Closing the gap between theory and practice with action research

C J Auriacombe
Department of Public Management and Governance
University of Johannesburg
South Africa

ABSTRACT

There is a strong belief that both researchers and practitioners have an important role to play in changing and bettering human conditions. However, behind the scenes there are heated debates about how research findings can be turned into practical meaningful information that could be applied in everyday practice. The challenge for researchers is to organise their endeavours in such a way that they produce benefits to practitioners. Even more important is for practitioners and researchers to develop a cumulative body of knowledge for change.

Research methods and techniques have become increasingly less useful for solving practical problems. One of the main reasons for this is the huge gap between theory and research. In short research and thus theory, lacks relevance and usefulness when faced with problems in the real world (practice). As is clear from the above the main aims of action research are not only to contribute to the development of theory or to address the practical problems experienced by people, but to develop the self-help competencies of people facing problems.

Action research therefore has the potential to help close the gap between theory and practice by bringing both the researcher and the practitioner as equals into the research process. The question is why action research has thus far not had any remarkable success in this regard.

"Despite this convergence of focus between development research and practice, a wide gap still exists: knowledge transfer between the two is limited, collaboration is limited and there is still a dearth of relevant knowledge.... Many efforts to bridge this gap have been initiated; almost as many have failed" (Ferguson 2005:1).

INTRODUCTION

The gap between science and practice has been a longstanding issue in social research. The most serious issue for researchers is that practitioners seem to pay little attention to research

findings. Practitioners on the other hand feel that research findings aren't always applicable to real-world situations. The question remains how does one turn research findings into practical meaningful information that could be applied in everyday practice?

Experienced scholars are of the opinion that the answer to this question lies in closer cooperation between researchers and practitioners. This means that practitioners should be more directly involved in the research process. "The core premise of monitoring and evaluation is that services can be continually improved through informed decision making and social learning, leading to social and economic progress" (International Development Evaluation Association Internet Source Undated). It is clear that to be more effective in addressing global problems such as poverty, disease etc., we need to change our approach to programme development. To meet the complexities of our modern world new evaluation paradigms and innovative methods and techniques need to be developed.

In view of this Patton (2008:111–113) added the following goals of programme evaluation: accountability focusing on the failure to match targets and performance, monitoring for ongoing management purposes and programme development. It is from the latter of these goals that action research methodology is drawn." Action research is understood to be an approach to research which aims at both taking action and research in a collaborative, emergent inquiry process that is simultaneously concerned with bringing about change in organisations, in developing self-help competencies in organisational members and in developing co-generated actionable knowledge" (Shani Pasmore in Holian and Coghlan 2013:399). Rovio, Arvinen-Barrow, Weigand, Eskola and Lintunen (2012:584) add that action research "has been used in organisational settings to gain an understanding of task effectiveness, different variables and their interactions affecting task effectiveness, self-awareness of those involved in the tasks, as well as for exploring the effectiveness of new methods of task functioning".

According to Carr (2006:421) initially, action research "was defined as a method that enabled theories produced by the social sciences to be applied in practice and tested on the basis of their practical effectiveness". LeCompte and Schensul (1999 in Travers Gustafson 2013:53) see action research as "ethnographic research conducted in partnership with members of the community…with the specific purpose of bringing about structural or cultural change".

The term action research in scientific literature is generally widely defined as noted above and freely used, yet it is not well conceptualised. This article aims to conceptualise this phenomenon and explores the possibilities that action research hold to close the theory-practice divide.

THE ORIGINS OF ACTION RESEARCH

The origins of action research go back more than five decades. Lewin (1946 in Hart and Bond 1995:13) described action research "as a way of generating knowledge about a social system while, at the same time, attempting to change it" (Lewin in Hart and Bond 1995:13). He constructed the basis for a theory of action research in the mid-1940s and is generally seen as the father of this evaluation research approach (Lewin in Hart and Bond 1995:13). His research pointed out the importance of participation and democratic decision-making

of research subjects (Lewin 1946 in Hart and Bond 1995:13). Lewin's (1946 in Hart and Bond 1995:13) main interest was in how people could empower themselves to improve their situation.

Lewin (in Hart and Bond 1995:13) described action research as a process composed of cycles where the problem was first analysed; based on this analysis appropriate intervention steps were planned implemented and evaluated. This notion of participation change, improvement and more recently empowerment forms the core of action research (Waterman,Tillen, Dickson and De Koning 2001:11). Despite the fact that Lewin is regarded as the father of action research Collier was the first person using the term, action research, in an academic publication (Ahmed 2009:22).

Churchman (1979) built on the notion of cycles by introducing the concept of "system" and further developing the idea of reflexivity. Following Hegel's work of 1870 he pointed out the importance of rigorous critical self-reflection in the evaluation process. Churchman (1979) insisted that the researcher must follow an iterative learning and feedback process (Midgley 2006:21). Other authors who made important contributions to the development of action research were Susman and Evered (1978:5) pointing out the dialectic process of knowledge generation whereby a circular process is followed by firstly gaining an understanding of the whole then it's parts (Susman and Evered 1978:5). According to Susman and Evered (1978:5) some researchers do not see Lewin as the only forefather of action research since the perspectives of Ortega also stressed the importance of shared goals between the researcher and the researched. Since its original development action research was used and expanded by various research fields e.g. feminist, education, pedagogical and nursing (Eriksson and Kovalainen 2008:195).

