UNIVERSITY OF Southampton
School of Electronics and Computer Science

COMP6049
Week 6
Interviews
November 2010

Dr Su White
http://www.edshare.soton.ac.uk/6439/

Introduction and Objectives

Should be a reminder by now ☺

How I will run this class – with you!

What I want – us all to think!

Keep trying to link this to other classes in this module

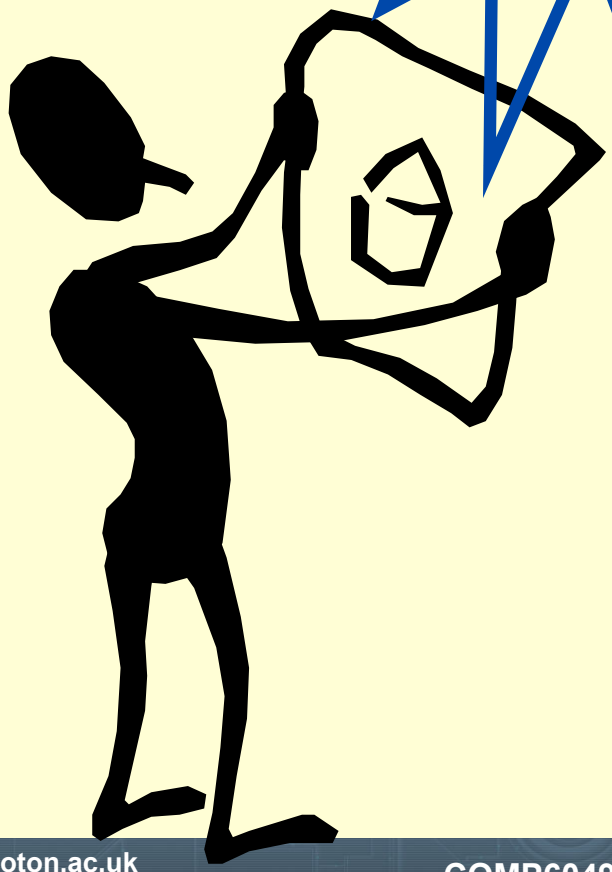
The plan

UNIVERSITY OF Southampton
School of Electronics and Computer Science

I may skip over some slides, but use them as notes

- Interviews
  - Why conduct them?
  - what are they?

NB All the time… considering what we know already about research methods



- Linking design with methods
- Conclusion/reflection

Interviews – why?

UNIVERSITY OF Southampton
School of Electronics and Computer Science

- Why do we conduct interviews?
- What format can interviews take?
- Remember the definition of research?
  - What contribution can interviews make to research?

Think about a classic abstract

This is the way the world is

This is what is wrong with the world

Here is my interesting idea/proposal

Here is what I have found

Interview Study

European Journal of Engineering Education
Vol. 29, No. 2, June 2004, 173–181

Taylor & Francis
Taylor & Francis Group

Changing assessment practice in engineering: how can understanding lecturer perspectives help?

LIZ MCDOWELL[†]*, SU WHITE[‡] and HUGH C. DAVIS[‡]

Assessment in engineering disciplines is typically oriented to demonstrating competence in specific tasks. Even where assessments are intended to have a formative component, little priority may be given to feedback. Engineering departments are often criticized, by their students and by external quality reviewers, for paying insufficient attention to formative assessment. The e[3]an project set out to build a question bank of peer-reviewed questions for use within electrical and electronic engineering. As a part of this process, a number of engineers from disparate institutions were required to work together in teams, designing a range of assessments for their subject specialisms. The project team observed that lecturers were especially keen to develop formative assessment but that their understanding of what might be required varied considerably. This paper describes the various ways in which the processes of the project have engaged lecturers in actively identifying and developing their conceptions of teaching, learning and assessment in their subject. It reports on an interview study that was conducted with a selection of participants. It is concluded that lecturers' reflections on and understanding of assessment are closely related to the nature of the subject domain and that it is essential when attempting to improve assessment practice to start from the perspective of lecturers in the discipline.

