Action Research: The Participative Researcher or Experiential Approach[1]

M.R. (Ruth) de Villiers
Sam Lubbe
Rembrandt Klopper

Abstract

There is an increasing interest in action research in business and management studies. This is due to a number of drivers, an important one being that increasing numbers of degree candidates find it very convenient and advantageous to conduct their research in their experiential employer's organisation. This provides relative ease of access to interesting situations from which business and management lessons may be learned. In these circumstances, the action researcher is actually playing the role of a consultant to his/her experiential organisation. There are a variety of different approaches to experiential training and it is important for the action researcher to understand which of these are appropriate to action research. After closely examining the stages and components of action research, this paper focuses on some of the details of how the actual research work or experiential training could be performed by considering the methods outlined in a work entitled *21st Century Process* (2001), Adams and McNicholas (2007), Van Aken (2004) and Baskerville and Pries-Heje (1999). The paper suggests how such research can be pursued in a rigorous manner and how the researcher can ensure that s/he realises the learning experience and thus the objectives of the research.

---

[1] Our thanks to Dan Remenyi for his valuable input on Action Research

Keywords

Action research, experiential training, degrees, experiential choices, process experiential consultancy, effective action and learning

1. Introduction

Interest in the academic research process in the field of business and management studies has grown strongly in recent years. One of the main drivers is that universities have increasingly expanded their degree offerings to include an experiential learning/training module of as part of certain qualifications. Although such degrees are described as 'taught degrees' they frequently include a research project as one of the requirements. The scope of work required from the student varies, but frequently involves some original research. In addition, many universities, technikons and business schools have a final-year capstone project in their undergraduate degree programmes. Such a project is often focused on a practical research question, which can be quite a demanding task.

The increase in interest in research has led to various books on subjects related to 'How to write your project' or 'How to survive your dissertation', etc. (Becker 1986; Becker, 1998; Leedy & Omrod, 2007; Blumberg *et al.,* 2005; Huff 1998). Although these sources are useful, in our experience, few of them really address the most pertinent research issues. As a result, the quality of research presentations for projects and mini-dissertations at bachelor's degree level is frequently questionable.

A significant number of students in business management supplement their formal studies with some practical experience. To this end, they may hold a full-time position for at least six months in a commercial or industrial workplace or possibly in a public sector organisation. These may often be large-scale organisations, because in general, only larger organisations are able and prepared to accommodate experiential learners by offering them practical experience and possibly even paying their tuition fees. Experiential students often find their employer's organisation a convenient environment in which to undertake the research project required for the practical component of

their studies. The question arises as to whether the student is able to find an appropriate research problem or question within the workplace that lends itself to this type of research?

In most instances students do find such a problem and they produce project reports that are synergistically useful both to their employers and for personal study. In the process the student is effectively working as a consultant and his or her experiential organisation has, in terms of the research, become the 'client'. This is a different relationship from the student's normal *modus operandi*, and it requires special understanding and skills on the part of the student. This is not a trivial matter, as there are various different ways in which experiential training is understood by organisations and the student needs to be clear as to what is actually required of him or her by the employer and by the academic organisation. Due to the nature of experiential training, the requirements of the workplace and those of the milieu of formal stuffy may differ, yet this must not be permitted to reduce the integrity of the research requirements of the degree programme. Furthermore, this work is done in a single organisation, *viz*., the student's experiential employer, and may thus, in some sense, be viewed as a single case study. In such situations the student needs a working knowledge of the particular kind of research required for the project in hand.

Succinctly, the resulting project reports sometimes lack academic or scholarly focus and our objective in this paper is to point out how a scholarly focus can be improved while synergistically retaining practical value for the employer.

2. Experiential Training

Experiential training should provide real-world workplace exposure to activities and procedures in an organisation. Any knowledge, insights, or skills gained from the experience should be linked to that organisation's mission and specific business challenges. The experiential training should be conducted in such a way that it helps accelerate a student's learning curve. Experiential training is based on the fact that true learning requires considerably more than the content presented in training manuals. In fact, the experience itself is where the most effective

learning takes place. Experiential training allows the student to learn about learning and be clear about the objectives (Caudron, 2000).

The above supports the concept that action research (AR) – to be discussed in the next section – can support students in their experiential training endeavours. AR combines a substantive act with a research procedure, it is an action disciplined by enquiry. The professional can thus become a reflective practitioner (Smith, 2001) because knowing-in-action helps the experiential trainee to absorb the relationship of theory to practice.

3. Action research

3.1   Background: The Dichotomy between Science and Action

In order to achieve the twin objectives of producing scholarly research while retaining a practical focus, it is useful for the student to understand a particularly relevant research paradigm – commonly referred to as Action Research (AR) – and be able to apply it effectively.

