

## Research Methods in Education

### Assignment Guidance

***The assignment for the RME unit will normally be a plan for a small-scale educational enquiry. If you are near to completing your five units, this assignment can be used to develop a plan for your dissertation study. If you are closer to the start of your five units, you may not be ready to plan what you are going to do for your dissertation. However, there is still value in developing a hypothetical plan which enables you to discuss issues relating to designing a small-scale research study. It is possible to use this plan as the basis for an Educational Enquiry unit where you conduct the enquiry as one of the units in your profile. (This might act as a pilot or preliminary study for what you then go on to do for your dissertation.)***

These notes are intended to provide guidance on the content and structure of your assignment for the Research Methods in Education (RME) unit.

If you are aiming at a specific MA programme or pathway (e.g. MA Education (International Education)) then your dissertation must be grounded in the field of study of that programme. This means that, your RME assignment should also be grounded in that field of study.

The assignment should conform to the MA assessment criteria and be of the appropriate length and format. For a 12 credit unit the length is 5000 words + or – 10%.

The headings below suggest a possible sequence of argument for the assignment. If you find that some information fits more easily in a different order, use the order that flows naturally.

#### **1 Introduction**

What is the topic or focus of the study you plan to carry out, and why is it of educational significance? Keep this section brief; it can be at a fairly general level.

*Information and Communications Technology (ICT) has become increasingly available in schools in the UK in the past decade. Skills in the use of ICT are vital to jobseekers ... This assignment sets out a plan for a small-scale study to investigate the use of ICT in the teaching of English at secondary school level ...*

#### **2 Context**

Explain the background to the study, e.g. any relevant national or international policy developments. Briefly describe the institutional context in which the study will be conducted e.g. location, type, size of school; characteristics of a year group or class if appropriate. Many people choose to investigate an aspect of provision or practice in the school or college (or classroom) where they work. The reader needs to know enough about the institutional context to be able to judge how far the findings might be of interest in a different setting, without being drowned in detail which is not relevant to the focus of the study.

*In 2003, the Chinese Ministry of Education introduced a new syllabus for English language teaching aimed at encouraging greater use of communicative methods in the classroom (Wang, 2005) ...*

*HFIS is an international school in Belgium. It has approximately 480 students on roll, aged 5-18 years. English is the medium of instruction ...*

### **3 Literature review**

A concise, critical review of the substantive research literature on your chosen topic, e.g. a specific aspect of educational management, teaching English as a Second Language etc. In the RME assignment, this will clearly be a smaller proportion of the total length than the literature review in the dissertation (indicative length 1000-1500 words).

You should give more space in the RME assignment to explaining your methodology, as discussed in the following sections. It is better to cover a small selection of recent, relevant sources in some depth than to refer to a large number of articles or books that you do not have space to discuss properly.

'Critical' means that you must try to evaluate the research to which you refer. Avoid producing a descriptive list of publications on the topic with little attempt to make sense of what you have read.

'Critical' does not mean that you make only negative comments on other people's research. You should attempt to weigh the strengths and limitations of studies that you have read in a fair-minded manner. The aim is to help the reader understand why the study that you plan to carry out is needed.

*In a study of teachers' perspectives of effective school leadership, Harris, Day and Hadfield (2003) identified four main aspects ... The study investigated the views of various stakeholders ... However, it is important to note that the evidence is based on a sample of 12 case study schools ... This study sets out to find whether the findings hold in a different school setting ...*

### **4 Research question**

State explicitly the question which your study is intended to address. Ensure that it is appropriate in scope (neither too broad nor too narrow), and that it defines a study which it is feasible for you to carry out (e.g. that you have access to classrooms if you plan to observe teaching practice). The question should follow naturally from the preceding review of the literature. Phrase the question openly, in a way that shows you will make up your mind in the light of what the evidence shows; avoid leading questions that suggest you already know what the answer is. You can have one main question, which is then split into 2-3 sub-questions.

*Does the system of 'Merits' (as a reward for positive achievement, effort or behaviour) in School X, impact on children differently?*

*- Do children with special educational needs get as many Merits as others?*

*- How does the giving of Merits affect the self-esteem of children with special educational needs?*

## **5 Research strategy**

This section of the research enquiry should be focusing on and engaging with some of the deeper philosophical aspects of your research question/s and process. The main broad methodological approaches to educational research are qualitative (where the evidence is typically in the form of words or images) and quantitative (where the evidence is in the form of numbers). However, it is likely that you will use a combination of these methodologies to some degree. The way in which your methodological approach is framed is heavily dependent upon the epistemological underpinnings of your research question. In this section of the enquiry you should be outlining the epistemological framing of your research by addressing questions such as: how are you defining the data for your research? Or, what is counting as data for your research and why? What knowledge matters for your research study and why? How are you positioning yourself as the researcher in relation to your 'data'? Are you engaging with your data in an objective or subjective sense – how and why?

If you are interested in the detailed perspectives of participants (e.g. pupils, teachers, parents), then it is likely that you will adopt a qualitative research strategy aimed at gaining an in-depth understanding of their point of view. If you are trying to get a general picture of prevailing attitudes or to gauge the performance of a school or class, then it is likely that you will adopt a quantitative strategy aimed at giving a precise snapshot at a particular point in time.

Whichever strategy you choose, explain why it is an appropriate way to tackle your research question.

