A Reflection on the Use of Action Research in a Major Change Project

John Molineux Australian Public Service, AUS

The problematic use of action research in the context of a large organizational change project is explored. The paper uses a systemic approach to identify and discuss issues around participation, reflection and the role of an insider as the action researcher. Recommendations are given in relation to future projects.

Introduction

This paper reflects on my use of action research as a change methodology at a large Australian government agency. The research included my direct participation in the design and implementation of a major cultural change project. A number of issues arose out of a systemic reflection on the assumptions,

A number of issues arose out of a systemic reflection on the assumptions, processes and outcomes of the project. One of these was around the difficulty of using action research in a large organisational change project. This is particularly true due to its emphasis on participation, which is inevitably time consuming, and therefore makes the methodology problematic in the context of change in a large organisation. In addition, there were some significant issues related to the reflection processes of action research in understanding the whole system that the project was working within. Finally, the role of an insider working as an action researcher raised further issues.

Arising out of the systemic understanding of this project, the paper includes a number of recommendations about the use of action research for future large change projects.

Action research in business

The nature of action research (AR) in business is represented in texts as an adaptation of the original form of action research to organisation development, where the major emphasis is on planned change.

The common use of action research as a participatory approach to change was used by many organisational development practitioners in the 1970s and 1980s. French and Bell (1990:108) even claim that the "organisation development process is basically an action research program in an organisation designed to improve the functioning of that organisation". They also outline many successful action research interventions over several decades. Also, Burnes (2000:270) notes that "action research has enjoyed a large following over the years". Since then, organisations have continued to use participatory cyclical processes, but have not necessarily labelled them as 'action research'.

An action research cycle is represented in Figure 1 (Coghlan and Brannick, 2001). In this model, four phases of action research are noted, and continue in a repetitive cycle of learning and improvement, which Waddell et al (2004:34) note

"may lead to rediagnosis and new action". Coghlan and Brannick (2001:19) see the cycle continuing in a series or "spiral of action research cycles".

Many organisations use an action research approach to change management without labelling it as action research. This is because they find that a methodology that links research, action and participation in a cyclical approach as useful. For example, the large action research change program in which I was involved (Molineux, 2005) was never labelled 'action research' within the organisation. The methodology, and my intent in using it, was only known by a small group involved in managing the implementation of the change project. The intent of this implementation group was to use participative techniques in a systemic understanding of change using strategic human resource management. Action research is the methodology that fits in well with not only participation, but also with an understanding of the complex systems involved in implementing a major organisational change project. Chisholm (2001:324) notes that action research "attempts to generate knowledge of a system, while, at the same time, trying to change or develop it" and "attempts to contribute to general knowledge about systems and the dynamics of changing them".

Its usefulness in a business context such as this is because of its application of research to practical situations. This practicality is recognized as a problem-solving ability by Gaventa and Cornwall (2001:75), who state that action research "focuses first on problem-solving, and more secondarily on the knowledge generated from the process", generating "knowledge which will lead to improvement, usually...organisational improvement or for the solution of practical problems". Also, Dick (2002:162) notes it is beneficial in situations "with highly uncertain outcomes" as action research allows time to "build enough understanding to decide which methodology and methods best suited" the research situation and questions. He adds that "action research offers substantial flexibility and responsiveness to a complex situation", so is "particularly useful...for others who need responsiveness to complex situations – people such as managers or professionals". Avison et al (2001:44) note that "no other research approach has the power to add to the body of knowledge and deal with the practical concerns of people in such a positive manner".

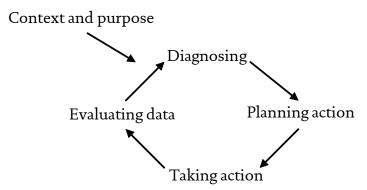


Figure 1 The action research cycle (Coghlan and Brannick, 2001:17)

This leads to my first recommendation, which is that action research is an excellent approach to use by organisations that desire to implement change in a complex and dynamic environment.