CONCEPTUALISING ACTION RESEARCH

The term "action research" is widely and freely used in scientific literature yet it is not well defined (Meyer 2000:8). Generally it is seen as part of evaluation research which involves both research and action. Carr (2006:425) argues that action research is "nothing other than a modern manifestation of the pre-modern tradition of practical philosophy through which our understanding of the study of practice was originally articulated and expressed". It is also not easy to define the concept 'action research'. As Waterman, Tillen, Dickson and De Koning (2001:11) state: …"an embracing definition of action research remains elusive and existing definitions tend to focus on the description of characteristics" (Waterman, Tillen, Dickson and De Koning (2001:11). Most definitions in the literature mention the following features of action research: problem-focused, context- specific, democratic, participative, practical, evaluative action and change orientated; dynamic, cyclic, critical and reflexive.

It's democratic/participative nature emphasises the different levels of equality between researcher and research participant(s) (Waterman, Tillen, Dickson and De Koning 2001; 11–12; Reason 1994; Wadsworth 2001; Beresford 1992 and Burns, Hambleton and Hoggett 1994). Therefore as Eriksson and Kovalainen (2008:196) emphasises the core driving force of action research is active participation of both the researcher and the participants as well as improvement of the social situation under study.

Action research bridges the theory-practice divide (Elliot 1991:69; Patton 1990:149; and Carr and Kemmis 1986:28). Fuller and Petch (1995) relate to this feature of action research by referring to the practitioner researcher. According to Johnston (2005:60), the action taken should bring about improvement in the situation and the research done should determine if it does. Action research is ideally suited to bridge the gap between basic and applied research or differently stated between theory, practice and research (Avison, Lau, Myers, and Nielsen 1999:94).

"For action researchers, theory informs practice, practice refines theory, in a continuous transformation. In any setting, people's actions are based on implicitly held assumptions, theories and hypotheses, and with every observed result, theoretical knowledge is enhanced. The two are intertwined aspects of a single change process. It is up to the researchers to make explicit the theoretical justifications for the actions, and to question the bases of those justifications. The ensuing practical applications that follow are subjected to further analysis, in a transformative cycle that continuously alternates emphasis between theory and practice" (O'Brien 2001 Internet Source).

There are various perceptions regarding the role of action research as a vehicle for change. On one side of the continuum action research is regarded as a relatively powerful medium for change (Baum 1998:186; Parry, Gnich and Platt 2001:217). Parry, Gnich and Platt (2001:217) point out the inability of positivist research approaches to bring about change in the social problems confronting us and firmly believe that action research can bring about more effective change. On the other side of the continuum there are those that have a more sceptical view of the potential of action research to bring about significant change in policy and practice (Hirschon Weiss and Wittrock 1991; Whitelaw and Williams 1994; Beresford 1992; De Jong 2000:55; Hart and Bond 2000:101; McKeganey 2000:14 and Fazey 2000:17).

One definition that incorporates all the above characteristics, except empowerment, is that described by Reason and Bradbury (2001:1) as: "…a participatory, democratic process concerned with developing practical knowledge in the pursuit of worthwhile human purposes . . . It seeks to bring together action and reflection, theory and practice, in participation with others, in the pursuit of practical solutions to issues of pressing concern to people, and more generally the flourishing of individual persons and their communities". To provide a more comprehensive understanding of action research this definition should be extended to include the empowerment features of action research" (Waterman,Tillen, Dickson and De Koning 2001:11).

The empowerment process is further alluded to by Waterman,Tillen, Dickson and De Koning (2001) who state that action research is also "…educative and empowering involving a dynamic approach in which problem identification, planning, action and evaluation are interlinked. Knowledge may be advanced through reflection and research. Theory may be generated and refined, and its general application explored through the cycles of the action research process" (Waterman,Tillen, Dickson and De Koning 2001:11).

Grant (2007:272) adds the following dimension to our understanding of action research by stressing that the interaction between researcher and participants involves multiple levels of understanding. On the one hand the researcher(s) reflect on and interact with the developing process and their own development. On the other hand their action research also has a social dimension–the research takes place in real-world situations, and aims to solve real problems.

PRINCIPLES OF ACTION RESEARCH

From the above description of action research specific principles can be identified.

Newton and Burgess (2008:26) suggest that the principles of action research should be simplified to measure only three criteria namely: Whether the study is knowledge generating; whether it is practical (improvement of practice); and whether it is emancipatory knowledge.

A simplified version of principles on which action research rests is that of Waterman, Tillen, Dickson and De Koning (2001:12) who emphasise that action research must always be critiqued on two inextricably linked features, namely a cyclic process and participation ranging from cooperation to collective action.

According to Myers (2000:8) the following principles are incorporated in most definitions of action research:

- Participation and collaboration.
- Democracy.
- Contribution to both social science and practice.

Waterman, Tillen, Dickson, and De Koning (2001:11) elaborate on these principles by adding the following:

- Action research has a learning base.
- It is problem focused.
- Change through action and improvement is an integral part of this approach.
- It follows a cyclic process.