Although AR is a highly effective framework for achieving these twin objectives of academic rigour and experiential relevance, it has its critics. Until recently many academics took the view that AR has much to do with action and little to do with research (Naslund, 2002). Zmud (2005) argues that with the multi-domain pervasiveness of technology, Information Systems (IS) research should be salient to other fields of research. In this context, AR can be directly applied to IS research within the workplace, and relevance of AR to IS is further addressed in this article.

As stated, the concept of AR has not been embraced wholeheartedly by academics. There has been the notion, possibly connected to Plato's ideas in his *Republic*, that there were essentially two separate worlds – the world of the philosopher and that of the king. The king is the person of action and his domain is quite distinct from the realm of thought, where the philosopher resides. The combination of these two domains was considered problematical. Indeed, there is good

reason to support this point of view. It is not trivial to bring together the mindset of knowledge and reflection with the propensity to action. Thus the action researcher needs to be simultaneously deeply involved with the project, while absorbing detail to reflect on the situation and thus to extract knowledge from the experience, as well as benefiting from experiential training.

It was perhaps at least in part this type of thinking that underpinned the criticism that rigorous knowledge could not be created from general experience but rather could only be established if the process of its creation was to comply with the scientific method espoused by the natural sciences. Thus the scientific method was considered the only way to obtain valid research results.

It was perhaps, at least in part, this type of thinking that underpinned the criticism that rigorous knowledge could not be created from general experience but rather could only be established if the process of creating it complied with the scientific method espoused by the natural sciences. Thus the scientific method was considered the only way to obtain valid research results. But this view has been amended over the past few decades. Medawar (1986), who is undeniably one of the 20th century's most distinguished scientists, posits that 'there is indeed no such thing as "the" scientific method. A scientist uses a very great variety of exploratory stratagems'.

Taking this idea further, Feyerabend (1993) argues that there are so many different ways of approaching science that it is better to recognise that there is really no scientific method at all. Thus Feyerabend's thinking is often encapsulated in the expression 'anything goes', which he argues as follows:

> To those that look at the rich material provided by history, and are not intent on impoverishing it in order to please their lower instincts, their craving for intellectual security in the form of clarity, precision, 'objectivity', 'truth', it will become clear that there is only one principle that can be defended under all circumstances and in all stages of human development. It is the principle: anything goes.

In a similar vein Habermas (1993) notes that the whole arena of science has actually shifted over the past few decades. His comment (Habermas (1993), 'Now we think more tolerantly about what might count as science' may in one sense be seen as an indication of how much more open science has become to new ideas and new methodologies. On the other hand, some scientists would argue that what has happened is that the scientific profession has become much more frank about their so-called methods. One of the more honest and amusing accounts of the scientific method is provided by Wikipedia. (2005): 'One contemporary philosopher, Abraham Kaplan, when asked to define the scientific method, answered that the "scientist has no other method than doing his damnedest".'

It is clear that early definitions of the scientific method, which emphasised objectivity and truth, have been exposed as a gross simplification of how research actually functions. In fact, seeing science as being simply a process of objectively seeking the truth is now perceived to be largely a myth. As Gould (1992) notes: 'I believe that science must be understood as a social phenomenon, a gutsy, human enterprise, not the work of robots programmed to collect pure information.'

Understanding science and research methods in this way has opened up an opportunity for a new method such as AR (Mårtensson & Lee, 2004) which, in the view of the authors, has a meaningful role to play in IS research in the workplace.

3.2 Definitions and Origins of the Action Research Process

The action research approach (Baskerville, 1999; Baskerville & Preiss-Heje, 1999; Cohen, de Villiers, 2005; Manion & Morrison, 2000; Zuber-Skerrit, 1992) emanates from the behavioural sciences and encompasses a variety of research and intervention methods. It originated in action-based social psychology, as founded in the 1940s by Kurt Lewin of the University of Michigan, who contended that complex real social events could not be investigated under laboratory conditions (du Poy & Gitlin, 1998; Wood-Harper, 1985). AR was used independently at the Tavistock

Clinic to study post-WW2 social disorders among veterans (Baskerville, 1999). It has also become an accepted approach in the educational domain, where Zuber-Skerrit (1992) defines it as inquiry by higher-education academics into problems of students learning. Its participative, practitioner-researcher approach lends itself to general educational research and educational technology, where an evolving intervention or artefact is investigated over several cycles. However it is appropriate for inquiry into, and for investigating the introduction of, technologies in any organisation.

Aiming to bridge the gap between research and practice, AR encompasses action outcomes and research outcomes (Dick, Passfield & Wildman, 1995). Commencing with the identification of a problem or situation that calls for action, AR functions as a change agent. We consolidate characteristics of AR mentioned by Baskerville (1999), Dick, Passfield and Wildman (1995), and du Poy and Gitlin (1998), and describe AR as being:

- ✓ Cyclic: iterative steps recur in a longitudinal time frame, generating knowledge to inform further action.

- ✓ Participative: clients, end users and researcher collaborate in close partnership as co-researchers; or as practitioner-researchers examine their own work. Where stakeholders are full participants in the research process or where practitioners serve both as subject and researcher, one refers to participative action research.

