

Professional Learning and Leadership Development Directorate



ACTION RESEARCH IN EDUCATION

GUIDELINES 2nd Edition

Action
research

Reflecting

analysing
reporting
sharing

Observing

This document is provided as a general reference for school leaders, teachers and staff involved in action research in the NSW Department of Education and Training.

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WHAT IS ACTION RESEARCH?

Action research is the term which describes the integration of action (implementing a plan) with research (developing an understanding of the effectiveness of this implementation). The original concept is sometimes attributed to Kurt Lewin (1890–1947).

Research often conjures a picture in people's minds of academics working in isolation for years proving theories. As distinct from academic research, those involved in action research participate in an ongoing testing and monitoring of improvements in their practice. They work in a collaborative way to identify issues in their organisation and develop processes for improvement. In education, action research is also known as teacher research. It is one method teachers use for improvement in both their practice and their students' learning outcomes. The central goal of action research is positive educational change.

This change impacts significantly on the teachers involved and how they teach. In a school setting, participants could include teachers, students, parents and community members. As in all forms of research, records are kept of the process and findings are published or presented to a wider audience.

Table 1: Comparison of academic or formal research with action research

	Formal research	Action research
training needed	extensive	little
goals	knowledge that is generalisable to a wider audience	results for improving practice in a local situation
method of identifying problems	review of previous research findings and extensions of them	problems currently faced or improvements needed in a set of classrooms or a school
literature review	extensive enquiry into all research previously conducted on this topic using primary sources	some primary sources but also use of secondary sources plus what practitioners are doing in other schools
sampling	random or representative preferably with large populations	students and/or members of the school community
research design	rigorous controls over long periods	flexible, quick time frame, control through triangulation
approach	deductive reasoning – theory to hypothesis to data to confirmation	inductive reasoning – observations, patterns, interpretations, recommendations
analysis of data	tests leading to statistical significance	generally grouping of raw data using descriptive statistics
application of results	theoretical significance	practical significance

Teachers use action research because:

1. it deals with their own problems, not someone else's
2. it can start now—or whenever they are ready—providing immediate results
3. action research provides them with opportunities to better understand, and therefore improve, their educational practices
4. as a process, action research promotes the building of stronger relationships among staff
5. importantly, action research provides educators with alternative ways of viewing and approaching educational questions providing a new way of examining their own practices.

Adapted from Mertler, C.A. & Charles, C.M., (2008) *Introduction to education research*, 6th Edition, Allyn & Bacon, Boston, Mass, page 308.

Action research is characterised as being:

- integrated conducted as part of a teacher's normal daily practice
- reflective a process which alternates between plan implementation and critical reflection
- flexible methods, data and interpretation are refined in the light of the understanding gained during the research process
- active a process designed to generate change in small steps
- relevant meets the needs of teachers and/or their students
- cyclical involving a number of cycles with each clarifying issue leading to a deeper understanding and more meaningful outcomes
- focused on a single issue of school improvement
- collaborative teachers and leaders working together to improve student outcomes
- planned an organised approach to answering a question
- learning simultaneous construction of new knowledge by teachers about their practice.

Everyday you analyse what worked and did not work in your lessons. You think of ways to do it better next time. 'What if' I do this instead? The 'what if' is a mini research question. Asking around to see if anyone else has tried your 'what if' and what happened when they tried it is a mini search of previous research. Trying it out in your classroom, observing what happens, reflecting on the actions and planning to re-use the strategy complete the action research cycle.

Action research, as outlined in the following pages, is only a more organised and formal way of conducting research in a manner that can be shared with colleagues for professional growth.

The following four stages are features of the ideal model. That does not mean that this is how all action research projects will work. The flexibility of action research based on constant evaluation and reflection means that the cycles may be truncated as new ways to proceed become clear.

Planning

- identifying the issue to be changed
- looking elsewhere for information. Similar projects may be useful, as might professional reading.
- developing the questions and research methods to be used
- developing a plan related to the specific environment. In the school setting this could involve personnel, budgets and the use of outside agencies.

Acting

- trialling the change following your plan
- collecting and compiling evidence
- questioning the process and making changes as required.

Observing

- analysing the evidence and collating the findings
- discussing the findings with co-researchers and /or colleagues for the interpretation
- writing the report
- sharing your findings with stakeholders and peers

Reflecting

- evaluating the first cycle of the process
- implementing the findings or new strategy
- revisiting the process

It might be represented diagrammatically as this:



Figure 1: One ideal action research cycle

When working through your action research remember that:

- it is cyclical and progress is made in small chunks
- it is based heavily on critical reflection
- you can use a wide range of methods for collecting data but it may be advisable to limit these to a manageable number
- participants should have meaningful roles in the collection and presentation of data
- because of the flexibility of the process and the constant reflection, not every cycle will be complete. There may be times when it is advisable to stop mid stream and start a new cycle.

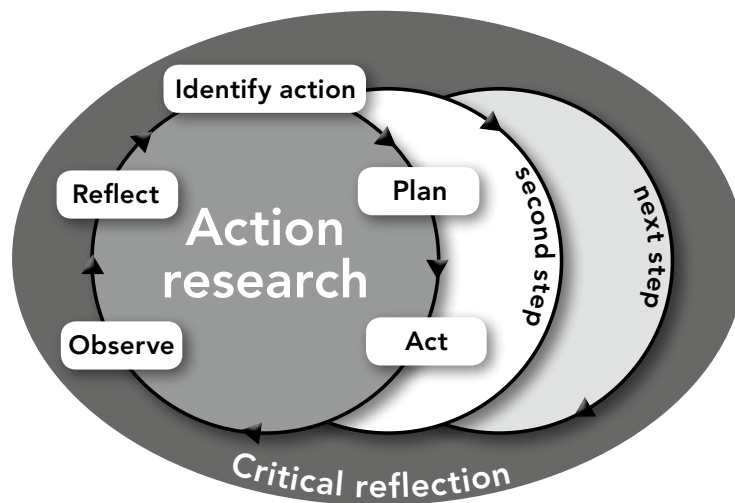


Figure 2: Cycles of action research

When starting action research the first stage of the cycle would be identifying the issue. In the next cycle the issue would already be identified from the data collection or from trials in other schools. Over the next few pages, each of the stages of the action research cycle will be explored in more depth.

Refer to Tip #1: Hints for conducting Action Research in the Appendix.

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