These principles focus on Canonical Action Research (CAR) (Davison, Martinsons and Kock 2004). Iivari and Venable (2009:4) identified similar principles to those above though they added the principle of reflection. Although difficult to assess it should be noted that "critical reflection" or reflexivity is today seen as the core of the cyclical action research process (Dick 1998 in Auriacombe 2013:72). Reflexivity could therefore be regarded as a form of ongoing analysis where the researcher moves beyond the descriptive level of knowledge by making meaning of the assumptions underlying the analysis. The researcher therefore uses a critical reflexive process to develop new knowledge and direction to act upon. Therefore knowledge is informed by practice, and practice is informed by knowledge, in an ongoing cyclical process (O'Brien 2001 Internet Source). As Dick (1998 in Auriacombe 2013:73) states: "… the critical reflection is as important as the action" and action research "…pursues the dual outcomes of action (or in other words, change) and research (in other words, understanding)".

The above principles of learning through reflection and change through action and thus, the improvement of the situation, aim to ensure that both researcher and the client examine what they have learned in an explicit, systematic and critical manner. This principle could be regarded as the core of the action research process and provides us with a more comprehensive understanding of the concept 'action research'.

Rapoport (1970) added the principle of the researcher-client agreement and cooperation and Susman and Evered (1978) added the principle of the cyclical process and the principle of theory and a theoretical framework. The principle of theory and a theoretical framework means that all action research starts with some theory which is further developed in the research process.

When it comes to the measurement of the quality of action research studies, the above principles tend to complicate our judgement of whether these criteria were met or not. Anderson and Herr (1999:16) propose that validity depends on the type of action research namely outcome, process, democratic, catalytic, and dialogic validities:

- Outcome validity refers to the extent to which the outcomes of the research match the intended purposes of the research.
- Process validity is concerned with effectiveness of the research approach in addressing the research problem.
- Democratic validity is concerned with "the extent to which research is done in collaboration with stakeholders.
- Catalytic validity refers to the ability of the research process to deepen the understanding of the participants, and empower them to take action.
- Dialogic validity means that researchers participate in critical and reflective dialogue with practitioners and stakeholders.

TYPOLOGIES OF ACTION RESEARCH

Several typologies have been devised in an effort to formally classify the various theoretical approaches to action research found in the literature. The above principles of action research form an inherent part of these typologies, for example level of participation, research methods and topic.

According to Waterman, Tillen, Dickson and De Koning (2001:11) one of the most well-known typologies based on modes of participation is that of Cornwall (1996). Table 1 presents the six different types of participation listed by Cornwall (1996).

Table 1: Forms of Action Research

• **Co-option:** where token representatives are chosen but have no real input or power in the research process. • **Compliance:** where outsiders decide the research agenda and direct the process, with tasks assigned to participants with incentives by the researchers. • **Consultation:** where local opinions are asked for but outside researchers conduct the work and decide on a course of action. • **Cooperation:** where local people/stakeholders work together.	• Together with outside researchers to determine priorities, with responsibility remaining with outsiders for directing the process. • Co-learning – where local people/stakeholders and outsiders share their knowledge, to create new understanding and work together to form action plans, with outsider facilitation. • Collective action – where local people set their own agenda and mobilise to carry it out in the absence of outside initiators and facilitators.

Source: (Adapted from Cornwall 1996)

Iivari and Venable (2009:4) identify four types of action research that coincides with that of Myers (2000:60–62):

- Action research focusing on change and reflection.
- Action science trying to resolve conflicts.
- Espoused and applied theories.
- Participatory action research emphasising participant collaboration.
- Action learning for programmed instruction and experiential learning.

The above typologies also correspond with that of Kemmis and McTaggart (2005:560–562). They however place more emphasis on the use of the action research approach by different professions such as teachers, in what they call classroom action research aimed at improving classroom performance, and industrial action research, aimed at improving organisational effectiveness. They also add action learning and soft system approaches to the typology of action research and thus increase our understanding of the dynamics of collaborative learning in action research (Kemmis and Mc Taggart 2005:560–562).

Kemmis and McTaggart (2005:560) identify eight key features. These are:

- "A spiral of self-reflective cycles, in which participants reflect on the problem, plan a change, take action, reflect on the results, reflect, return to further planning and so on;
- A social process, typically undertaken in education and community development settings, in which people explore the relationships between individual and social worlds;
- Participation: people critically explore their own knowledge and interpretations (of themselves and their actions) and how this affects/constrains their sense of identity and agency;
- Practicality and collaboration: Participants examine their own social practices (such as patterns of interaction and social organisation) and seek ways to make these more equitable and satisfying;
- Emancipation: Participatory action research aims to free people from, or at least reduce the restrictions imposed by unjust social structures which limit self-development;
- A critical approach: People challenge limitations imposed on them through social media – such as oppressive language, discourse, ways of working or relating to others;
- Reflexivity: Participatory action research is dialectical – participants examine reality in order to change it; 'a process of learning by doing'; and
- Transformation of theory and practice: Neither is dominant. Participatory action research aims to develop each in relation to the other".

According to Eriksson and Kovalainen (2008:195) a different way of classifying action research is to do it according to the solutions strived for, e.g. practical, theoretical, policy, technical, participative or empowering. Similar to this Berg (2001:186) suggested that there are three modes of action research namely:

- Technical/scientific.
- Practical/collaborative.
- Emancipating/empowering/critical science.