- ✓ Qualitative: it tends to operate more via verbal aspects than by numbers.

- ✓ Reflective: critical reflection on the process and outcomes is vital to each cycle, and is used in designing subsequent steps, interventions and events.

- ✓ Responsive: it reacts and adapts flexibly to the findings from each previous cycle.

In a parallel from the professional disciplines, Smith (2001), using Schön, defines reflective practice or reflection-in-action as the professional artistry that occurs when skilled practitioners tackle work-related activities, going beyond rigid rules of inquiry, and generating new

rules in situations that are uncertain and unique. Furthermore, the reflective practitioner is both a participant in the process and a critic who observes and analyses. Similarly, AR aims both to improve practice and to advance knowledge.

3.3 Research Processes and Methods

Zuber-Skerrit (1992) terms the four repetitive processes undertaken in each cycle as plan, act, observe, and reflect. The mega process comprises a series of cycles that feed into each other. Action research is accordingly less an event and more an ongoing process. It employs or integrates methods from both the experimental and naturalistic (interpretivist) traditions, yet is consistent with naturalistic inquiry in that all research occurs within its natural context (du Poy & Gitlin, 1998).

A broad variety of data collection methods may be used, provided that they are appropriate to the inquiry in hand. Multiple data collection methods may be used in a single study to triangulate the findings. Methods commonly used are experimentation, surveys and interviews, observation, etc.

3.4 The Epistemology, Relevance and Rigour of Action Research

Action research has an interpretivist ethos, incorporating social enquiry based on the views and interpretations of the participants, all regarded as equals, making it an emancipatory process, while also incorporating the researcher as participant. It is a holistic, not a reductionist, approach, which includes ethnographic enquiry and works from an ideographic standpoint, promoting the uniqueness of each setting (Baskerville, 1999). When AR originated, the precise collection of quantitative data was emphasized and there was less focus on qualitative research skills. In due course, it was recognised that AR operated under a different epistemology and, although it can be less rigorous in design and methodology than other approaches, it is acknowledged as a participative research process that generates reliable knowledge and makes theoretical contributions. AR can be distinguished by its operation over a longitudinal time framework of several cycles and by the in-depth involvement of researcher as participant. In many cases it focuses more on refinement of existing processes, situations or products than on new

developments. Certain AR projects do not attempt to construct theory, models or principles to guide future work, but this is not consistently the case.

With regard to the rigour and validity of an AR process, Kock (2004), mentions three potential 'threats'. First the issue of control: while the natural environment, as opposed to a lab setting, is one of AR's benefits, the researcher will not have complete control over this environment and its subjects. To counteract this, Kock suggests that data collection and analysis can be based on the units-of-analysis method, where the units are defined before research commences. Second, he refers to the contingency threat: as a change agent, the researcher has access to a large body of data, which may be 'broad and shallow' and thus complex to analyse, because its rich context makes it difficult to separate components relating to particular constructs. This can possibly be addressed by the integration of grounded theory, which involves the identification of categories and relationships between them, and groups the inter-related categories into theoretical models. Third, the close involvement of the researcher can lead to subjective bias in interpreting the data, a factor that can be mitigated by multiple iterations of the AR cycle to support cumulative collection of predefined data (Kock, 2004).

Recently there has been mounting criticism that the more traditional approaches to academic research have not satisfied the community of practitioners; they may well have produced rigorous results, but findings have possibly not been as relevant as they could have been. In fact, the past few years have seen a substantial increase in the call by the business community for more relevant research. It has become clear that rigour in academic research is not enough and that without specific relevance the output of academics and academic institutions is of little value. In fact, this was acknowledged many years back by Wittgenstein's (1969) article, stating that knowledge is in the end based on acknowledgment. This may in turn be interpreted as anticipating the need for researchers to be cognisant of the requirements of their communities; however it is clear from the on-going debate on this issue that many academics have failed in this respect.

In this situation, the spotlight turns to action research. As an academic research paradigm, the AR approach can deviate substantially from traditional academic research methodological thinking. AR is based

on the assumption that we can often learn more by focusing on the 'action-net' (actor network) – how actors, or participants, engaged in the same or different projects may share a common narrative (Czarniawska-Joerges, 1997). Joint understanding (by both researcher and stakeholders from the organisation) of that narrative is often the key to learning and thus enabling change. Whereas some interpretivist research design may be seen as being related to or at least derived from the traditional academic research method of the natural sciences, AR is really quite different. Baskerville and Preiss- Heje (1999) capture this in their succinct statement, that 'to an arch-positivist, it [AR] should seem very unscientific'.

But in reality, AR has many of the characteristics of the type of research conducted by physical and life scientists. It is empirical. It is both interventionist and observational. While it is experimental, it can also accommodate a multivariate situation. AR, in fact, may be considered to more closely resemble a laboratory situation than any other business and management studies academic research approach.