Explaining the method

UNIVERSITY OF Southampton
School of Electronics and Computer Science

engineering centred on hard-pure knowledge, mastery of physical environment via simulated or real-work contexts with teaching geared towards products and techniques requiring progressive mastery of techniques in linear sequence, and giving importance to factual understanding favouring examinations; multi-choice questions and problem-solving. Their internalized understanding of engineering was wholly consistent with Becher and Trowler's (2001) description of the discipline as a 'hard applied' subject.

In order to explore this aspect of engineering education, data were collected on approaches to teaching using questionnaires (Prosser and Trigwell 1999) for a small number of project participants and engineers who attended dissemination events. The sample was very small and the selection process by no means representative across all engineering lecturers, however the attitudes reported were remarkably consistent and confirmed a largely content-focused view of education with little insight into processes that might underlie student learning.

It might be argued that the particular hands-on approach of learning about educational approaches through an activity such as the design and review of test banks is particularly well suited to the predominant learning and teaching paradigm that exists in engineering. Additionally, the task of formally describing and classifying questions by means of allocating metadata served to make more explicit the assessment functions of a question. It would be interesting to follow through these assertions in further research.

Case Study – mixed methods

UNIVERSITY OF Southampton
School of Electronics and Computer Science

'Disruptive technologies', 'pedagogical innovation': What's new? Findings from an in-depth study of students' use and perception of technology

Gráinne Conole [a,*], Maarten de Laat [b], Teresa Dillon [c], Jonathan Darby [a]

[a] *The Open University, Walton Hall, Milton Keynes, MK6 7AA, United Kingdom*
[b] *School of Education and Lifelong Learning, The University of Exeter, Exeter, EX1 2LU, United Kingdom*
[c] *Polar Produce, Bedminster, Bristol, BS3 4Q, United Kingdom*

Abstract

The paper describes the findings from a study of students' use and experience of technologies. A series of in-depth case studies were carried out across four subject disciplines, with data collected via survey, audio logs and interviews. The findings suggest that students are immersed in a rich, technology-enhanced learning environment and that they select and appropriate technologies to their own personal learning needs. The findings have profound implications for the way in which educational institutions design and support learning activities.

Keywords: Post-secondary education; Student experience; Evaluation; Technologies; Audio logs

A mixed method approach

UNIVERSITY OF Southampton
School of Electronics and Computer Science

Table 1
Breakdown of data collected

Survey	Case studies	
	Audio logs	Interviews
Economics: 128 Languages: 92 Medicine: 31 Computing: 158 Other: 18	Economics: 3 Languages: 47 Medicine: 16 Computing: 19	Economics: 2 Languages: 3 Medicine: 5 Computing: 4
Total 427	85	14

Situating the findings

UNIVERSITY OF Southampton
School of Electronics and Computer Science

However, there were examples in both the interviews and the audio logs where search engines failed to provide useful information, such that the students had to resort to alternative sources of paper-based and digital information. Despite this, comments were generally favourable with respect to the relevance of the information found for their studies. The rapid positioning of Wikipedia as an important authoritative text, despite its relative newness, is an important indicator of the way in which students are now using technologies with peer review and sharing of 'what counts as good' being an important scaffold to help make meaning of a complex and constantly changing information landscape.

I search for what I need using Search Engines and Wikipedia, and build up a list of things that I need. I reference those through to Word, and send the file to my peers through IM, where I get feedback and additional info on what's going on and how the things I'm researching relate to the current area of study.

Despite this openness to exploring new sources of information, students indicated that it was sometimes difficult to evaluate the creditability of sources found on the web and they provided examples of some of the strategies they used to double check sources. For example students discussed how they cross-referenced and validated material found on the web with other sources (text books, lecture notes, *etc.*), as well as restricting their search scope to reliable sites that they learnt to trust.

You can tell usually from the website itself how accurate the information might be. When they attribute it, it might be an academic publishing or something. So you generally see that it is better than when it comes from a blog or something.