Each mode has a specific goal. The goal of the scientific mode is to be based on a theoretical framework, test a particular intervention. The practical/collaborative mode seeks to improve practice and service delivery. The emancipating/empowering/critical science mode can assist practitioners in addressing fundamental problems. The modes suggested by Newton and Burgess (2008:21) correspond with those offered above namely:

- A knowledge-generating mode.
- Improvement of practice mode.
- An emancipatory/empowerment mode.

Myers (2000) presents one of the most elaborative typologies of action research. He distinguishes five types of action research namely:

- Positivist action research.
- Interpretative action research.
- Critical/pragmatic or realist action research.
- Participative action.
- Action science.

According to Eriksson and Kovalainen (2008:196) action research is a cyclic process that could be divided into distinct stages. Various authors distinguish different stages ranging from the two stages (collaborative analysis and collaborative change) of Baskerville and Myers (2004) to the more elaborate model of Susman and Evered (1978) involving problem identification or analysis, planning, implementation or action taking, evaluation, adaptation and again implementation (Myers 2000:57).

Action research brings about change via a cyclical process generally consisting of four recurring phases: planning, acting, observing and reflecting (Kemmis and McTaggart 2000: 11–14). Susman (1983) distinguishes five phases (Figure 1).

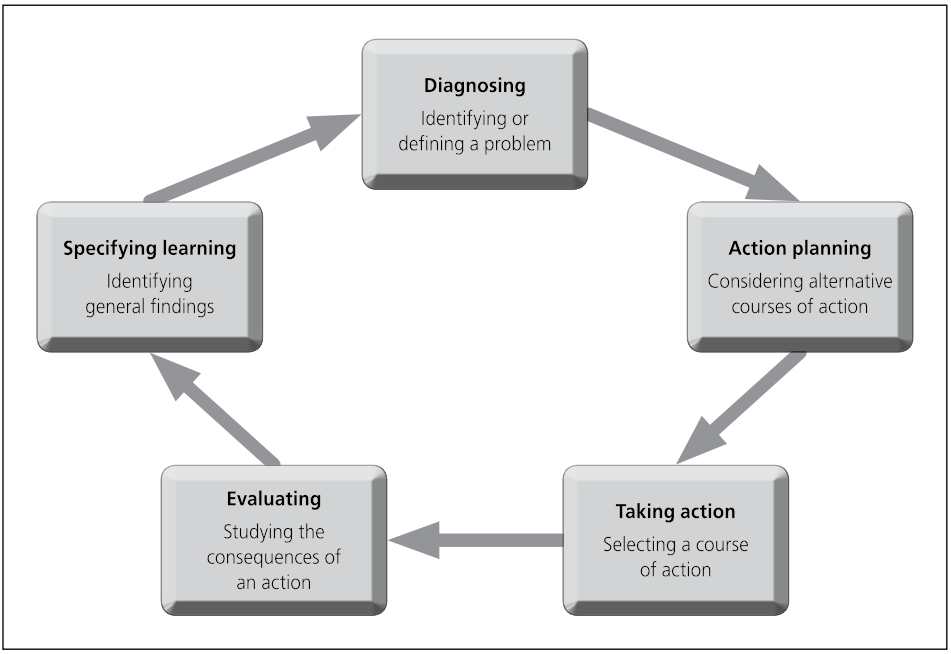
In the first phase a problem is identified and information is collected by the problem or issue to be addressed for a more detailed diagnosis. This is followed by the development and implementation of a plan of action. Then the data is analysed to find potential solutions and based on the analysis, one possible solution or intervention is implemented. Then data is collected and analysed/evaluated, and reflected upon to find out whether the outcomes were successful or not. The problem is re-evaluated and the cyclical process starts again and continues to evolve until the problem is resolved.

According to Eriksson and Kovalainen (2008:196) most of the action research models consist of a cyclical four-step process of planning, taking action, evaluating the action, leading to further planning. In this cyclic process action research produces different kinds of knowledge including practical and propositional. Theory may also be generated or refined (Waterman,Tillen, Dickson and De Koning 2001:11) however the most important contribution of action research is the involvement and improvement of real life problems (Eriksson and Kovalainen 2008:195).

Every aspect of social research revolves around an individual with his/her life and a life world within a social context (Bentz and Shapiro 1998:4). The difference with the action research approach is that equal weight is given to research, action and evaluation or reflection. As Glesne and Peshkin (1992:11) state: "The role of the researcher in action research is that of facilitator who works collaboratively to involve the stakeholders in every aspect of the research process".

Finally, initiating action researchers make no attempt to remain objective, but openly acknowledge their bias to the other participants. Therefore action research falls within the pragmatic, realist paradigm of the qualitative research realm (Eriksson and Kovalainen (2008:196). This means that as depicted in Table 2 both a quantitative and qualitative research and an abductive reasoning approach (mixed methods or mixed methodology) could be used. However not all scholars will agree to this. This dispute is responsible for the main problems of action research in today's practical set up.

Figure 1: Gerald Susman's (1983) Action Research Model



Source: (Susman 1983)

To gain a better understanding of action research and what theories are prominent in this approach it is necessary to understand it within a specific philosophical framework. It is also important to get clarity on how this philosophical approach impacts on the methodology and methods used in action research. It is therefore important to note that research is done from the life world perspective (ontology) of how the individual researcher believes that research should be done (epistemology).