The importance of reflective cycles in action research

effection is a critical component of action research and is an integral part of the action research cycles. Greenwood and Levin (1998:115) state that "doing AR means engaging in a process of mutual action and reflection". They add that action research practitioners "must continually reflect on experiences from the field, seeking what is necessary to keep a change process moving and tracking what is being learned". Its importance is outlined by Coghlan and Brannick (2001:19), who note that:

"It is the dynamic of this reflection cycle that incorporates the learning process of the action research cycle and enables action research to be more than everyday problem solving."

Regular, systematic and critical reflection, according to Dick (2002:168) "enables you to develop the understanding that accrues to become your contribution to knowledge and, directly or indirectly, to action" and so is "an essential, iterative part of action research".

Martin (2001:202) also notes that reflection leads to "the uncovering of new interpretations and perspectives", which may "challenge prior beliefs and understandings and reframe what they know". Rose and Haynes (1999:214) stress the importance of reflection, particularly in complex organisations and suggest that "mature reflection has become crucial to progress, for change is unlikely to be simple to achieve, and the way forward is unlikely to be obvious to everyone concerned".

A reason for the reflection periods is noted by Greenwood and Levin (1998:97), who suggest that in action research "there are always more possible futures than appear at first to be open" and therefore effort needs to be put to "reanalyse the past", and to consider "what other, possibly more desirable, futures may be available".

Two processes of reflection are noted by Schön (1983, 1987). One of these is reflection-in-action, which is the ability to reflect on the process while engaging in the action itself. The other is reflection-on-action, which means working through experiences gained from actions after the fact. Both of these processes were evident in my research.

Reflection in my research was an interweaving process that arose as a deliberate part of the action research cycles, but also at other times triggered by events, ideas or quiet times. In this research, Checkland's (1985) FMA model was used as a tool for deep reflection and rethinking about the implications of unexpected action that arose during the conduct of the action research. This occurred between Phases 1 and 2, and between Phases 2 and 3 of my research. The reflection cycles in the process of this research and my own reflexivity led to new thinking about strategic human resource management and about the relevance of the theory of punctuated equilibrium to the research problem. In my research, reflection was essential and

resulted in new understandings of the application of theory in the field, and on the methodologies used.

Checkland and Holwell (1998a:13) state that "any research in any mode may be thought of as entailing the elements shown [in the FMA model]". This is represented in Figure 2. Checkland (1985:758) notes that the FMA model "is a very general model of the organised use of rational thought". Checkland and Holwell (1998a:13) describe it as:

"Particular linked ideas F are used in a methodology M to investigate an area of interest A. Using the methodology may then teach us not only about A but also about the adequacy of F and M."

The importance of this in action research, Checkland and Holwell (1998a:13) note, is that a "change to or modification of F, M, and even A has to be expected in action research".

They believe that the "susceptibility to change F, M, and A in research in which the researcher becomes involved in the flux of real-world social situations" (p.13) implies an essential need to "declare in advance the elements F M A" (p.14), that is "the intellectual structure which will lead to findings and research lessons being recognized as such." Changing situations, then, are likely to test "the adequacy of F and M and the appropriateness of A" (p.14).

In action research, Checkland and Holwell (1998a:13) state the declared framework is in the sense of "research themes within which lessons can be sought", and the researcher "enters the 'social practice' of a real-world situation in which the themes are relevant and becomes involved as both participant and researcher". Reflection of experience on the declared F and M "may require some rethinking of earlier phases—and again, it is the declared intellectual framework of F and M which allows this to be done coherently" (p.14). Checkland and Holwell (1998b:25) note that the reflection "can yield findings of various kinds, such as learning about F, M, A, or about the research themes; or new themes may be defined as a result of the experience".

I found that this approach to refection was holistic and systemic and yielded significant benefit in my research. In the project, the framework of ideas was stated in a research proposition. However, my reflection on evidence from the applied action area indicated that the framework of ideas required some adjustment. At the end of Phase 1 of the action research, noted in Figure 3, the cultural change implementation projects were abolished and I needed to reflect on why such important and successful change projects were terminated after senior management of the organisation had so strongly supported them. I was forced to rethink the original framework of ideas and methodology, as the area of action was bringing up new and unexpected information. It was during this time that I discovered that the organisation was the subject of macro-cycles, in accordance with the theory of punctuated equilibrium. Subsequently, I re-thought the framework and the methodology of the research project and generated new insights.