AR qualifies as academic research because when used correctly it offers a viable framework that allows something of theoretical value to be added to the body of knowledge. To clarify what this means it is necessary to consider the main characteristics of academic research. To be accepted as rigorous academic research in the business and management studies' field, any piece of research work needs to be:

1. clearly articulated as a question;

2. framed within the body of current theoretical knowledge;

3. conducted with appropriate observational and analytical procedures;

4. expressed as a convincing and reflective argument; and

5. clearly demonstrated to have practical management validity and utility.

If these criteria are met, the research may well have a sound claim to be regarded as both rigorous and relevant.

3.5 Application within IS

IS research has been characterised by lack of relevance (Keen, 1991; Westfall, 1999; both cited by Baskerville, 1999). Myers (2004) proposes that AR is a valid research approach for applied fields. Baskerville (1999) asserts that AR generates highly relevant research results due to its basis in practical action, aimed at explicit problem solving while also informing theory. In the previous decade, however, Trevor Wood-Harper had already set out to address the tensions between theory and practice and the confusion that existed between traditional scientific research and the more sociological approaches, by introducing AR to the IS community as a purely research methodology with his landmark paper, *Research Methods in Information Systems: Using Action Research* (Wood-Harper, 1985). In the 1980s, AR techniques were applied by Peter Checkland in systems analysis, as he developed soft systems methodology. AR is increasingly used for scholarly research in IS. Baskerville (1999) advocates it to inquire into the complex and multivariate nature of IS's social setting, using:

- joint goals of solving practical computing problems and expanding scientific knowledge;
- collaborative performance, which enhances the competencies of all participants;
- an emphasis on action and change orientation in social settings.

Baskerville lists various forms of IS action research: prototyping, soft systems methodology, action science, participant observation, fieldwork, and process consultation. Implicit within these is the investigation of problems and evolving solutions in their context of use, which will be discussed explicitly by the present authors (Section 4).

3.6 Systematic, Iterative Stages

Action research can be graphically depicted as a spiral, but the model developed by one of the present authors and shown as Figure 1, is a series of cycles which close in as a solution is attained. The researcher occupies a central, participative, and influential position. This model forms a useful framework to guide and monitor the progress of a research project. Variants can be custom-built for particular applications as appropriate.

Several of the researchers *cited* in this section advocate iterative cycles of AR research, feeding into change and re-development. However, the context of the present study relates to research conducted in short-term projects, such as those associated with blocks of experiential learning. In such situations multiple iterations may be precluded and the research process must be based on a 'compressed' variant of action research.
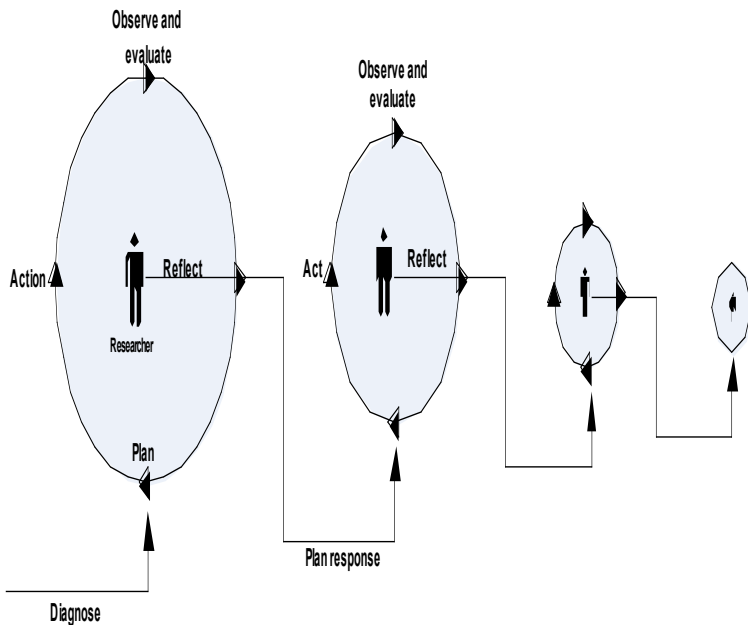

Figure 1 *Action research model* (synthesized by de Villiers, 2005)

4. Relevance and Rigor

In the past few years there has been increasing pressure on business and management studies to accept AR as a method for academic research. The reason for this is that there has been mounting criticism that the more traditional approaches to academic research have not satisfied the

community of practitioners; they may well have produced rigorous results, but findings have possibly not been as relevant as they could have been. In fact, the past few years have seen a substantial increase in the call by the business community for more relevant research. It is now clear that rigour in academic research is not enough and that without specific relevance the output of academics and academic institutions is of little value. In fact, Wittgenstein's (1969) states that knowledge is in the end based on acknowledgment. This may in turn be interpreted as anticipating the need for researchers to be cognisant of the requirements of their communities; however it is clear from the on-going debate on this issue that many academics have failed in this respect.

