
- 38th Essex Summer School in Social Science Data Analysis and Collection, July, August 05
- Secondary analysis workshop, University of Manchester, September 05
- Paper at a ESRC funded seminar series entitled 'Qualitative Longitudinal Research: Principles, Practice, Policy', Leeds, September 06
- Fourth Annual Language and Computation Day, October 05
- ESRC RMP Mixed Methods: identifying the issues workshop, Manchester, October 2005
- Secondary Analysis in Qualitative Research. Utopia and Perspectives Conference, Grenoble, France, November 05
- QUADS Meeting Online Resources: standards, London, November 05, <http://www.esds.ac.uk/qualidata/news/eventdetail.asp?ID=1441>
- The Analysis of Qualitative Longitudinal Data for Policy, London November 05
- Learning about the past from the present, London, November 05
- Identities Research Programme, January 06
- 'Qualitative Longitudinal Research: Principles, Practice, Policy', University of Leeds, January 06.
- Expert visit to Bremen Qualidata Archive, February 06
- Collaboration with Australian data over use of qualitative data collections (ongoing)
- Exploring the potential: examining archived data at Mass Observation and ESDS Qualidata, University of Sussex, January 06

- Exploring the Economic and Social Data Service, Swansea College, January 06
- ARK seminar, Belfast, January 2007
- Fedora User Conference (Part of the Open Repositories Conference) Sydney, January 2006
- Biographical Methods ESA Research Network, 06
- Qualitative Methods Research Network., 06
- NCeSS visit, January 06
- JISC National Centre for Text Mining visit, January 06
- TEI group, ongoing 06
- Changing Families, Changing Food, Sheffield, March 06
- Best practices in sharing data, London. March 06
- Bridging quantitative and qualitative methods for social sciences using text mining techniques, Manchester, April 06
- Oral History on the Web, London, April 06
- Capturing context for qualitative data, QUADS workshop, May 06, <http://www.esds.ac.uk/qualidata/news/eventdetail.asp?ID=1617>
- IASSIST 2006, May 06
- Gender and Food Day Workshop, June 06
- Second International Conference on e-Social Science, June 06
- MIMAS Open Forum 2006, June 06
- 39th Essex Summer School in Social Science Data Analysis and Collection, July, August 06
- ESRC Research Methods Festival, July 06
- Sharing, reusing and representing qualitative digital data, Workshop, Cardiff, July 06
- ESRC Teaching and Learning and Research Programme (TLRP) meeting, Summer 2007;
- National Centre for Research Methods (NCRM) Summer School, September 06
- Internet for Social Research, Birmingham, September 06
- Qualitative Archiving and Data Sharing Scheme (QUADS) Showcase Day, London, September 06, <http://www.esds.ac.uk/qualidata/news/eventdetail.asp?ID=1588>
- Association for Survey Computing Conference: Words instead of Numbers, London, September 06
- Virtual Ethnography in Contemporary Social Science conference, Amsterdam, September 06
- 9<sup>th</sup> RAI International Festival of Ethnographic Film, Oxford, September 06
- JISC funded seminar on Virtual Research Environments for the History of Political Discourse held at UEA, September 2006
- EU Workshop, Goteborg September 06
- Fifth Annual Language and Computation Day, October 06
- CESSDA Expert Seminar, October 06
- CAQDAS 2007 Conference: Advances in Qualitative Computing', Egham, April 2007
- At all ESDS events

## **Annex D: Scheme Budget including co-funding**

ESRC £500,000

No co-funding was secured, but ESDS infrastructure at Essex utilised significantly. In addition, all of the projects were embedded in a richer infrastructure of expertise, both technical and academic, on which they drew heavily.