How to...

Plan your research
Meet your objectives

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Evidence for Excellence in Education

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This *How to* guide provides an introduction to planning a research project. It is intended for senior leaders, teachers and other school staff interested in carrying out their own research. The guide offers some areas of consideration and some practical tips to assist research project planning.

Before you embark on your research project it is essential that you plan it thoroughly. Throughout your research, your plan is likely to constantly change and evolve. While this can be a little unsettling, it can also be exciting. The better you plan your research at the outset though, the easier the whole process will be and the less likely that changes will need to be made.

When doing a research project, especially if you are new to research, it is often best to start small. A small, simple but well-planned project is better than being over ambitious. There are a number of steps to take when planning your research, which we outline in Figure 1, along with an example.

**Define your area of interest**

If you’ve decided to do some research, you probably already have a good idea about the broad topic area you want to investigate and why. In the example above, the area of interest is literacy. Ideas for research can come from anywhere. They are usually grounded in people’s experiences; come from a problem they want to try to understand or overcome; or are developed from a hypothesis they want to test.

- Whatever the starting point, a research project must be based on objective, systematic and rigorous approaches to explore and test the questions which stem from that original idea.

**Figure 1: Steps to planning research**

<table>
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<th>Step</th>
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<tr>
<td>Define your area of interest</td>
<td>e.g. literacy</td>
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<td>Narrow your focus</td>
<td>e.g. boys’ engagement with literacy lessons</td>
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<tr>
<td>Write your research question(s)</td>
<td>e.g. how do Year 6 boys make choices about which reading books they will take home to read?</td>
</tr>
<tr>
<td>Choose your method(s)</td>
<td>e.g. surveys of Year 6 boys; interviews with some Year 6 boys and the school librarian</td>
</tr>
<tr>
<td>Who are your research participants?</td>
<td>e.g. Year 6 boys; school librarian</td>
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**Define your area of interest**

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Narrowing the focus of your research

- Within the broad area you have chosen to research, you will need to decide which particular aspect/s of that area you are interested in exploring. This is sometimes called the ‘research focus’.

- To help narrow the focus of your research, you could read around the topic area; talk to colleagues; or review your school’s data to identify a particular challenge it is facing. Taking the example in Figure 1, you may be particularly interested in boys’ engagement with literacy lessons because your attainment data shows that girls tend to outperform boys.

- At this stage, you need to think about what you hope to achieve from your research (i.e. what are your aims and objectives?). It is a good idea to make a record of your aims and objectives, as you will need to keep referring to them throughout your research.

- Depending on your topic area, you may need to define some key words or phrases. In the example above, how will you define ‘engagement’ for your research project? For example, you could monitor the extent to which they proactively engage in lessons.

- You may also need to think about any sub-groups you are interested in. For example, do you want to investigate literacy with all boys in your school or only those in a particular year group? You could then decide to narrow the focus further and concentrate on learners in one class or who have English as an Additional Language.

During this stage it can be helpful to:

- write a paragraph or two describing what your research is about, and where, how and why you are going to do it. You can keep referring back to this as your research progresses – it will help you to keep on track, particularly when you are analysing and writing up your research.

- explain your research to other people, such as friends, family and colleagues. This will help you to clarify your thoughts. Furthermore, their questions could alert you to any assumptions you have made or key words or terms you need to define.
Writing the research questions

The next stage is to write your research question(s). Research questions detail precisely what your research is about. A good research question is clear, explicit and should define the parameters of the research. Research questions should be ‘open’ to allow room for you to explore all possibilities; including those you had not anticipated. An ‘open question’ usually starts with ‘how’; ‘why’; ‘where’ or ‘what’.

**Example research question:**

*How do year 6 boys make choices about which reading books they will take home to read?*

The example above makes it clear what the research will explore and what the parameters are. It states that the research is limited to Year 6 boys only (i.e. not girls or different year groups) and their reading book choices.

When writing a research question there are some things to consider. These are outlined in Figure 2.

**Figure 2**

**Be realistic**

- It is good practice to have maybe one or two well-formed questions.
- These can be supplemented by sub questions if needed (for example, ‘Does my school offer a wide variety of reading books for year 6 boys?’).

**Take your time**

- Writing a good research question can take time.
- It is a good idea to reflect on your research question as it may need to be refined.
- It can be useful to write several versions of the same question and then compare them to ascertain where exactly you want to focus your research.

**Ask yourself**

- How are the questions different?
- What difference will asking that question make to how you do the research?
- Which question do I really want to know the answer to?
Choosing a method

Once you have decided on your research focus and your research question(s), you need to decide which method or methods you will use to collect the data to answer those questions. A well written research question may suggest which method or combination of methods is appropriate to use.

Often, research projects adopt a mixed method approach (i.e. they adopt more than one method). This can offer a broader insight into your research question or help to engage a wider range of stakeholders. It is not always necessary or appropriate to choose a mixed method approach though.

That said, there is unlikely to be only one way to answer your question. When choosing your method, an element of choice comes into play. The methods you choose are likely to depend on:

- **your research question.** For example, if you want to know how many Year 6 boys take reading books from the school library each week, you are unlikely to ask all Year 6 boys this question. Instead, you would be better collecting this information from library records or pupils reading diaries. If however, you want to know what the boys think about the selection of reading books in your school, you would be better asking them either through a questionnaire or through group or one to one interviews.