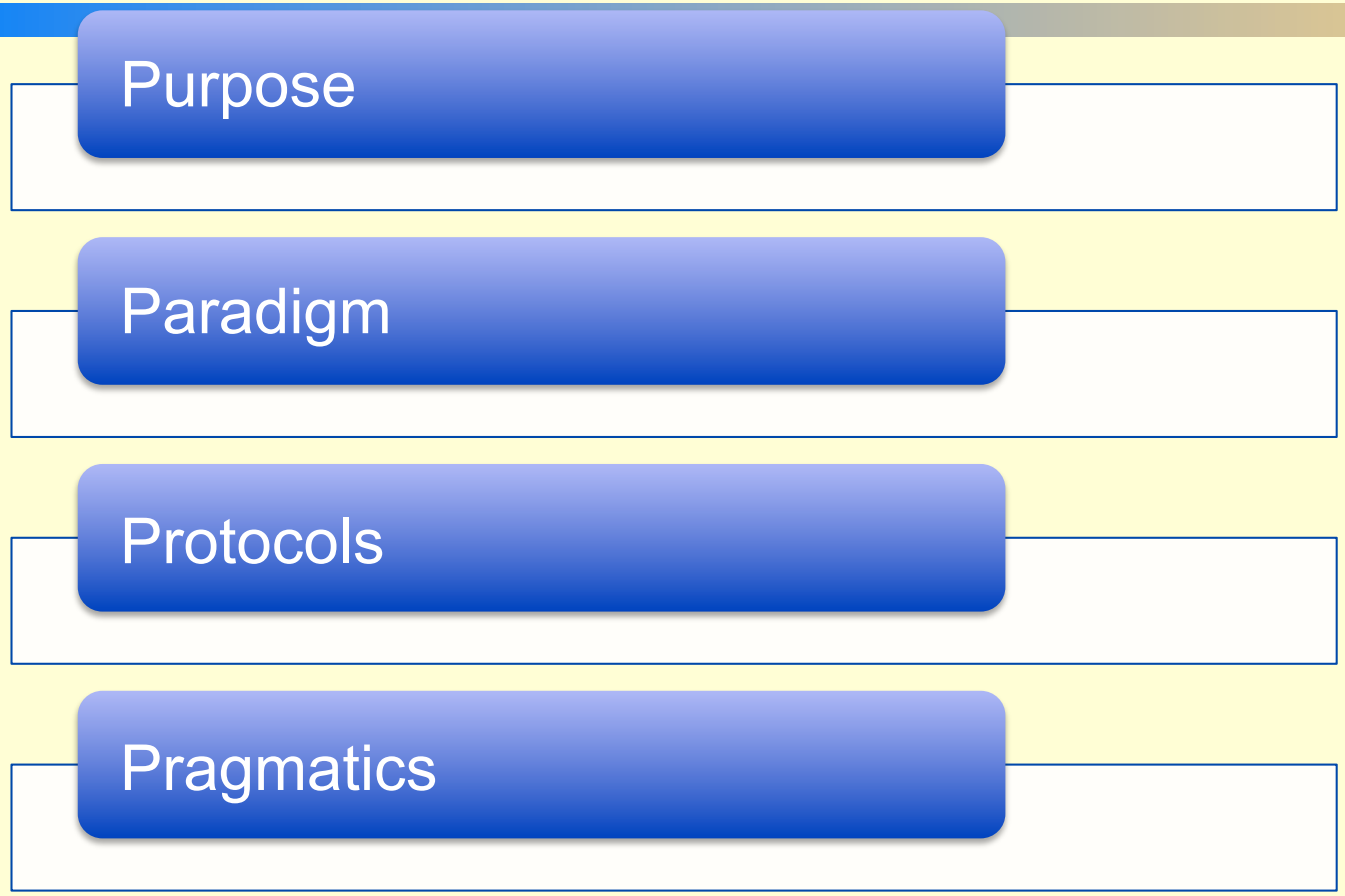
Methods of validation and cross-referencing indicate that students mix and match information sources, combining old and new methods.

I use it as my first task in gathering information (Google, etc) and I use Podcasts whenever I can. I will often be reading parts of a course book whilst finding similar information on the Internet.