In the literature (Patton 2008:34; Myers 2000:60) action research has been depicted as deductive–research proceeds from theory to evaluation; inductive–developing theory from evaluation research e.g. grounded theory; or abductive–follow a pragmatic, participatory, user focused approach.

As Hart and Bond (1995:152) state: "… the different approaches to action research are based on the specific philosophical position of the researcher (**positivistic**, **realistic** or **impressionistic**) and thus on his/her **ontologica**l and **epistemological** stance.

- Positivists believe that there is a real world or truth out there that can be discovered scientifically and studied objectively/independently;
- Realistic means that the real world could be discovered by means of a systematic, interactive methodological approach and theory is generated;
- Impressionistic means that there is no real world or truth out there only a narrative truth;
- Ontology is the researcher's ideas about the existence of and relationship between people, society and the world; and
- Epistemology is the knowledge or evidence of things in the social world. What are the principles and rules by which researchers decide whether and how social phenomena can be known, and how knowledge can be demonstrated.

Table 2: Participatory Action Research versus Traditional Research

Element	Participatory action research	Traditional research approaches
Problem identification	Done by community or group experiencing the problem	Often done by outside person/external researcher
Decisions about how the research will take place	Done by community	Usually done by the researcher
Methods of gathering information	Wide variety of methods are used (group meetings, workshops, surveys, use of drama and song, kitchen table meetings, storytelling	Usually interviews and questionnaires
	Focus on collective/group response	Focus on individual responses
	Adaptable to each community or situation	Usually very inflexible
Analysis and interpretation of data	Emphasis on group problem-solving and interpretation	Analysis done by external researcher often without consultation from the community/group
How results are used	Direct application where possible by community, planned action to push for change in the system	Not usually part of the process; a report is written to document findings with little ownership by people in the community
Feelings of community group involved	Fun, lots of involvement and sharing, learning, enlightened process, informal	Perpetuates status quo; often makes no difference in the lives of people in the community; they feel exploited; process is stiff

Source: (Bernard 2000)

These theoretical approaches also signify essential characteristics of action research and show how these differ according to the aims of the research and the way knowledge is produced".

As is clear from the above each of the types of action research is influenced by corresponding philosophical approaches. Explanatory research rests on the positivist tradition. The foundation of interpretive research is based on discovering the meaning of a social phenomenon, while critical research is mainly concerned with change and empowerment (Newton and Burgess 2008:21). "It follows that each action research mode makes somewhat different knowledge claims and therefore relies on somewhat different configurations of validity" (Newton and Burgess 2008:26).

These complex and evolutionary characteristics of action research make it difficult to assess the value and outcome of it from a positivistic point of view. In fact when action research is tested against the criteria of positivist science, such as objectivity, it does not meet scientific standards. Therefore the positivists question action research as an approach that is able to meet scientific criteria. However when measured against an alternative philosophical approach such as interpretivism, critical action research, participative action research and action science, its scientific merit becomes clear (Susman and Evered 1978).

Interpretative action research is where theory emerges from the action research process. Critical action research combining action research with the critical social theory of Habermas (1984), aims at improving practice (education system). Participative action research involves research participants in the research process with the aim of empowering them. Lastly, action science aims to understand the difference between the behaviour of practitioners and their beliefs or world view and resting on the assumption that there is a discrepancy between what people say and what they do (Myers 2000:60–62).

CLOSING THE GAP BETWEEN THEORY AND PRACTICE

"Action research is about working towards practical outcomes and about creating new forms of understanding, since action without reflection and understanding is blind, just as theory without action is meaningless" (Reason and Bradbury 2001:2). According to Susman (1983:582) the lack of success of action research to bridge the gap between practitioners and researchers is mainly because of "…a crisis of epistemology due to adoption of a positivist model of science". If a different philosophical approach such as pragmatism is used the hurdles raised by a positivist paradigm could be overcome. Susman (1983:582) also states that these hurdles include the following:

- Positivists believe that methods are value free.
- Research participants should be treated as objects of a study.
- The role of history is not important in the generation of knowledge.
- Knowledge of the inquirer can be excluded from an understanding of how knowledge is generated.

In contrast to this, supporters of action research believe that research should be (Susman and Evered 1978:589):

- Future oriented.
- Collaborative.
- Should bring about system development.
- Generate theory grounded in action.
- Be situational and contextual (Susman and Evered 1978:589).

According to Susman and Evered (1978:589) the above mentioned six characteristics of action research provide a corrective to the deficiencies of positivist science. These characteristics are representative of the methods and objectives of key developers and practitioners in the action research field.

It is clear from these characteristics that there is no short answer to the question "What is action research?" However, action research is generally seen as a democratic process concerned with the development of living knowledge to build theory and help people to address issues and challenges in their everyday lives and is grounded in a participatory world view (Reason and Bradbury 2001:2). In light of this, action research forges the strongest link with the realist, pragmatic paradigm of qualitative research and not with a positivistic one (Eriksson and Kovalainen 2008:195). In fact, from a positivistic point of view action research could be heavily criticised. Most of the criticisms centre around the role of the

researcher and the principle of objectivity, the methods used to generate knowledge and validity of the findings. Not only can action research not be done from an objective stance but participants are as involved as the researcher in the process of meaning making and action taking (Waterman, Tillen, Dickson and De Koning 2001:3).

