

How to carry out research in your school

Generate a hypothesis

The hypothesis is your prediction of the outcome of your research. It is based on the context, your previous knowledge, experiences and/or the research or evidence from others.

Hypothesis > wild guess < a well-established theory

A Hypothesis can **never** be proven or disproved; you can only claim to have found support for or against it.

Plan & implement

Take time to plan each step of your research. Consider how you will go about trying to answer your research question.

Where can you gain more information to help answer your research question? Who will you collaborate with to undertake the research?



WHERE

WHEN

WHY

WHO

What is your desired outcome?

How will you measure whether you are on target to reach your desired outcome?



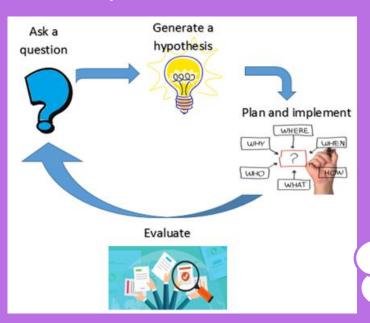
Pay attention to **ethical considerations**, including <u>data</u> protection.

REMEMBER: it is essential at this stage to plan how you will **evaluate the impact** of your research. What performance indicators will you use? How will you know whether you are on the right path to reaching your desired outcome?

Purpose of leaflet:

This leaflet has been created to guide you in the steps you need to consider when beginning to carry out research in your school.

The Research cycle



Ask a question

Think about what you want to investigate within your context. Turn the appropriate idea into a clearly defined research question.

This research question will help steer your research and provide a focal point.

What in your teaching would you like to make more successful?

What are you curious about?

Is there a problem you would like to solve in your classroom?





Evaluate the impact

In order to do this, you will need to have a **baseline** measurement.

Baseline measure: measure of where you are before you take action

This will allow you to see **where you are now** in order to determine **where you need to be**. As your research moves forward, the baseline measure will serve as a comparison point to enable you to **track** and **evaluate** any progress made toward your desired outcome.

Data collection

Is about gathering information to inform your research. There is so much data out there, but you need to be clear what needs to be done at the level of the classroom or individual in order to progress learning further.

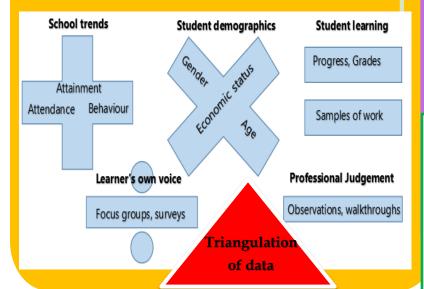
Be careful not to be data rich but information poor

Questions to bear in mind:

Is this data
meaningful to the
question we want
to investigate?

What is the **purpose** of this data?

Possible sources of data:





Triangulation of data

An important part of this process is the triangulation of data. This will afford more confidence in your findings if a similar story is being told by each source.

Triangulation of data: using more than one source of data to provide the information you are seeking.



Evaluate

Vital to the research is **evaluating the impact** of what has been done. Compare your original baseline measures with the measure of where learners are now.

What changes have been found?

Do your findings support your hypothesis?

What was successful and

not so successful?

What else could you do?



Make sure to **reflect** on your data. Consider the implications of your findings. These may lead you to new research questions, or plans for adjustments you could make.



Sources of support

- The Aberdeenshire Educational Psychology Service Email: eps@aberdeenshire.gov.uk
- Chartered teachers in your school
- Visible Learning Website: <u>visiblelearningplus.com/</u> (includes a tool for calculating effect size)
- Ethics guidance:

http://www.sera.ac.uk/documents/Publications/SE RA%20Ethical%20GuidelinesWeb.PDF