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# Action research theses

Bob Dick (1995) Action research theses. A resource paper accompanying AREOL, the on line course in action research.

... in which the use of action research for theses is considered, taking into account its dual aims of action and research.

## Approaching an action research thesis — an overview

A colleague Paul Ledington (quoting his PhD supervisor Peter Checkland, I think) defines a thesis as something "with a new sentence in it". The rest of the thesis is necessary to support the new sentence. In fact, there will be more than one new sentence. But I think Paul neatly defines what theses are required to do: they are supposed to add in some way to the body of understanding and knowledge.

Denis Philips, quoting John Dewey, claims that all that research can do is to make a "warrantable assertion". Truth is elusive; but research, well-conducted, can provide a warrant, an adequate assurance, for the assertion which we eventually offer. We may not be able to claim that we have pinned down the truth. But if

we can say that our methodology and evidence allow a reasonable claim to be made, then that is as much as anyone can reasonably demand.

Taken together, these two ideas define a good PhD as one which is

- able to claim its methodology as appropriate to the situation, and
- able to support a claim of some warrantable addition to knowledge.

This can provide a starting point for thinking about a good action research thesis.

As the name implies, action research is intended to produce both change ("action") and understanding ("research"). These two dimensions, change and understanding, can usefully be considered for each aspect of a research proposal.

The section which follows can function as a checklist when you are choosing an approach to action research. Later sections describe the methodology and ways of using it to conduct the research, and how the research can be reported in the eventual thesis.

## Choosing an approach

In deciding if your topic is viable, and later in reporting it, the two outcomes of action and research are important in their effects on choice of situation, participants, methodology and literature.

For example...

**Justifying the research**: It is usual for a proposal, and the eventual thesis, to offer reasons which explain why the research as worthwhile. This is most typically because it addresses research questions which are topical and/or have theoretical or practical importance.

*Action*: Is the intended change worthwhile?

*Research*: Will the study add to understanding of a worthwhile research question?

**Methodology**: The purpose of the methodology is to allow both an *assured* contribution to knowledge, and successful change. In the thesis you want to be able to claim that your conclusions, and the data you base them on, have survived your attempts to disprove them and find other alternatives. An appropriate methodology is what enables you to make this claim. A later section describes this in more detail.

Choosing an action research methodology requires you to offer a justification for that choice. This is most easily done on the grounds that both action and research are intended outcomes, and that action research provides the flexibility and responsiveness that are needed for effective change at the same time that it provides a check on the adequacy of data and conclusions.

*Action*: Will the methodology assist effective change?

*Research*: Are data and interpretations adequately assured by the methodology?

**Participants**: Social research, of whatever form, deals in some way with people. They function at least as informants, directly or indirectly (for instance, by being observed). This is the least participative end of a continuum. A much more participative approach may involve them as co- researchers. The level of participation, and the means used to achieve it, determine the effectiveness of both the action and the research.

*Action*: What is done to involve those who can influence the desired change? To what extent are all stakeholders involved, and by what means?

*Research*: Are all relevant informants sampled? Are the processes which are used suited to validating the information collected or contributed?

**Literature**: Accessing the literature is more difficult, in some ways, than it is for other research.

First, there is a greater need to access the methodological literature. Without this, it is harder to offer a sufficient justification for your choice of paradigm and methods. To complicate matters, there are two methodological literatures. One is directed towards bringing about change. The other is about qualitative research, and action research in particular.

Second, the content literature (the literature about your topic) may have to be accessed twice. If you start with a research question, you will have to identify and understand the literature most directly relevant to that research question. When you have begun to collect and interpret the data, you will find that more specialised literature is likely to become relevant. You then have to identify and understand it. It allows you to refine and further guarantee your conclusions.

**Methodological literature**: The purpose of the methodological literature is therefore to justify your choice of action research as the over-arching paradigm, and your particular methods as suited to the situation.

*Action*: Have you taken into account the literature on bringing about change in the situation you are researching?

*Research*: Have you also addressed, in your methodology, the challenges to validity of results which the literature identifies? Have you used processes which are consistent with the accepted procedures of the current methodological literature?

**Content literature**: The content literature guides you (and, probably, the participants) in deciding which issues to address. It also provides a check on the adequacy of your conclusions.

*Action*: Does the literature cover relevant aspects of the situation, and of change in that situation?

*Research*: Is relevant theoretical and research literature on the situation adequately covered? Are all claims tested against the more specialised research literature?

## Methodology

In its pursuit of understanding and change, and its use of participation, action research is unable to use the methods of experimental research to develop a warrant for its assertions. It requires a different approach.

Action research achieves this in the first place by being critically reflective within a cyclic process. In addition, at all stages, the researcher attempts to find exceptions to the data so far collected, and to disconfirm the emerging interpretations.

**Cycles.** There are many ways of describing the cycles. Kemmis and McTaggart, for example, describe each as having four elements: plan, act, observe, reflect. The important characteristic of each cycle is that the researcher plans before acting, and reflects on the findings and the method after acting. The reflection at the end of each cycle feeds into the planning for the next cycle.

A typical cycle may look something like this:

1a Decide which questions you wish to have answered; if this is the first step in the process, it may be a very broad question: "How does this system work?", perhaps.