Included in the model at Figure 2 are Mezirow's (1991) reflection types. Mezirow notes that transformative learning occurs when fundamental mental

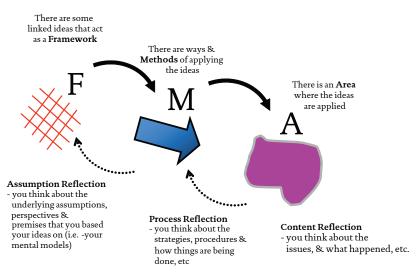


Figure 2 Checkland-Mezirow template (Sarah et al, 2002).

frameworks are questioned and revised, and in action research such reflection leads to the uncovering of new interpretations and perspectives. Three types of reflection are noted: *Content reflection* examines the issues and events in the area of action (*the what*); *Process reflection* examines the methods and processes used (*the how*); and *assumption reflection* examines the underlying ideas and mental models (*the why*). I used these three types of reflection in reflecting on the action research at the conclusion of Phase 1.

In my research, there were three major phases of the action research and a total of ten cycles, which are represented in Figure 3. The cyclical model of action research used consisted of the four elements: *Evaluate*; *Reflect*; *Design Action*; and *Take Action*. In Phase One, the cycle was repeated six times, with each cycle taking around three or four months to complete, although the cycles tended to overlap at times.

Phase One extended for 25 months, which was the bulk of the time involved. It commenced with the Agency Executive's decision to approve the change project, so implementation action could commence. I was a key member of both the design team for the change project (for eight months prior to implementation) and the implementation team. A large number of projects were set up to implement it, and I was involved in coordinating and guiding these projects.

The change projects commenced late in 1999 and operated for 18 months before being terminated in June 2001. Many of these projects were fully or partly implemented by June 2001, and the outcomes from the projects contributed to a shift in the organisation's culture. The reasons for the termination of the projects, along with discoveries about the macro-cycles of government influencing the decision to terminate, were noted by Molineux and Haslett (2002). The discoveries relating to the macro-cycles were a major finding arising from the reflection process used through this research.

The second phase lasted a much shorter period, for nine months. In this

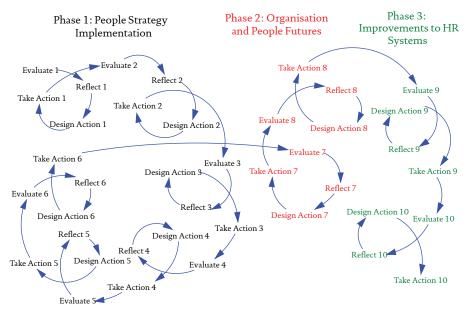


Figure 3 A representation of action research phases and cycles in a major change project (Molineux, 2005).

phase, I was a key member of the Organisation and People Futures team. This team was involved in designing new HR strategies for the Agency, as well as rethinking some of the original ideas of the change project, based on extended research in HR.

Phase Three lasted ten months. During the third phase, I was involved in two different projects that were implementing improvements to the HR systems of the Agency. These activities arose from the original work of the cultural change team, and data collection ceased twelve months after completion of the third phase of the project.

I was able to transfer the action research to other HR improvement projects, following the abolition of the Organisation and People Futures team. The first of these projects resulted in the ninth cycle in this research, and involved work originally commenced in the cultural change project. The second project in Phase Three involved the redesign of the Agency's Performance system using Soft Systems Methodology.

I was able to continue forms of action research following the abolition of the projects. Through undertaking these systemic reflection processes, I understood that I was able to continue research in different forms, facing setbacks and dealing with real world problems, whilst working in a system where his control was limited. This leads to a key learning and recommendation arising from this work in using systemic reflection processes and in trusting the systemic view for the discovery of answers to problems.

The problematic nature of participation

Participation is a fundamental principle of action research. For example, West and Stansfield (2001:266) state that "Attention to the notion of collaboration is vital in action research". Also, Reason and Bradbury (2001:2) note that action research:

"...is only possible with, for and by persons and communities, ideally involving all stakeholders both in the questioning and sensemaking that informs the research, and in the action which is its focus."