## **6 Research design**

This is an important section and you should give it an appropriate amount of space in the RME assignment (indicative length: 1000 words). It follows closely from the preceding section on your research strategy. Common examples of research design used in small-scale studies include: case study; action research; survey; classroom ethnography; and natural experiment. Refer to your reading in the research methods literature in this section, e.g. chapters from textbooks that discuss the design you have chosen to use. Give a quotation or citation to support your account of your chosen design. You can refer briefly to other designs to show that you considered other possibilities. However, concentrate on explaining the positive reasons that justify your chosen approach; avoid mounting a lengthy discussion of the pros and cons of approaches that you are not going to use.

*Yin (2003:13) defines the case study as follows:*

*A case study is an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident.*

## **7 Methods of data collection**

This is a crucial section of the RME assignment (indicative length: 1000 words). Describe how you plan to gather evidence to enable you to address your research question. Common methods of data collection used in small-scale studies include: interviews; questionnaires; observation; results of standardised tests; reflective journals; audio/video recording.

Wherever possible, you should provide a draft or pilot version of your research instrument(s) in an appendix, such as a questionnaire or interview schedule. In the text of the assignment, explain how you developed the instrument and how it is related to your research question. For example, how do

the specific questions in a questionnaire bear on the aim of your study? Refer again to your reading in the research methods literature in this section. You should consult appropriate chapters in one or more textbooks and demonstrate your knowledge of them by citation.

For a dissertation, it is possible to plan to use two or perhaps three different methods.

## **8 Methods of data analysis**

This is an important section. It should show that you have thought ahead about how you will organise and interpret the evidence that you plan to collect. The content of what you write here will vary depending on whether you have chosen a qualitative or quantitative strategy.

For qualitative data: a common approach to analysis is to code the raw data (interview transcripts, fieldnotes from observations etc.) by identifying occurrences of similar phenomena; then to group these initial codes under thematic headings which organise the evidence in relation to your research question. This approach owes much to grounded theory (Strauss & Corbin, 1990). Research methods textbooks contain chapters on qualitative data analysis and you should refer to your reading here.

For quantitative data: are you planning to collect nominal, ordinal or interval data (or a combination of types)? Explain how you plan to represent the data collected and what kinds of relationship you will investigate when analysing the dataset. Tables are a good way to summarise numeric datasets. Descriptive statistics will help to illustrate the chief features of the composition of your sample e.g. proportion of girls and boys who choose to study a modern foreign language. Bar charts are useful for representing frequencies; pie charts are useful for representing percentages. Only use statistical tests whose purpose you understand. Research methods textbooks contain chapters on quantitative data analysis and you should refer to your reading here.

## **9 Validity and reliability**

Explain what steps you will take to ensure that readers can have confidence that the findings of your study are accurate, and not the product of prejudice or bias. In a questionnaire survey, you may ask the 'same' question with different wording (construct validity); and you should explain whether the results of your study are likely to be generalisable (is the sample representative, or would further research be needed – what is its external validity?). In an observational study, you may plan to observe a series of lessons, or lessons by several teachers in one Department, to increase the dependability of your findings. In dissertation studies, you may plan to use more than one method of data collection and examine whether the results from each approach support one other (e.g. questionnaires and follow-up interviews) – a form of triangulation. Again, refer to your reading about research methods in this section.

Strictly speaking, the concept of reliability applies to quantitative methods and refers to whether an instrument gives accurate readings on repeated measurements under similar conditions. Some writers prefer the terms 'confirmability' and 'trustworthiness' in referring to the findings of qualitative studies.

## **10 Ethics**

Ethical considerations should be central throughout the research process. You will be expected to carry out your planned enquiry in an ethical manner. This includes everything from the purpose of the research and how the research will benefit those that are being researched to issues of confidentiality and anonymity during the writing up process.

In this section, explain how you will ensure that you maintain ethical standards in the conduct of your study. Refer to the BERA Ethical Guidelines; research textbooks also have chapters on this topic to which you can refer. The principles which most often need to be addressed explicitly in small-scale studies are: securing participants' informed consent; protecting their confidentiality; and safeguarding the welfare of vulnerable participants, e.g. young children and people with learning difficulties. Before beginning any data collection, you will be required to complete the Departmental Ethics Form. You may wish to complete this and include it as an appendix to this assignment.

## **11 Timetable**

It is helpful to include a brief outline timetable for your planned study estimating approximately how many weeks each of the following phases will take when you come to carry out the enquiry.

- Reading and note-taking of the research literature (ongoing)
- Design or piloting of research instrument
- Data collection
- Data preparation (e.g. transcribing interviews or entering survey responses on a spreadsheet) Data analysis (allow lots of time – weeks, not days)
- Writing up (allow even more time!)

## **12 Significance of the study**

You cannot know what your study will show until you have carried it out, but say briefly in conclusion how you hope the findings will help to inform the evaluation of current educational practice or the development of alternative approaches. This section should remind the reader why it is worth carrying out your proposed study.

*The school development plan for School X identifies the introduction of regular peer observation of teaching as a target for 2010. The action research study described above fits well with this planned development ...*

## **13 References**

Include all cited references. Use the Harvard system: list your references alphabetically by author's surname; if you have more than one work by the same author, list them in date order (earliest first); and if you have more than one work in the same year by the same author, list them in date and letter order (2003a, 2003b etc).

## **14 Appendix/appendices**

Include a draft version of your research instrument(s) if available, e.g. questionnaire, interview schedule, observation schedule. Also, possibly a copy of the ethics form.