This type of thinking about the inadequacies of the traditional approach to business and management research has created a real opportunity for AR.

4.1.1 Applying Action Research within Business and Management Studies

In the past few years there has been increasing pressure on business and management studies to accept AR as a method for academic research. Section 3.4 considered the issues of relevance and rigour within research approaches and then reviewed AR in this light, noting the recent calls by the business community for more relevant research. Rigorous research alone is insufficient; direct contextual relevance is essential. Academics need to pay cognisance to this requirement. This type of thinking about the inadequacies of the traditional approach to business and management research has created a real opportunity for AR.

4.1.2 Conceptualising the AR Process in the Business Context

AR works through a process of theory discovery that involves the solving of a problem through a specific intervention in a working organisation, and which is conducted in collaboration with members of the staff. The focus of AR is on problem-solving that leads to organisational learning. From a conceptual point of view, AR may be described in terms of five high-level stages as defined in Figure 2; these are clearly equal to the five requisites of action research described which

relate respectively to the five requisites of academic action research described at the end of Section 3.4.
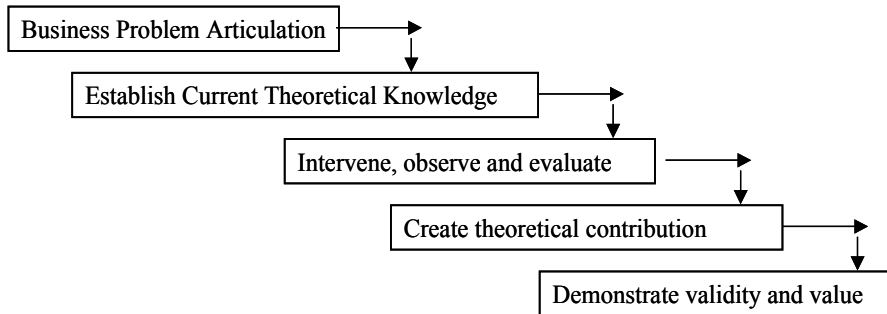

Figure 2: *The five high-level conceptual stages of AR*

The first of these activities is the articulation of the problem. Thus AR will always have a set of specific business objectives both in terms of solving a problem as well as in terms of learning. Initial identification of the problem will come from the client (either a manager or an employee). The second step involves understanding the state of the current theoretical knowledge in a particular field of study.[2] This obviously requires a detailed literature survey.

The third step involves planning and conducting the intervention or 'action' in the workplace in order to solve a problem or take advantage of an opportunity. It compresses the plan-act-observe-reflect

---

[2] The process consultant does not have to be an expert in a particular functional area. In fact, Schein (1969, 1987) argues it is best if that is the case, as functional knowledge may sometimes obscure understanding of the processes occurring between organisational members. This is similar to the case of Argyris (1993), where the consultant should go armed with an understanding of Argyris' theory of learning. Thus the theoretical background of the researcher/consultant could be in the arena of facilitation and interviewing.

processes named in Section 3.3 and shown in Figure 1 into a single comprehensive step. This step will also incorporate observation of the intervention; data collection and the evaluation of its results, which should inform and feed back into the action by introducing refinements (note the feedback loop in Figure 1). Here the researcher-participants will not only be involved in the work of the intervention but are also required to stand back from their actions, distancing themselves, reflecting and behaving as pure researchers. Theoretical concepts are key to achieving objectivity and ethical boundaries are vital.

The fourth activity comprises the action researcher's converting this experience into a contribution to the body of knowledge, which is, making a contribution to theory. Here the important skill is the ability to generate or extend theory from the experiences encountered during the AR.

The fifth step is to demonstrate that the contribution made to the body of theoretical knowledge is in fact valid and useful to the practising community. The validity and the usefulness of the new theoretical contribution are conferred through the evaluation of the research findings, an evaluation over and above the evaluation of Step 3. It is undertaken primarily by the participants in the AR programme. Of course the validity and the usefulness of the new theoretical contribution may be further endorsed by the acknowledgement of the wider community.

It is this combination of action and of the subsequent creation of knowledge that makes AR so useful in the field of business and management research, especially for experiential students who can simultaneously work and research in their experiential training employers' organisations.

4.1.3 The Five Sets of Activities of an AR Project

The five high-level stages described above may also be viewed in terms of five sets of detailed activities of an AR project. These are: Initiating the Research Project, Planning the Research Project, Participating in the Action, Evaluating the Action and Presenting the Contribution. These five sets of detailed activities are described in Figure 3.