1b Decide who to ask, and how to ask them. (This and the previous step are both "plan".)

2 Ask. (This is the "act" component.)

3a Check the information you collected; devise ways of testing it in the next cycle.

3b Interpret the information — what does it mean? Devise ways of testing your interpretation in the next cycle.

3c Check the adequacy of your choice of participants and way of collecting information. Amend them for the next cycle if desirable.

3d Check your data and interpretation against the relevant literature; you may not do this for every step, but may limit it to every few cycles. (This and the three prior steps are part of reflection.)

and return to step 1a of the next cycle with an improved methodology, questions, and sample of participants.

The planning and reflection, and perhaps the data collection, will probably be carried out with the help of participants from the client group.

In fact, there are cycles within cycles. If you are using interviews for data collection, each interview is a cycle. The sequence of interviews forms another cycle, as do the other forms of data-collection you use. In turn, they are part of the still larger cycle of the overall project.

**Triangulation or dialectic.** I have referred to other forms of data collection. You can better assure your data and interpretations if you use varied informants, several different methods, different ways of asking the same question, and so on. Comparison between them provides part of the check on their adequacy.

This is commonly called triangulation. However, the term is coming to be used more often to mean the use of multiple methods. I will therefore use the term "dialectic". As far as possible the intention is to use multiple data sources within each cycle. A comparison of the two or more sources of data then enables you to focus on agreements and disagreements. Information which is unique, provided by only one person, can then often be discarded. You need carry forward only your interpretations.

(Most qualitative research accumulates such large bodies of data that a practitioner cannot be expected to find the time to deal with it. Action research offers an economy in that only the interpretations need be carried from cycle to cycle.)

In comparing two or more sources of data, then, I am suggesting you give your attention to topics which are mentioned more than once. Your sources then either agree or disagree about the topic:

- If they agree, search for exceptions to this in the next cycle. You might do this, for example, by asking questions which probe specifically for exceptions.
- If they disagree, search for explanations. You might do this, for example, by asking questions which probe specifically for explanations.

In this way, your questions and methods, and your data and interpretations, become more focussed as you proceed.

**Documentation.** For thesis purposes, you will also find it desirable to ensure that you document your procedures as you go. In particular, you will want to keep a record of:

- the emerging interpretations, and any changes in these;
- the changing methods, any refinements in them, and any conclusions you can therefore draw about them;
- the literature you access, and any confirming or disconfirming information you obtain from it;
- quotes from raw information which capture well the interpretations you are developing.

Without adequate documentation, it will be very difficult to reconstruct this when you prepare the eventual thesis. It is much easier to keep good, if selective, records as you proceed.

**Your own reflection.** Chad Perry and Ortrun Zuber-Skerritt suggest a further cycle if you are doing the research for thesis purposes. They mention the objection that, if you are using a participative approach, you may be challenged

on the grounds that the thesis is not your own work. They offer a way around this problem.

Each cycle of your research, which may be participative, becomes the "act" component of an individual reflection. In other words, after each cycle, you critique the planning, the action, and the reflection. This may be done as you check the ongoing documentation.

As you do this, you will probably find it useful to keep a record of what you learn. This might take the form of a diary. Your learning may be about the client system, or about people and systems generally, or about change, or about yourself and your approach to change. Increasingly in qualitative research, it is being regarded as appropriate to discuss yourself and your learning as part of your thesis.

## Writing up the research

If you attempt to write up a thesis using a format appropriate to an experimental study, it will probably be a long and repetitious thesis. Instead, I suggest structuring it around the contribution to knowledge that your study has made.

Early chapters will be more conventional. They are likely to include:

- some justification for the study, explaining why it was worth doing;
- some justification for the approach (that is, for your choice of action research, participation, and qualitative data);
- a description and justification for the particular methods used for data collection and interpretation.

To the extent that you can identify relevant literature for the thesis topic, there may be a literature review. However, much of the more specialised literature will be accessed only as the study progresses, and reported adjacent to the relevant findings.

The later parts of the thesis then include the findings — the contribution to knowledge. The contributions may be about any (or all) of the following.

- The specific client system, and (to the extent that you can generalise) about similar client systems. You probably cannot generalise directly from a single system. But the literature may enable you to make claims about the extent which your findings apply to other systems.
- People, systems, and change.
- The methodology you used. Of importance here may be the variations you introduced to deal with the unexpected. Some of these variations may be novel, and useful additions to the methods available.
- Yourself.

## Warranted assertions

As you plan, and conduct, and report the study, it will help to keep in mind the end product — a new sentence (or, more probably, several), and evidence that it is new and worth claiming.

At then end, you want to be able to say something like the following:

"These are the contributions to knowledge which survived my vigorous attempts to disconfirm them, first in later action research cycles, and then from the literature."

The design, conduct and reflection in each cycle, and the records that you keep, can be directed to achieving this end.

## References

Kemmis, Stephen, and McTaggart, Robin, eds. (1988) *The action research planner*, third edition. Victoria: Deakin University.

Perry, Chad, and Zuber-Skerritt, Ortrun (1992) Action research in graduate management research programs. *Higher Education*, 23(2), 195-208.

Phillips, Denis C. (1987) *Philosophy, science, and social inquiry: contemporary methodological controversies in social science and related applied fields of research*. Oxford: Pergamon Press.