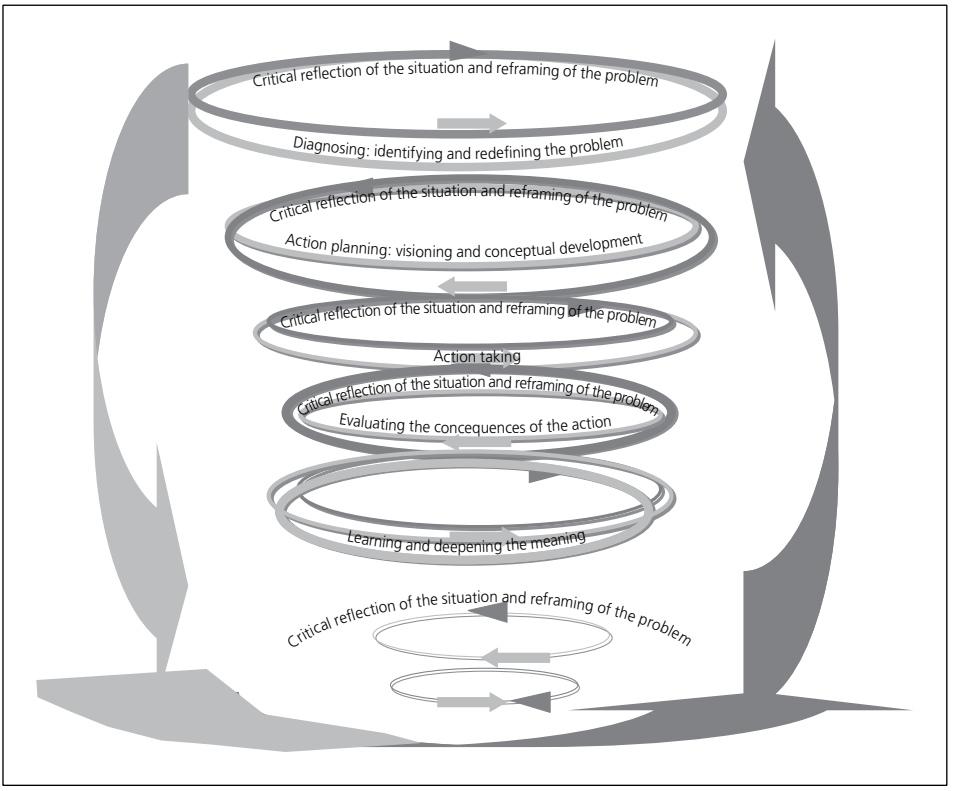
Emancipating from the "action turn" of Reason and Tolbert (in Kincheloe and McLaren 2005:314) the primary aim of action research today is not only to develop theory deductively or to contribute to knowledge in the field inductively but to take an abductive critical viewpoint aiming to provide a direct link between "…intellectual knowledge and moment-to-moment personal and social action, so that inquiry contributes directly to the flourishing of human persons, their communities, and eco systems" (Kincheloe and McLaren 2005:315). Thus the goal of action research is not only to assess, facilitate improvement and generate new knowledge and thus to contribute towards the goals of science, but also to improve accountability, performance and programme development as well as to provide opportunities for empowerment. In view of this action research should be seen as more than a research strategy for knowledge building. It could in fact be seen as an approach to the world that forges a link between practice and theory.

More specifically action research combines theory and practice through an iterative reflexive learning process involving researchers, practitioners and stakeholders. "Continuous learning (leading to people's increased ability to solve problems) is one of the key features of participatory research. It is therefore crucial that the research design allows for systematic, regular and critical exchange and reflection upon both the research process and the results (learning and outcomes). A central aspect should be the meaningful participation by the different stakeholders in these activities" (Pound, Snapp, McDougall and Braun 2002).

Therefore it has the potential to overcome the division between practice and theory (Waterman,Tillen, Dickson and De Koning 2001:2). Even more so since action research involves mutual sense making and co-learning it contributes to both theory and practice and has the ability to lead to collective action and develop knowledge for practical use (Waterman, Tillen, Dickson and De Koning 2001:12). Each level of iteration in the action research process, and more specifically critical reflection on knowledge production and how this new knowledge relates to older knowledge and theory adds to the development of theory, and practice (Avison, Lau, Myers, and Nielsen 1999:95). As is clear from Figure 2, action research has the ability to, through a process of reflection and knowledge building, develop theory and bring practical meaningful information that could lead to accountable solutions for practitioners struggling with everyday social problems (Waterman,Tillen, Dickson and De Koning 2001:13).

In the design and initial stages of institutional change, conceptual and competence development and reflective learning need to be woven together in an iterative way. The change process should generate (as well as draw on examples of) relevant first-hand experience so that those involved can internalise the need for change. The inclusion of 'real life' experiences is critical. Developing capacity in participatory research approaches, including mainstreaming gender concerns, goes faster when research teams are interacting and testing methods in the field. This 'real life' experience reinforces and internalises the concepts and associated practices. Furthermore, by working together as a team, members can draw upon each other's perceptions and skills. Systematic reviews of the work, led by a

Figure 2: The iterative knowledge building and reflexive process of Action Research



Source: (Based on Susman and Evered's 1978 cyclical process of action research)

facilitator in a supportive, innovative atmosphere, can help to build the competencies in an iterative way (Pound, Snapp, McDougall and Braun 2002).