Action Research: The Participative Researcher or Experiential

Approach

It is important to emphasise that action research cannot be conducted without the collaboration of a number of project stakeholders and thus it is important to take the necessary time and give the required attention to obtain the support of these stakeholders. These individuals will make important contributions to the design of the project and to the actual work or action, as well as to the evaluation of the result of the intervention.
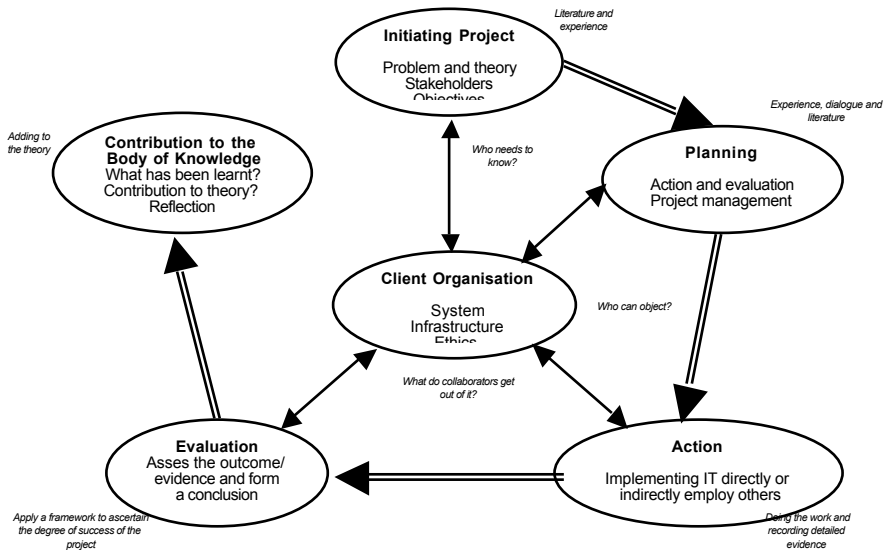

Figure 3: *The five sets of detailed (low-level) activities in the AR Process*

In the light of the features and models of the AR process described in this article, we now return to the problem in hand, namely the specifics of the research project to be undertaken by students as a capstone to their studies in business and management. This project should:

- be based on a sound and rigorous research methodology; but should also

- hold relevance to the workplace environment in which it is conducted.

We propose five sets of detailed activities of an AR project to be conducted by project students. The activities are practical and application-oriented, but are in line with the ethos and methods of action research and are, respectively:

1. Initiating the Research Project;

2. Planning the Research Project;

3. Participating in the Action;

4. Evaluating the Action; and

5. Presenting the Contribution.

These sets of activities are depicted in Figure 3 and outlined in the subsections following.

4.1.4 Initiating the Research Project

Two different activities need to occur during this stage of AR. These are setting the specific business objectives of the intervention and defining the research question that this activity will help answer. Although these are very similar issues, they are nonetheless different. The research question will focus on a problem or opportunity currently of concern to the organisation in which the researcher is working. It should be a problem within the direct responsibility or ambit of the researcher. In AR, the researcher will normally obtain a wide range of views from colleagues about the problem and will draw on these views when formulating the question. It is for this reason that AR is sometimes seen as a democratic or empowering approach to research (Lindgren *et al.*, 2004). Of course, like many other research projects in business and

management research, defining the research question is most effectively achieved when the practical problem being addressed is framed by reference to the researcher's broader working experience, as well as knowledge of the relevant academic literature.

At this stage of the research process it is useful for the researcher to clarify such issues as who actually needs to have the question answered and what exactly will be achieved by knowing the answer. It is important for the researcher to be completely open with all the stakeholders, and hidden agendas would be ethically questionable.

4.1.5 Planning the Research Project

Having established the research question, the next stage is to decide on the particular intervention or action that will be used. There may be several ways in which the researcher could attempt to solve the problem identified by the research question. The implications of each of these possible interventions need to be thought through and a choice has to be made. Once the approach to solving the problem has been selected, the detailed planning of the AR may begin.

What this amounts to is creating a detailed project plan where all the activities or work elements are described. The approach here is very much the same as that which is used in standard project management techniques. However, there is another dimension to this stage besides simply planning the business intervention. During this stage the evaluation approach to be used should also be selected and plans should be implemented to use it. In AR the evaluation of the projects will normally involve the views of several of the organisation's staff who are involved in the project. This is another dimension of the democratic nature of AR.

4.1.6 Participating in the Action

In this stage the researcher performs the activities that are required of the intervention. This is the practical business and management equivalent of what the natural scientist does in the laboratory. Here the researcher may actually do the work himself or herself or s/he may

simply manage the work being done. But in either event, it is during this stage of the research programme that the action takes place.

This stage may take hours or days or in some cases even weeks or months. What is important here is that the action carried out should be carefully observed and noted by those involved, and recorded in an unbiased way. Of course in the multivariate work of business and management, it may not be possible to observe all the detail of precisely what is being done and the organisation's reaction to it. The more comprehensive the observation and recording of the intervention, the more likely that interesting results will be revealed. The researcher needs to be continually aware that he or she can easily be plagued by the problem of selective perception that could result in only reporting those aspects of the intervention which support the research objectives. Knowingly omitting evidence to suit a particular argument may invalidate the research and is, of course, ethically questionable.