For many the internet was invaluable in terms of enabling them to access up to date information. Specia

Approaching an interview

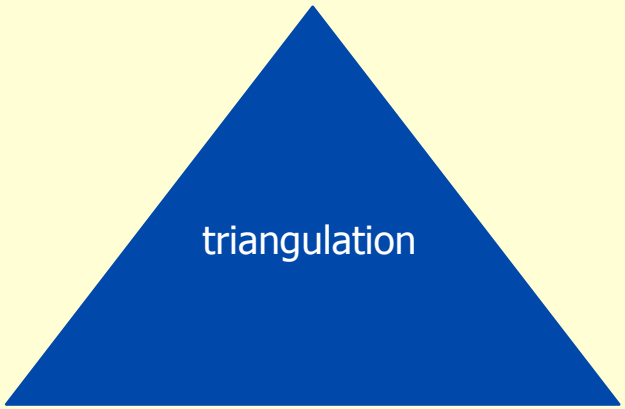
UNIVERSITY OF Southampton
School of Electronics and Computer Science



Purpose

UNIVERSITY OF Southampton
School of Electronics and Computer Science

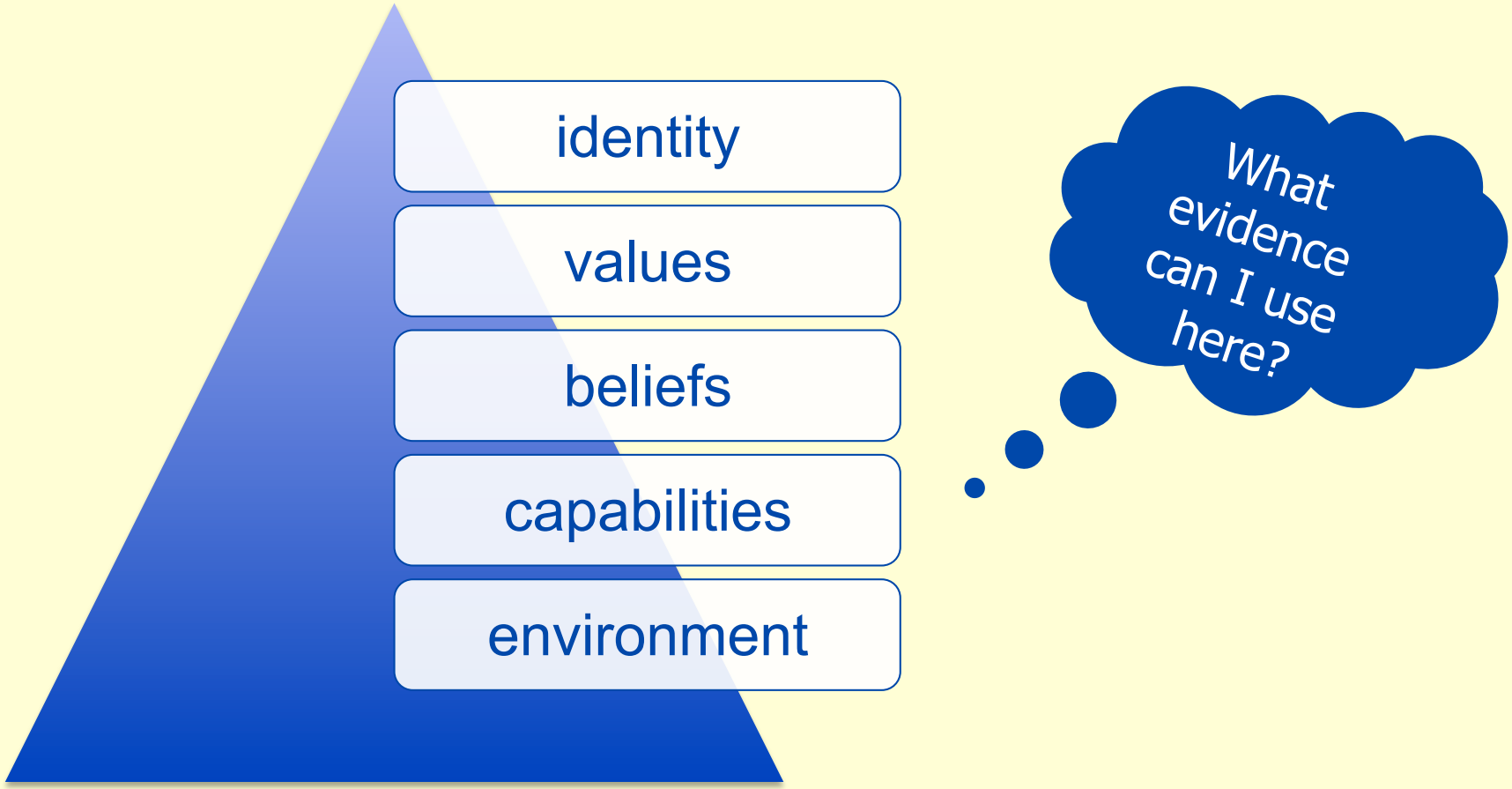
- Why do we conduct research?
  - Validate
  - Confound
  - Generate new evidence