IN CONCLUSION

In contrast to the traditional goal of evaluation namely to improve an intervention model, developmental evaluation or action research focuses on changing and adapting the intervention and thus has a developmental approach to the problems being addressed (Patton 2008:344). It is clear that to be more effective in addressing global problems such as poverty, disease etc., we need to cross the gap between theory and practice. Action research provides this opportunity for practitioners and researchers to work closely together to build a cumulative body of knowledge for social change.

BIBLIOGRAPHY

Ahmed, J. *Teaching of biological sciences*. New Delhi: PHI Learning Private Limited.

Anderson, G. and Herr, K. 1999. The New Paradigm Wars: Is There Room for Rigorous Practitioner Knowledge in Schools and Universities. *Educational Researcher,* 28(5):12–21.

Avison, D., Lau, F., Myers, M. and Nielsen, P.A. 1999. Action research. *Communications of the ACM*, 42(1):94–97.

Auriacombe, C.J. 2013. UJ Internal Handbook: Methodology for Honours, Masters and Doctoral students. Unpublished Study Manual. Johannesburg: University of Johannesburg.

Baskerville, R. and Myers, M.D. 2004. Special Issue on Action Research in Information Systems: Making IS Research Relevant to Practice-Foreword. *MIS Quarterly,* 28(3):329–335.

Baum, F. 1998. Measuring effectiveness in community-based health promotion. In Davies, J.K.. and Macdonald, G. (Eds.) 1998. *Quality, Evidence and Effectiveness in Health Promotion striving for certainties*. London: Routledge.

Bentz, V.M. and Shapiro, J.J. 1998. *Mindful Inquiry in Social Research.* Thousand Oaks, CA: Sage.

Berg, B.L. 2001. *Qualitative Research Methods for the Social Sciences*. Boston: Allyn and Bacon.

Bernard, W.T. 2000. Participatory research as Emancipatory method. Challenges and opportunities. In Burton, D.(Ed.). 2001. *Research training for social scientists*. London: Sage.

Beresford, P. 1992. Researching citizen involvement: a collaborative or colonising experience? In Barnes, M. and Wistow, G. (Eds.) 1992. *Researching User Involvement*. Leeds: University of Leeds Press.

Burns D., Hambleton, R. and Hoggett, P. 1994. *The Politics of Decentralisation: Revitalising Local Democracy*. London: MacMillan.

Carr, W. and Kemmis S. 1986. *On Becoming Critical: Education, Knowledge and Action Research.* London:Falmer Press.

Carr, W. 2006. Philosophy, Methodology and Action Research. *Journal of Philosophy of Education*, 40(4):421–435.

Churchman, C.W. 1979. *The Systems Approach and its Enemies*. New York: Basic Books.

Cornwall A. 1996. Towards participatory practice: participatory rural appraisal (PRA) and the participatory process. In De Koning, K. and Martin, M. (Eds.). *Participatory Research in Health*. London: ZenBooks.

Dadds, M. and Hart, S. 2001. *Doing Practitioner Research Differently*. London: Routledge/Falmer.

Davison, R.M., Martinsons, M.G. and Kock, N. 2004. Principles of canonical action research. *Information Systems Journal,* 14(1):65–86.

De Jong, W. 2000. The politics of rapid assessment and response. *International Journal of Drug Policy,*11(2):55–58.

Elliot, J. 1991. *Action Research for Educational Change*. Milton Keynes: OU Press.

Eriksson, P. and Kovalainen, A. 2008. *Qualitative methods in business research.* Thousand Oaks, CA: Sage.

Evered, K.T. 2006. Regionalism in the Middle East and case of Turkey. *Geographical Review*, 95(3):463–477.

Fazey, C. 2000. From kidnapping to corruption: some trials and tribulations in the implementation of rapid assessment studies. *International Journal of Drug Policy*, 11(2):169–179.

Ferguson, J. 2005. Bridging the gap between research and practice. *KM4D Journal*,

1(3):46–54.

Fuller, R. and Petch, A. 1995. *Practitioner Research: the reflexive social worker.* Milton Keynes: OU Press.

Glesne, C. and Peshkin, A. 1992. *Becoming qualitative researchers: An introduction.* White Plains, NY: Longman.

Grant, S. 2007. Learning through 'being' and 'doing'. *Action Research*, 5(3):265–274.

Habermas, J. 1984. *Theory of communicative action*. Boston:Beacon Press.

Hart, E. and Bond, M. 1995. *Action research for health and social care: A guide to practice*. Buckingham: Open University Press.

Hart, E. and Bond, M. 2000. Using action research. In Gomm, R. and Davies, C. (Eds.). *Using Evidence in Health and Social Care*. London: Sage/OU Press.

Hirschon Weiss, C. and Wittrock, B. 1991. Social Sciences and Modern States. In Wagner, P., Hirschon Weiss, C., Wittrock, B. and Wollmann, H. (Eds.). 1991. *Social Sciences and Modern States: National Experiences and Theoretical Crossroads*. Cambridge: Cambridge University Press.

Holian, R. and Coghlan, D. 2013. Ethical Issues and Role Duality in Insider Action Research: Challenges for Action Research Degree Programmes. *Systemic Practice and Action Research*, 26(5):399–415.