Greenwood and Levin (1998) discuss the need to achieve a balance in action research of three elements: research, participation and action. The process of generating knowledge through participation is reinforced by Brulin (2001:441), who notes that knowledge "that aspires to…be of practical use has to be developed jointly with the users of the knowledge", so "researchers have to form knowledge in interactive relationships with practitioners". In another commentary, Dick (2002:164) states that "there is a spectrum of participation from which one can choose" in action research, which "may be done with the style and level of participation that suits you [the action researcher] and your participants".

Whilst it is noted that participation is an essential part of action research, its use in large organisational change projects is somewhat problematic. This is due to the sheer numbers of people involved or impacted by major change in organisations. In an effort to become more participative, organisations have used techniques such as industrial democracy and representative boards to enhance participation in management. Change management, however, can be much more of a problem as it can be very emotive, and participative management techniques can invoke resistance rather than collaboration.

Systems theory offers some alternative approaches for participation in action research projects. I used one of these, Soft Systems Methodology (Checkland, 1981), in the course of the first and third phases of this research. I found that projects that used a co-design approach using SSM had much greater acceptance and success than projects that did not use SSM. This finding was confirmed through a number of interviews with project managers and the implementation team.

Also, I noted that there is a range of possibilities in relation to participation. In a large organisation, it is not possible to involve everyone as a collaborator in co-design of change programs. It is more likely that action researchers may involve people in different ways and at different times of the project.

A possible spectrum of action research participation is included as Table 1. The spectrum ranges from a researcher conducting a research project with one client or manager, to a fully collaborative action research project involving all relevant members of the organisation. It should be noted that one action research intervention may cut across several different forms of participation in different parts of its cycle. For example, an action researcher may be engaged by the CEO in the first instance, and in the first phase or cycle may be working only with a small team. Later, during subsequent cycles, the researcher may be designing interventions with representative groups, and later be implementing the change in a collaborative way

Type of action research participation	Examples of participants involved
Client-oriented action research intervention	Researcher and one client or manager
Manager-sponsored action research	Researcher and management team
Project-based action research	Researcher, managers and/or project team
Representative action research	Researcher, managers and representatives from parts of the organisation
Participative action research	Researcher, managers and relevant organisational members participating
Collaborative action research	Researcher, managers and relevant organisation members collaborating
Collaborative action research with	Researchers and clients working
co-researchers	jointly as co-researchers

 Table 1 Spectrum of action research participation in a large organisation

with organisational members.

In my research, the level of participation varied depending on the cycle and the situation context. At times it involved a small group, at other times it involved larger groups of participants, clients and others. The smaller group of participants consisted of a core group and several project leaders. These participants had a much higher level of participation and involvement than workshop participants and other stakeholders. In relation to the categories suggested in Table 1, the design stage of the change project would be categorised as project-based action research, as I worked with managers and a project team. The implementation stage of the project would be categorised as representative action research, where the implementation team worked with representatives from other parts of the organisation. The third phase of the research involved co-design with the collaboration of relevant organisation members, so this part of the research would be categorised as collaborative action research.

A recommendation from this reflection is that participation may be used in a variety of ways at different times in the life of an action research project.

The role of an insider in an action research project

In relation to the study of organisational culture, Schein (2000:xxvi) outlines three routes for a researcher:

"(a) infiltration, in which the participant observer becomes a true insider; (b) a formal research role agreed to by the insiders; and (c) a formal clinical role, in which the insiders ask the outsider to come into the organisation as a helper/consultant."

In my case, I would be considered as a 'true insider', but not in terms of 'infiltration', as I was already a member of the organisation. In another case, this type of insider role allowed De Guerre (2002:332) "insight and opportunity that could not occur for outsiders". He found that from the inside, he "had the privilege of seeing first hand the nature of new local, contextual, and immediately applied social science iteratively, leading to the generation of new knowledge". The insider role, however, has the potential to create a dilemma between organisational commitment and academic achievement and obligations. Coghlan and Brannick (2001:49) note that the organizational role "may demand total involvement and active commitment", whereas the research role may require "a more detached, more theoretic, objective and neutral observer position."