It should be noted that to obtain useful research evidence from these 'actions' it is not necessary for them to achieve their original business objectives. In fact, even if the intervention completely fails, the research could still be considered a success (Henfridsson & Lindgren, 2005).

4.1.7 Evaluating the Action

The evaluation of the action or the intervention will have been previously discussed and consensus reached. Whatever the approach, the researcher needs to be cognisant of the views of all the stakeholders in the research. It may not be easy to obtain consensus from the various stakeholders, and this stage of the AR project can be quite challenging if not actually problematical. However, the evaluation stage of AR research is considered to be critical in obtaining valid results and therefore needs to be performed with considerable care. The output of this stage of the research is the main 'raw material' from which to compile the final conclusions and thus add something of value to the body of knowledge.

4.1.8 Presenting the Contribution

The final stage of AR involves the researcher's presenting a reflective and strongly convincing argument that he or she has been able to use the experience to develop an academic contribution. It is here that the creativity of the researcher comes into play in that the researcher needs to synthesize his or her understanding of the data, evidence or experiences obtained from the research process. Here the researcher leaves the mere observable facts behind and develops a contribution to business and management theory, and then presents his or her findings. No matter how sound the rest of the research, it will have little impact if at this stage the researcher cannot present a convincing argument.

One of the characteristics of a convincing contribution to the body of theoretical knowledge is that the researcher has carefully reflected on all the possible interpretations of the findings of the work. This is not a trivial matter and normally requires the researcher to engage in a detailed discourse with both the corporate stakeholders and possibly other appropriate academic researchers.

4.1.9 The Action Researcher as an Experientially Trained Person

Having established the stages that an AR project would involve, we now examine some of the detail of how the actual research work or experiential training could be performed by considering the methods outlined in a work entitled 21st Century Process… (2001). This author provides us with an explicit enunciation of how the AR researcher can be effective in the mode of experiential student or 'researcher', providing firm boundaries that should govern the 'contract' that the researcher forms with the organisation. However, any discussion of action research would be incomplete without reference to the work of Adams and McNicholas (2007), Cady and Caster (2000), McKay and Marshall (2001), and Agyris and Schön (1978). We therefore may start with a consideration of the contribution made by van Aken, and argue that, for the experiential researcher, the method proposed by 21st Century Process Consultation is more feasible.

4. Conclusion

The impact of action research on experiential training is an area that has not previously received much attention, yet there is a lot to be learned from its proponents. An understanding of the interplay of the various forces unleashed by action research and experiential training in traditional societies can help organisations find solutions to modern problems. Action research on experiential training can:

- Effect positive and negative impacts on old problems;
- Help to emphasize lessons learned by experientially trained students being broadened; and
- Underline the best research methods to complement experiential training.

References

21st Century Process Consultation. 2001. [WWW] available online: http://www.manage2001.com/pc.htm accessed 21 November 2007 at 12:09

Adams C & P McNicholas 2007. Making a Difference: Sustainability Reporting, Accountability and Organisational Change, *Accounting, Auditing & Accountability Journal* San Francisco, CA: Jossey Bass.

Argyris C & DA Schön 1978. *Organizational Learning: A Theory of Action Perspective.* Reading, MA: Addison-Wesley.

Baskerville RL 1999. Investigating Information Systems with Action Research. Communications of the Association for Information Systems, 2 (Article 19). [WWW] available online: http://cais.isworld.org/articles/2-19/. Accessed 21 May 2006.

Baskerville R L & J Pries-Heje, 1999. Grounded Action Research: A Method for Understanding IT in Practice. *Accounting, Management and Information Technologies* 9:1,January: 1 - 23.

Becker H S 1986. *Writing for Social Scientists: How to Start and Finish your Thesis, Book or Article.* Chicago, IL: University of Chicago Press.

Becker H S 1998. *Tricks of the Trade: How to Think about your Research while you're Doing it.* Chicago, IL: University of Chicago Press.

Black, D, S Brown, A Day & P Race 1998. *500 Tips for Getting Published: A Guide for Educators, Researchers and Professionals.* London: Kogan Page.

Blumberg B, DC Cooper & PS Schindler. 2005. *Business Research Methods*. McGraw-Hill.

Cady SH & MA Caster. 2000. A Diet for Action Research: An Integrated Problem and Appreciative Focused Approach to Organisation

Development. *Organization Development Journal* 18,4: 79 - 93.

Cantor, JA 1993. *A Guide to Academic Writing.* Westport, CT: Praeger.

Caudron S 2000. Training and the ROI of Fun. *Workforce* 79,12,December:34 - 38.

Cohen LL, L Manion & K Morrison 2000. *Research Methods in Education*. London: RoutledgeFalmer.

Czarniawska-Joerges B 1997. *Narrating the Organization: Dramas of Institutional Identity.* Chicago, IL: University of Chicago Press.

