

ECAD7004: Researching the Learning: what, how and why am I teaching?

Session 9



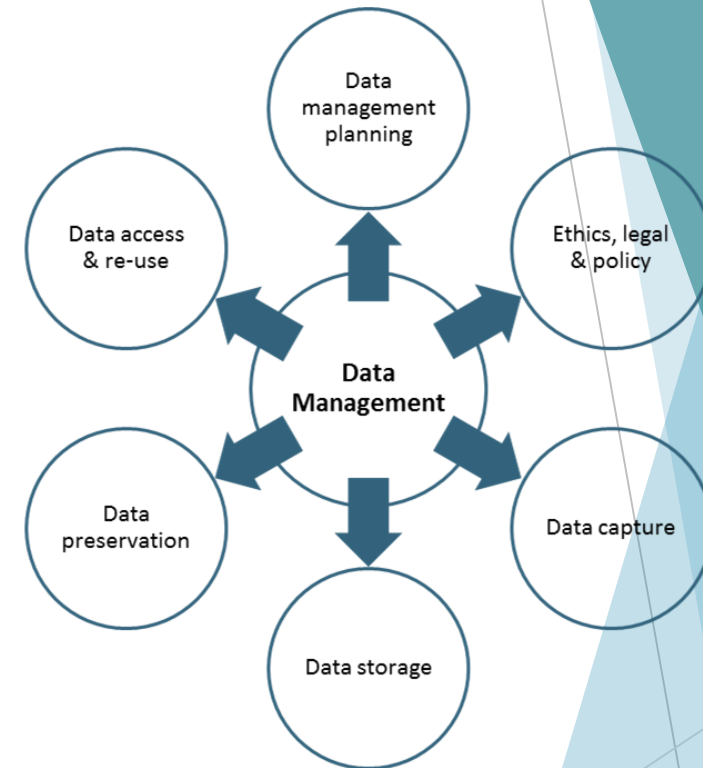
Data Management



1. The ethical considerations of data management.



- ▶ All research and enquiry involves dealing with data.
- ▶ This data can take many different forms e.g. the results of surveys, observations or interviews.
- ▶ Managing your research data in an ethical manner is crucial to the research process.
- ▶ In particular, ensuring that you consider how best to **create, store, protect, share and preserve** your data is essential.



2. Key considerations



Research practices must ensure that research data and records are:

- ▶ Accurate, complete, authentic and reliable
- ▶ Identifiable, retrievable, and accessible
- ▶ Retained in a safe and secure manner
- ▶ Retained in a manner that is compliant with legal obligations
- ▶ Available to others in line with appropriate ethical, data sharing and open access principles
- ▶ Commensurate with the legitimate interests and protection of human participants of research data.

(UWTSD Research Data Management statement, 2018)

Storing your research data

- ▶ You must ensure that you store your research data securely.
- ▶ For example, you may use electronic devices which have password protection and data encryption.
- ▶ You may avoid using portable storage devices like USB sticks
- ▶ Data should not be sent via email or other forms of media that can be hacked.
- ▶ Hard copies of any records should be stored in secure premises.
- ▶ All members of a research team should understand how to protect the data.
- ▶ See BERA (2018: 25).



Compliance: the General Data Protection Regulation (GDPR) and research

The core principles of GDPR are the principles of ethical research data management:

- ▶ Collect no more data than is necessary from an individual for the purpose for which it will be used;
- ▶ Obtain personal data fairly from the individual by giving them notice of the collection, and its specific purpose;
- ▶ Retain the data for no longer than is necessary for that specified purpose;
- ▶ Keep data safe and secure;
- ▶ Provide an individual with a copy of his or her personal data if they request it.

UWTSD Research Data Management Statement

- ▶ You should also refer to this document in your ethics form.

Section	Indicative guide to word count (this is not prescriptive)
Aim, focus and purpose of the research • The issue that interested me was.. • Because in my school.. • In my class...	100-120
Research context (briefly describe the setting context); • In my class... • I discussed this with my partner(s)... • Our research question is ... • For my class this means...	100-120
Short overview of relevant literature (concisely present current thinking from literature) • I looked further into this by reading books, journal articles, government documents and other on-line material. What this showed me was... • In particular, this author said... • But this author said.. • This reading supported our research question (or helped us refine our question to...)	900

Explanation of your lesson study design • The methodology used is lesson study research, which is a form of action research...Lesson study research methodology is... • The methods of data collection used are: reflection, observation (non-participant) and focus group. • My observational notes ...(taken from?, acceptable form of data collection? qualitative or quantitative data ?) • The reflections were captured using... • The non-participant observations were collected using ... • The focus group were chosen as a sample because...(type of sample/ sample size/ qualitative or quantitative data ?)	900
Ethical considerations • There are ethical considerations with doing research in a classroom which are...(link to Ethics form)	100-150
Lesson study 1 results and analysis • In what way did the children achieve the lesson goals?(student learning, thinking and engagement) • How could the lesson be improved? (revise the lesson for the next class) • What did we learn from this experience?(do we need to modify our research tools to collect better evidence ?) Lesson study 2 results and analysis • In what way did the children achieve the lesson goals?(student learning, thinking and engagement) • How could the lesson be improved? (revise the lesson for the next class or for future teaching) • What did we learn from this experience?(do we need to modify our research tools to collect better evidence / to share with others ?) For groups of three - Lesson study 3 results and analysis where appropriate (+500 words)	1300-1700