- **the methods which are most appropriate for your research participants.** For example, carrying out a paper survey with reception class children will not be appropriate as they are unlikely to be able to read or respond to the questions. Asking them the questions verbally and asking them to put up their hand for each response option would work better.

- **practical considerations;** such as time, costs, resources, access and ethics.

- your skills and preferences. If you do not feel confident with numbers and statistics for example, you may want to choose a qualitative approach (if this will address your research question).
Pinning down the details

In addition to deciding on the method(s) you should begin to decide on the details of your research. These include:

Who is going to take part in the research?

- Which year groups, classes, staff, parents, governors or other stakeholders will you involve?
- Will you only carry out your research with one of these stakeholder groups or a combination of them?
- Will you involve girls and boys, particular cohort of learners (e.g. those receiving free school meals) or particular subject areas or those working towards a particular qualification (e.g. A-level students)?

When are you going to do your research?

- Have you drawn up a detailed research project schedule/timetable?
- How long will you need to spend on different tasks?
- How long will you ask participants to spend on your research?
- Have you got a deadline you need your research complete by?
- Have you factored in term times and examination periods?

Who is going to be involved in conducting the research and collecting the data?

- Will you do the research alone or will you involve others?
- What about involving learners themselves?
- If you are involving others, what are their roles and specific tasks going to be?

What, and how much, data will you collect?

- For example, how many classes, learners, staff, schools will be involved?
- How many questionnaires will you send out? And how many do you think you will get back?
- How many interviews will you carry out?
Plan your research – meet your objectives

How are you going to record, collate, store and analyse the data?

- How will you record what people have told you? Will you audio-record or make notes – or both?
- How will you collate your data? For example, will you put all your questionnaire responses into a spreadsheet ready for analysis?
- Where will you securely store the data you collect, to ensure you comply with the Data Protection Act?
- How will you label the data to anonymise it?
- How will you analyse your data?
- Do you need any specialist training or software?

How are you going to present your findings?

- Who do you want to share your findings with (your intended audience)?
- What kind of outputs will engage your intended audience(s)?
- If you are writing a report, what will the main section or chapter headings be?
- How will you make your data more accessible and lively? (e.g. will you use graphs, charts, tables, quotes or vignettes?)

How will you share or disseminate your findings with others?

- What networks or existing publications can you use to make others aware of your findings? For example, will you give a presentation, write a report, write a piece for the school newsletter or an article for a journal?
- How will you encourage your senior leadership team to use the findings from your research in the school improvement planning process?

Even though some of these tasks seem a long way off, you need to plan them at the outset. This will help to ensure that your project remains manageable and keeps on track (and so will answer your research question).
**Practical considerations**

When planning a research project there are always practical considerations, which will limit what can be done. These include:

**Time:** Be realistic about how much time you and anyone else working with you will need to spend on your project. Research tasks often take longer than you initially think so it is a good idea to add in some contingency time, or ask other people who are experienced in carrying out research for their advice. It is worth considering whether there are any fixed time points that you need to work to. You might, for example, need to collect the data at a certain point in the school year or in time to inform a particular planning decision. Fixed deadlines such as these will affect your research design.

**Access:** You will need to consider how you will access your research participants. If you are carrying out research within your own class or school, this may be relatively easy. If, however, you are trying to access people outside of your school (such as staff in another school or setting or grandparents of your learners) this may be more difficult. Ensure you get permission from the school’s headteacher before commencing any research within your or another school.

**Resources and costs:** Consider what resources you will need for your research and how much these will cost. Think about software, equipment (e.g. audio recorders), printing and library access costs. Consider what you need to buy and what you can hire or borrow.
Support: Have you considered what support you may need? This can include training in how to use certain methods or software, but it can also be emotional support from friends and families. Some research projects (as part of academic studies) may require more specialist support from expert mentors or supervisors.

Ethical considerations: You need to consider the ethics of your research from the outset and throughout your project.

Consider keeping a record of your research project: Keep detailed notes about what you have done, ideas, contacts and decisions you have made. These can be helpful later on when you come to write up your research. Some people find it useful to keep a more reflective research diary in which you write down your thoughts and feelings about the project. This may increase the time commitment involved in your research though, but can help you identify any underlying assumptions which you might not have been aware of up to that point.

Remember

- Keep it simple
- Draw up a timetable or schedule
- Talk to people about your research
- Consider every eventuality

Other useful resources

We hope that this short guide to planning your research has whetted your appetite for carrying out your own research. NFER has published a series of ‘How to’ guides for practitioners who want to carry out their own research, helping you put your ideas into practice. NFER have books and training days available, as well as free guidance on topics to research and methods of research. Why not get recognition for your achievements in research in your school, college or early years setting by applying for the NFER Research Mark? Visit www.nfer.ac.uk/ris for more information.
The NFER ‘How to’ guides are a quick and easy way to digest different aspects of research.

Written by NFER researchers, these guides will help practitioners run research projects in education. From definitions and benefits, through to potential pitfalls, they will ensure the research is based on professional guidance.

This guide was published in 2013 and was correct at the time of publication. Users are encouraged to check for the latest advice on data protection with the provisions of the General Data Protection Regulation. For further information please visit the ICO website.