There are also specific issues for managers who undertake insider action research, such as in my research. Some of these issues are outlined by Coghlan (2001:50). He believes that "managers who undertake action research projects may be located anywhere in their organization's hierarchy", but their location in the hierarchy "has undoubted implications for what may be researched and how". For example, higher-level executives "may have more access" but may by excluded "from access to informal and grapevine networks". Middle- or lower-level managers "may find upward access difficult and be confined to their function or division". Other issues for the researcher that he notes include maintaining a "desired career path" (p.50) and "pre-understanding" (p.51) of knowledge, insights and experience of the organisation and various participants.

An advantage of being an insider is that the researcher is "already immersed in the organization" (Coghlan, 2001:51), so has built up an extensive understanding of how it works. He notes that this can also be a disadvantage, in that the researcher "may assume too much and not probe as deeply as if they were outsiders or ignorant of the situation". Other problems include role conflict and impacts on organisational relationships.

One of the most difficult problems Coghlan (2001:52) sees is the possibility of the research being considered political and "might even be considered subversive". It is therefore critical that the researcher carefully negotiate their access and use of organisational information. Coghlan (2001:53) therefore sees a need for manager-researchers "to be prepared to work the political system" and to "maintain their credibility as an effective driver of change and as an astute political player".

Many of these aspects outlined above were issues during my research. For example, I was able to access information that would not generally be available to an outsider. I also understood the context and history of the organisation in undertaking change, and had built relationships with key stakeholders. As I wished to maintain a career in the organisation, playing the political system was an important consideration. For myself, the intensity of the level of involvement in the project over three years and the subsequent abolition of the implementation projects did have an impact. An outsider could be more dispassionate. However, arising from this reflection, I recommend that it is important for the insider to become resilient and to work through setbacks and pitfalls to discover new understanding. I also recommend that action researchers carefully position themselves within the organisation.

Recommendations

I have noted a number of recommendations arising from the systemic use of reflection from my research:

1. Action research is suitable in complex and dynamic environments

Action research should be considered as a highly suitable methodology in undertaking large organisational change projects where the issues are complex and the environment is dynamic. This is because action research is naturally systemic, and can readily adapt to these environments.

2. Action researchers need to understand the systemic view

The action researcher should always remember to view the system at which they are working on a number of levels. The researcher should not just consider the project they are working on, but its ongoing context in the macro-system of the organization and its interaction with its environment. Understanding the impact and relationships at this level will help the researcher to implement a more effective approach to change management. It is recommended that the researcher actively advocate the systemic approach, particularly in meetings with organizational management, such as during the design and implementation of a project.

3. Action researchers can choose from a spectrum of participation

There are a range of possibilities in involving people in change programs. The action researcher needs to consider the stage of the project, the relationships with key stakeholders, and the appropriateness of involvement of organizational members at these project stages. The researcher can then work out which form of participation would be the most effective for each of these project stages. It is recommended that researchers consider the types of participation noted in the spectrum at Table 1.

4. Action researchers need to have reflexivity and flexibility

It is important for an action researcher to critically review their own action and impact on the organisation. The action researcher needs to consider that their intent and the outcome of the project may be quite different, so they need to be able to be responsive and flexible to deal with changing requirements on the run. This not only involves interaction with others, but a critical reflection and re-evaluation in the researcher's own approach and goals. FMA is recommended as an approach for reflection in this context.

5. Action researchers need to position themselves within the organisation

The action researcher needs to place themselves in a position within the organisation where they can most benefit themselves and bring about the desired change. The researcher must first understand their role and the political and social position they have within the organization. To achieve a place of influence that would benefit the project, the researcher needs to build close relationships with key clients, and gain sufficient political and positional support to enable effective contribution to the outcomes of the project. It is recommended that the researcher obtain organizational written agreement about their role and reporting relationships.