Dick, B, R Passfield & P Widman 1995. A Beginner's Guide to Action Research. Retrieved September 2006 from http://www.scu.edu.au/schools/gcm/ar/arp/guide.html

De Villiers MR 2005. Interpretive Research Models for Informatics: Action Research, Grounded Theory, and the Family of Design- and Development Research. *Alternation* 12,2: 10 - 52.

Du Poy, E & LN Gitlin 1998. *Introduction to Research: Understanding and Applying Multiple Strategies.* (2nd ed.). St Louis: Mosby Inc.

Easterby-Smith M, R Thorpe & A Lowe 2002. *Management Research: An Introduction.* London: Sage.

Eden C & C Huxham 1996. Action Research for the Study of Organizations. In Clegg, SR, C Hardy & WR Nord (ed): *Handbook of Organization Studies*. London: Sage.

Engels, F *cited* in R Groves 1975. *The Strange Case of Victor Grayson*. London: Pluto Press. (Chapter 2.)

Feyerabend, P 1993. *Against Method.* 3ʳᵈ ed. London: Verso.

Gould, SJ 1992. *The Mismeasure of Man.* London: Penguin.

Hatch, MJ & M Schultz 2004. *Organizational Identity: A Reader.* Oxford: Oxford University Press.

Habermas, JM 1993. *Postmetaphysical Thinking: Philosophical Essays.* Hohengarten, WM (trans). Cambridge, MA: MIT Press.

Henfridsson O & R Lindgren. 2005. Multi-Contextuality in Ubiquitous Computing: Investigating the Car Case through Action Research. *Information and Organization* 15,2: 95-124.

Huff, AS 1998. *Writing for Scholarly Publication.* Walnut Creek, CA: AltaMira Press.

Koch, N 2004. The Three Threats of Action Research: A Discussion of Methodological Antidotes in the Context of an Information Systems Study. *Decision Support Systems* 37: 265-286.

Leedy, PD & JE Omrod 2005. *Practical Research – Planning and Design.* Pearson: Prentice Hall.

Lindgren R, O Henfridsson & U Schultze 2004. Design Principles for Competence Management Systems: A Synthesis of an Action Research Study. *MIS Quarterly* 28,3: 435-472.

Mårtensson, P, & AS Lee 2004. Dialogical Action Research at Omega Corporation. *MIS Quarterly* 28,3: 507-536.

McKay, J & P Marshall 2001. The Dual Imperatives of Action Research. *Information Technology & People* 14,1: 46-59.

Medawar, PB 1986. *The Limits of Science.* Oxford: Oxford University Press.

Myers, MD (2004). Qualitative Research in Information Systems. Original Version: *MIS Quarterly* 21,2: 241,242 (1997). Updated

in MISQ Discovery modified Sept 08, 2004. Online Available http:// www.qual.aouckland.ac.nz/

Naslund, D 2002. Logistics Needs Qualitative Research – Especially Action Research. *International Journal of Physical Distribution & Logistics Management* 32,5: 321 – 38.

Schein, EH 1987. *Process Consultation, Vol. 2*. Reading, MA: Addison-Wesley.

Schein, EH 1993. The Academic as Artist: Personal and Professional Roots. In Bedeian, AG (ed): *Management Laureates, Vol. 3*. Greenwich, CN: JAI Press.

Smith, MK 2001. Donald Schön: Learning, Reflection and Change. *The Encyclopedia of Informal Education*, www.infed.org/thinkers/et-schon.htm, accessed 27 November 2007.

Van Aken, JE 2004. Management Research Based on the Paradigm of the Design Sciences: The Quest for Field-Tested and Grounded Technological Rules. *Journal of Management Studies* 41,2: 219 – 246.

Wikipedia – Kaplan, Abraham 2007. [WWW] available online: http://en.wikipedia.org/wiki/Abraham_Kaplan accessed 21 November 2007 at 12:07.

Wittgenstein, L 1969. *On Certainty*. Section 378. Anscombe, GEM & GH von Wright (eds). Oxford: Oxford University Press.

Wood-Harper, T 1985. Research Methods in Information Systems: Using Action Research. In Mumford, E et al (eds): *Research Methods in Information Systems*. Amsterdam: North-Holland.

Zuber-Skerrit, O 1992. *Action Research in Higher Education*. London: Kogan Page.

Zmud, R 2005. Interview for the Official Quarterly Bulletin of the AIS Special Interest Group on Semantic Web and Information Systems. *Quarterly Bulletin of the AIS* 2,2.

M.R. (Ruth) de Villiers, Sam Lubbe, Rembrandt Klopper

M R (Ruth) de Villiers
School of Computing
University of South Africa
Pretoria, South Africa
dvillmr@unisa.ac.za

Sam Lubbe
University of South Africa,
Pretoria, South Africa
lubbesi@unisa.ac.za

Rembrandt Klopper
School of Information Systems & Technology
University of KwaZulu-Natal,
Durban, South Africa
rklopper@ukzn.ac.za