- What sort of evidence
  - Convincing
  - Objective
  - Valid
    - ★ Does this raise issues?
- Enable analysis
- Generate Conclusions
- Publication

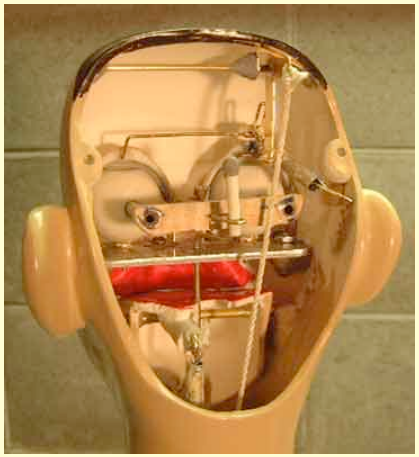
Purpose: Ways of looking at change

UNIVERSITY OF Southampton
School of Electronics and Computer Science



Sullivan et al 2001
Aligning individual and organisational values to support change

Purpose: What's going on inside?



- Survey
  - Qualitative questions
- Interviews
  - One to one
    - ★Structured
    - ★Semi structured
  - One to many
    - ★Focus group
    - ★Other 'devised' methods

Purpose: to publish...

UNIVERSITY OF Southampton
School of Electronics and Computer Science

- This is the way the world is (literature +survey?)
- This is what is wrong with the world (evidence?)
- This is my startling idea (paradigm/epistemology?)
- This is what I found (valid method, evidence and conclusions)

Reminder – (w2) Paradigm

UNIVERSITY OF Southampton
School of Electronics and Computer Science

- Epistemology
  - Will determine where we start
  - Where we want to engage in discourse
  - May constrain our beliefs
  - May determine the contents of our survey
- Methodology
  - How to administer interviews?
  - How to retain consistency
  - How to gather quality data?
  - Analysis methods/load
  - Anticipates analysis

Paradigm: What tools do we have?

Its all research

- Methodology – a way of thinking about or studying (social reality)
- Method – a set of procedures and techniques for gathering and analysing data
- Analytical Processes – the application of set techniques appropriate to quantitative or qualitative methodologies

Thanks (in part) to Strauss and Corbin

Plan and Prepare

UNIVERSITY OF Southampton
School of Electronics and Computer Science

- Refer to existing practice – in your field
- Refer to established practice – from a research methods overview

- In the literature
  - Books will provide theoretical overviews
  - Your community may have investigated and discussed methods

Orlikowski, W.J. Using Technology and Constituting Structures: A Practice Lens for Studying Technology in Organizations, Organization Science, 11, 4, 2000: 404-428.

Protocols

- Ethics, Privacy and Data Protection

Same old, same old…

- Just think about the personal…
  - You are asking for information
  - Respect your contributors

the **challenge** of retaining objectivity

★ You may become a confidante!!

Protocols

UNIVERSITY OF Southampton
School of Electronics and Computer Science

- Establishing ground rules
  - Build rapport
- Running the show
  - Plan your questions
    - ★ Dry run
  - Collect and record data
    - ★ Be professional
    - ★ Focus on interactions

Pragmatics

UNIVERSITY OF Southampton
School of Electronics and Computer Science

- Constraints
  - Timing and access
- Selection method/ sampling rationale
- Consequences
  - Data Volume (analysis tools)
- Design
  - Expertise
  - Draft and Review
- Process
  - Pre-test/Trial/Pilot …then survey
  - Follow up survey

Pragmatics – bringing it together

UNIVERSITY OF Southampton
School of Electronics and Computer Science

- Planning
  - What you want to explore/ find out/prove/discover
  - Who will you interview, how will you select them
  - What you will ask
  - Dry run
- Process
  - Conduct interviews (review each session)
  - Transcribe and Analyse data
  - Interim conclusions/ discussion/
  - Draft, review, publish

How you will learn this...

