

A beginner's guide to action research 1

This is a resource file which supports the regular public program "areol" (action research and evaluation on line). For details email Bob Dick bdick@scu.edu.au or bd@uq.net.au ... in which action research is briefly described, and the simultaneous achievement of action (that is, change) and research (that is, understanding) is discussed

Action research consists of a family of research methodologies which pursue action and research outcomes at the same time. It therefore has some components which resemble consultancy or change agency, and some which resemble field research.

Conventional experimental research, for good reason, has developed certain principles to guide its conduct. These principles are appropriate for certain types of research; but they can actually inhibit effective change. Action research has had to develop a different set of principles. It also has some characteristic differences from most other qualitative methods.

Action research tends to be...

cyclic -- similar steps tend to recur, in a similar sequence;

participative -- the clients and informants are involved as partners, or at least active participants, in the research process;

qualitative -- it deals more often with language than with numbers; and

reflective -- critical reflection upon the process and outcomes are important parts of each cycle.

To achieve action, action research is responsive. It has to be able to respond to the emerging needs of the situation. It must be flexible in a way that some research methods cannot be.

Action research is emergent. The process takes place gradually. Its cyclic nature helps responsiveness. It also aids rigour. The early cycles are used to help decide how to conduct the later cycles. In the later cycles, the interpretations developed in the early cycles can be tested and challenged and refined.

In most instances the use of qualitative information increases responsiveness. It is possible to work in natural language, which is easier for informants. There is no need to develop a metric (which may have to be abandoned later if it doesn't fit the emerging situation).

The use of language also makes the whole process more accessible to participants. They can develop enough understanding to become co-researchers in many situations.

One crucial step in each cycle consists of critical reflection. The researcher and others involved first recollect and then critique what has already happened. The increased understanding which emerges from the critical reflection is then put to good use in designing the later steps.

The cycle best known in Australia is probably that of Stephen Kemmis and his colleagues at Deakin University. The steps are:

plan --> act --> observe --> reflect (and then --> plan etc.)

The reflection leads on to the next stage of planning. The "planning" isn't a separate and prior step; it is embedded in the action and reflection. Short, multiple cycles allow greater rigour to be achieved.

As change is intended to result, effective action research depends upon the agreement and commitment of those affected by it. This is usually generated by involving them directly in the research process. In many instances, researchers try to involve them as equal partners.

Action research in more detail

The responsiveness of action research allows it to be used to develop hypotheses from the data, "on the run" as it were. It can therefore also be used as a research tool for investigative or pilot research, and generally for diagnosis or evaluation.

Most writers on the topic state or assume that action research is cyclic, or at least spiral in structure. To put this differently, certain more-or-less similar steps tend to recur, in more-or-less similar order, at different phases of an action research study. At the same time (so the action researcher hopes) progress is made towards appropriate action and research outcomes.

A commonly known cycle is that of the influential model of Kemmis and McTaggart (1988) -- plan, act, observe, reflect; then, in the light of this, plan for the next cycle.

It is also generally held that action research is participative, though writers differ on how participative it is. In some instances there may be a genuine partnership between researcher and others. The distinction between researcher and others may disappear.

On other occasions the researcher may choose for whatever reason to maintain a separate role. Participation may be limited to being involved as an informant. The participants, too, may choose something less than full partnership for themselves under some circumstances.

Most action research is qualitative. Some is a mix of qualitative and quantitative. All else being equal, numbers do offer advantages. In field settings, though, one often has to make other sacrifices to be able to use them. Most importantly, sometimes numbers are not easily applied to some features of a study. If these include features of particular interest or importance, the choice is between qualitative research or omitting important features. In addition, developing a suitable quantitative measure is often difficult and time-consuming. It may be more time-efficient to use qualitative data.

In many field settings it is not possible to use more traditional quasi-experimental research methods. They can't readily be adjusted to the demands of the situation. If you do alter them in midstream you may have to abandon the data collected up to that point. (This is because you have probably altered the odds under the null hypothesis.)

But to achieve both action and research outcomes requires responsiveness -- to the situation, and the people, and the growing understanding on the part of those involved. Using a cyclic process in most circumstances enhances responsiveness. It makes sense to design the later stages of an action research activity in such a way that you capitalise on the understanding developed in the early stages.

It is the cyclic nature of action research which allows responsiveness. It is often difficult to know just where a field intervention will end. Precise research questions at the beginning of a project may mislead researcher and clients.

Imprecise questions and methods can be expected to yield imprecise answers initially. But if those imprecise answers can help to refine questions and methods, then each cycle can be a step in the direction of better action and research.

In other words, there are times when the initial use of fuzzy methods to answer fuzzy questions is the only appropriate choice. Action research provides enough flexibility to allow fuzzy beginnings while progressing towards appropriate endings. A cyclic process is important. It gives more chances to learn from experience provided that there is real reflection on the process and on the outcomes, intended and unintended. Qualitative information is less constraining of the process.

Participation is a somewhat different issue, more to do with action than research. Action outcomes can usually be achieved only with some commitment from those most affected. One of the most important ways of securing that commitment is through involving those affected.

There may well be other reasons, too. For instance, for some researchers it is more ethical to use participative methods. On some occasions the eventual interpretation of information is richer if involvement is greater.

There are some conditions that are more important. As a starting assumption good action research is empirical: responsive to the evidence. It is important that the evidence is used critically rather than uncritically. Again, a cyclic process allows this to happen more easily. If each step is preceded by planning and followed by review, learning by researcher and client is greater. The quality of evidence can also be increased by the use of multiple sources of evidence within all or most cycles. Differences between data sources, used critically, can then lead the researchers and the participants towards a deeper and more accurate understanding. Literature can be such an alternative data source.

Summary

Use multiple cycles, with planning before action and critical analysis after it. Within each cycle -- use multiple data sources; and try to disprove the interpretations arising from earlier cycles. Action research is a family of research processes whose flexibility allows learning and responsiveness. Vague beginnings can move towards better understanding and practical improvement through the critical analysis of the information, the interpretation of it, and the methods used. Good action researchers, critique what they do and how they do it, the better to learn from the experience. It is the balance between critical reflection and flexibility which allows adequate rigour to be achieved even in confused field settings. The conclusions drawn are data-based, preferably drawing the data from multiple sources. The conclusions emerge slowly over the course of the study. At each cycle the researchers challenge the emerging conclusions by vigorously pursuing disconfirming evidence. The major justification for action research methods is that they can be responsive to the situation in a way that many other research

methods can not be, at least in the short term. In the interests of rigour, each cycle will include critical reflection. In most instances it will also be qualitative and participative to some extent.

Notes

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References:

- Carr, W. and Kemmis, S. (1986) *Becoming critical: education knowledge and action research*. London: Falmer Press.
- Checkland, P. (1981) *Systems thinking, systems practice*. Chichester: Wiley.
- Guba, E.G. and Lincoln, Y.S. (1989) *Fourth generation evaluation*. Newbury Park, Ca.: Sage.
- Kemmis, S. and McTaggart, R., eds. (1988) *The action research planner*, third edition. Victoria: Deakin University.

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