Discussion of research findings in relation to related literature and research • What did I find out ? • What does that mean for my class? • Strengths and limitations of the methods	400-580
Conclusion [Critically examine your own research lessons, for example, was the method of collecting data used reliable? How valid was the method used? Can the findings be generalised?] • Strengths and limitations of the methods • Did I pilot any of the methods? Did this help? • What will I do in my next school experience? • How will this help me move forward? If I did this lesson again I would..	600-730
Recommendations [what recommendations would you make in light of your research? How might findings be taken forward to inform further research?] • How will this help me move forward ? • If I did lesson study research again I would.. • Sharing the good practice...	200-300
Reference list (using the Harvard system) Appendices	

Assignment Submission

The assignment will be submitted to Turnitin on (or before) the 21st February 2020 in two sections:

- ▶ Section 1 - Title page / Main text of essay / reference list
- ▶ Section 2 - Any appendices (including lesson plans, observation sheets, reflection sheets, interview questions, information sheet/script)



Developing your
academic voice.

What distinctions are there between journalistic/academic writing styles?

- ▶ Tone
- ▶ Purpose
- ▶ Audience
- ▶ Evidence
- ▶ Authority
- ▶ Focus
- ▶ Scrutiny
- ▶ Analysis

Masters level writing

Should demonstrate...

- ▶ Research evidence
- ▶ Critical Analysis
- ▶ Synthesis
- ▶ Mastery

Should be...

- ▶ Reviewed
- ▶ Analytical
- ▶ Synthesised
- ▶ Focused

Literature Review

Purposes of a literature review

- ▶ Integrate and summarise the empirical evidence about this research question
- ▶ Assess critically the overall state of knowledge on this topic, and the theoretical and conceptual tools that have been or can be used to explore it
- ▶ **Locate your study in relation to the literature**

Drawing on the Literature

- ▶ Provides a theoretical background to your study;
- ▶ Helps you to establish the links between what you are proposing to examine and what has already been studied;
- ▶ Enables you to show how your findings have contributed to the existing body of knowledge in your profession and to integrate your findings into this.

Literature Review

- ▶ It is not...
 - ▶ a straightforward summary of everything you have read on the topic
 - ▶ a chronological description of what was discovered in your field



What is a
literature
review?

A literature review is a **select analysis of existing research** which is relevant to your topic, showing how it relates to your investigation. It **explains** and **justifies** how your investigation **may help answer** some of the questions or gaps in this area of research.

A longer literature review **may have headings** to help group the relevant research into **themes** or **topics**. This gives a focus to your **analysis**, as you can group similar studies together and **compare and contrast** their approaches, any **weaknesses or strengths** in their methods, and their findings.

(Reid et al., 2012)

Critical Review of Literature

- ▶ At Level 7, the literature review provides the reader with a picture of the state of knowledge and of major questions in the subject.

The furniture sale catalogue, in which everything merits a one-paragraph entry no matter how skilfully it has been conducted: Bloggs (1975) found this, Smith (1976) found that, Jones (1977) found the other, Bloggs, Smith and Jones (1978) found happiness in heaven.

Haywood and Wragg, 1982: 2

Referencing

- ▶ Use the Guidance - Harvard Referencing system
- ▶ View them as stage notes - your sentence should make sense with or without the reference information.

Think about the kinds of declarations you make...

- ▶ Can you prove it?
- ▶ What does your data demonstrate?

- ▶ I observed children playing together and communicating confidently, which clearly enhanced their language development. Vygotsky (1962, p2) stated; 'a learners Zone of Proximal Development is significantly improved through social communication', this supports this idea.

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Change perspective slightly...

Empirical evidence suggests that collaborative play can enhance children's language development. **This evidence correlates with Vygotsky's (1962) theory of the 'Zone of Proximal Development' (ZPD), where a child's interaction with other children can be influential in extending their individual development, particularly linguistically.**

Problems with Secondary Source Data

- ▶ **Validity and reliability** - validity is likely to vary from source to source e.g. census information is likely to be more valid and reliable than information from a personal diary.
- ▶ **Personal bias** - information from personal diaries, newspapers etc. may have the problem of personal bias as these writers are likely to exhibit less rigour and objectivity than perhaps a research report.
- ▶ **Availability of data** - check whether the data you think will be required is available to you.
- ▶ **Format** - check whether data is available in the required format e.g. do your categories for age match the data available?

(Ross and Mathews, 2010)



**Thanks for
listening!**

Any Questions?

No?

SUPER!