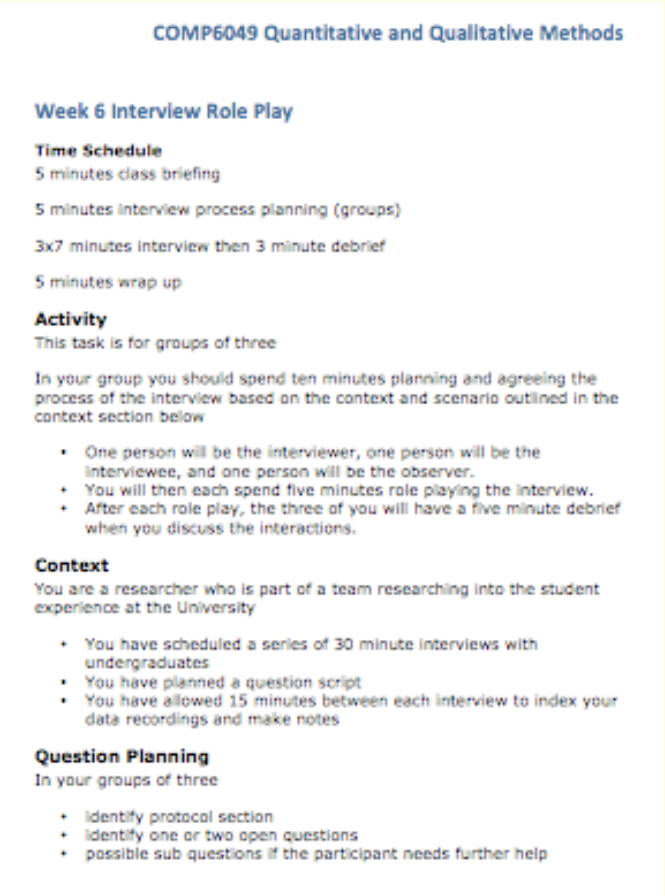
UNIVERSITY OF Southampton
School of Electronics and Computer Science

Next Class

- Role play
- Small group activities

Prepare

- Take a look at the references
- Look at the brief for next class
- Prepare yourself ☺



COMP6049 Quantitative and Qualitative Methods

Week 6 Interview Role Play

Time Schedule

5 minutes class briefing

5 minutes interview process planning (groups)

3x7 minutes interview then 3 minute debrief

5 minutes wrap up

Activity

This task is for groups of three

In your group you should spend ten minutes planning and agreeing the process of the interview based on the context and scenario outlined in the context section below

- One person will be the interviewer, one person will be the interviewee, and one person will be the observer.
- You will then each spend five minutes role playing the interview.
- After each role play, the three of you will have a five minute debrief when you discuss the interactions.

Context

You are a researcher who is part of a team researching into the student experience at the University

- You have scheduled a series of 30 minute interviews with undergraduates
- You have planned a question script
- You have allowed 15 minutes between each interview to index your data recordings and make notes

Question Planning

In your groups of three

- identify protocol section
- identify one or two open questions
- possible sub questions if the participant needs further help

References

for background and related material and references please see the course web page

CRESWELL, J. W. (1998) Qualitative inquiry and research design choosing among five traditions, Thousand Oaks, Sage.

CRESWELL, J. W. (2003) Research design qualitative, quantitative, and mixed methods approaches, Thousand Oaks, Calif. London, Sage Publications.

GLASER & STRAUSS (1999) The discovery of grounded theory strategies for qualitative research, New York, Aldine de Gruyter.

HUBERMAN, A. M. & MILES, M. B. (2002) The qualitative researcher's companion, Thousand Oaks, CA, Sage Publications.

KVALE (1996) Interviews an introduction to qualitative research interviewing, Thousand Oaks, Calif., Sage.

MYERS, M. D. & AVISON, D. E. (2002) Qualitative research in information systems : a reader, London, Sage.

my details

UNIVERSITY OF Southampton
School of Electronics and Computer Science

Dr Su White

- saw@ecs.soton.ac.uk
- +44 (0)23 8059 4471
- http://www.ecs.soton.ac.uk/~saw