Iivari, J. and Venable, J. 2009. Action Research and Design Science Research – Seemingly similar but decisively dissimilar. 17th European Conference on Information Systems, Verona. Available at: **http://www.ecis2009.it/papers/ecis2009-0424.pdf**. (Accessed on 24 January 2013).

International Development Evaluation Association. Internet Source. Undated. Available at: **http://www.ideas-int.org/documents/file_list.cfm?DocsSubCatID=13** (Accessed on 16 January 2013).

Johnston, M. 2005. The lamp and the mirror: Action research and self studies in the

social studies. In Barton, K. (Ed.). 2005. *Research methods in social studies education: Contemporary issues and perspectives*. Greenwich, CT: Information Age Publishing.

Kemmis, S. and McTaggart, R. 1988. *The Action Research Reader*. Third edition. Victoria: Deakin University Press.

Kemmis, S. and McTaggart R. 2000. Participatory action research. In Denzin, N.K. and Lincoln, Y.S. (Eds.) .2000. *Handbook of Qualitative Researc*h. (2nd ed.) Thousand Oaks CA: Sage.

Kemmis, S. and McTaggart, R. 2005. Participatory action research: Communicative action and the public sphere. In Denzin, N.K. and Lincoln, Y.S. (Eds.). 2005. *Handbook of Qualitative Research.* (3rd ed.). Beverley Hills CA: Sage Publication.

Kincheloe, J. L. and McLaren, P. 2005. Rethinking critical theory and qualitative research. In Denzin, N.K. and Lincoln, Y.S. (Eds.). 2005. *The Sage Hand Book of Qualitative Research.* Thousand Oaks, CA: Sage Publications.

Lewin, K. 1946. Action Research and Minority Problems. *Journal of Social Issues*, 2(4):34–46.

Meyer, J. 2000. Using qualitative methods in health related action research. *British Medical Journal*, 320:178–181.

McKay, J. Marshall, P. 2001. The dual imperatives of action research. *Information Technology and People*, 14(1):46–59.

Midgley, K**.** 2006. Pre-registration student nurses' perception of the hospital-learning environment during clinical placements. *Nurse Education Today*, 26(4):338–345.

Myers, M. 2000. Qualitative research and the generalizability question: Standing firm with Proteus. *The Qualitative Report.* 4(3/4). March 2000. Available at: h**ttp:www.nova.edu/ssss/QR/QR4-3/myers.html**. (Accessed on 30 January 2007).

Newton, P. and Burgess, D. 2008. Exploring types of educational action research: Implications for research validity. *International Journal of Qualitative Methods,* 7(4):18–30.

O'Brien, R. 2001. An Overview of the Methodological Approach of Action Research. In Richardson, R. (Ed.). 2001. *Theory and Practice of Action.* Available at: **http://www.web.ca/~robrien/papers/arfinal.html** (Accessed on 15 September 2013).

Parry, O., Gnich, W. and Platt, S. 2001. Principles in practice: reflections on a 'post positivist' approach to evaluation research. *Health Education Research*, 16:215–226.

Patton, M.Q. 1990. *Qualitative evaluation and research methods*. Beverly Hills, CA: SAGE Publications.

Patton, M.Q. 2008. *Utilization-Focused Evaluation*. Beverly Hills, CA:SAGE Publications.

Pound, B., Snapp, S. McDougal, C. and Braun, A. 2002. Managing Natural Resources for Sustainable Livelihoods. Available at: **http://www.idrc.ca/fr/ev-43437-201-1-DO_TOPIC.html** (Accessed on 23 June 2014).

Rapoport, R.N. 1970. Three Dilemmas in Action Research. *Human Relations*. 23(6):499–513.

Reason, P. 1994. Human inquiry as discipline and practice. In Reason, P. (Ed.). 1994. *Participation in Human inquiry*. London: SAGE Publications.

Reason, P., and Bradbury, H. 2001. *Introduction: Inquiry and participation in search of a world worthy of human aspiration: Handbook of action research*. London: SAGE Publications.

Rovio, E., Arvinen-Barrow, M., Weigand, D.A., Eskola, J. and Lintunen, T. 2012. Using Team Building Methods with an Ice Hockey Team: An Action Research Case Study. *The Sports Psychologist*, 26:584–603.

Susman, G.I. 1983. Action Research: A Sociotechnical systems perspective. In Morgan, G. 1983. *Beyond Method: Strategies for Social Science Research*. London: SAGE Publications.

Susman, G., and Evered, R.1978. *An assessment of the scientific merits of action research*. London: SAGE Publications.

Wadsworth, Y. 2001. Becoming responsive–and some consequences for evaluation as dialogue across distance. *New Directions for Evaluation*, 92:45–58.

Waterman, H., Tillen, D., Dickson, R., and De Koning, K. 2001. Action research: a systematic review and guidance for assessment. *Health Technology Assessment*. 5(23):1–166.

Whitelaw, A., and Williams, J. 1994. Relating health education research to health policy. *Health education research*, 9(4):519–526.

Winter, R., and Munn-Giddings, C. 2001. *A Handbook for Action Research in Health and Social Care*. London: Routledge.

AUTHOR'S CONTACT DETAILS

Prof C J Auriacombe
Director: Centre for Public Management and Governance
Department of Public Management and Governance
Faculty of Management
University of Johannesburg
Auckland Park
Email: **christellea@uj.ac.za**
Tel: 011 559 2385
Cell: 083 463 3646