References

- Avison, D., Baskerville, R. and Myers, M. (2001). Controlling action research projects. *Information Technology & People*, 14 (1): 28-45. ISSN 09593845.
- Brulin, G. (2001). The Third Task of Universities or How to Get Universities to Serve their Communities! In P. Reason and H. Bradbury (Eds.), *Handbook of Action Research: Participative Inquiry and Practice*: 440-446. Sage, London. ISBN 076196645.
- Burnes, B. (2000). *Managing Change: A Strategic Approach to Organisational Dynamics*. Pearson Education, Harlow, UK. ISBN 027303376X.
- Checkland, P.B. (1981). Systems thinking, systems practice. Wiley, Chichester, UK. ISBN 0471986062.
- Checkland, P.B. (1985). From optimizing to learning: A development of systems thinking for the 1990s. *Journal of the Operational Research Society*, 36 (9): 757-767. ISSN 01605682.
- Checkland, P.B. and Holwell, S. (1998a). Action Research: Its Nature and Validity. *Systemic Practice and Action Research*, 11 (1): 9-21.
- Checkland, P.B. and Holwell, S. (1998b). *Information, Systems and Information Systems*. John Wiley & Sons, Chichester. ISBN 0471958204.
- Chisholm, R.F. (2001). Action Research to Develop an Interorganisational Network. In P. Reason and H. Bradbury (Eds.), *Handbook of Action Research: Participative Inquiry and Practice*: 324-332. Sage, London. ISBN 076196645.
- Coghlan, D. (2001). Insider Action Research Projects. *Management Learning*, 32 (1): 49-60. ISSN 13505076.
- Coghlan, D. and Brannick, T. (2001). *Doing Action Research in Your Own Organization*. Sage, London. ISBN 1412902479.
- De Guerre, D.W. (2002). Doing Action Research in One's Own Organization: An Ongoing Conversation Over Time. *Systemic Practice and Action Research*, 15 (4): 331-349. ISSN 1094429X.
- Dick, B. (2002). Postgraduate programs using action research. *The Learning Organization*, 9 (4): 159-170. ISSN 09696474.
- French, W.L. and Bell, C.H. (1990). Organization Development: Behavioural Science Interventions for Organization Improvement, 4th Ed. Prentice Hall, Englewood Cliffs, NJ. ISBN 013242231X.
- Gaventa, J. and Cornwall, A. (2001). Power and Knowledge. In P. Reason and H. Bradbury (Eds.), *Handbook of Action Research: Participative Inquiry and Practice*: 70-80. Sage, London. ISBN 076196645.
- Greenwood, D.J. and Levin, M. (1998). *Introduction to Action Research*. Sage, Thousand Oaks, CA. ISBN 1412925975.
- Martin, A.W. (2001). Large-group Processes as Action Research. In P. Reason and H. Bradbury (Eds.), *Handbook of Action Research: Participative Inquiry and Practice*: 200-208. Sage, London. ISBN 076196645.
- Mezirow, J. (1991). *Transformative Dimensions of Adult Learning*. Jossey-Bass, San Francisco, CA. ISBN 1555423396.
- Molineux, J. (2005). Systemic strategic human resource management enables organizational cultural change: An action research study. Unpublished PhD thesis, Monash University, Australia.
- Molineux, J. and Haslett, T. (2002). Working within organisational cycles a better way to implement action research projects in large organisations. *Systems Practice and Action Research*, 15 (6): 465-484.
- Reason, P. and Bradbury, H. (2001). *Handbook of Action Research: Participative Inquiry and Practice*. Sage, London. ISBN 076196645.
- Rose, J. and Haynes, M. (1999). A soft systems approach to the evaluation of complex

interventions in the public sector. *Journal of Applied Management Studies*, 8 (2): 199-216. ISSN 13600796.

- Sarah, R., Haslett, T., Molineux, J., Olsen, J., Stephens, J., Tepe, S. and Walker, B. (2002). Business Action Research in Practice—A Strategic Conversation About Conducting Action Research in Business Organizations. *Systemic Practice and Action Research*, 15 (6): 535-546. ISSN 1094429X.
- Schein, E.H. (2000). Sense and Nonsense about Culture and Climate. In N.M. Ashkanasy, C.P.M. Wilderom and M.F. Peterson (Eds.), *Handbook of Organizational Culture and Climate*: xxiii-xxx. Sage, Thousand Oaks, CA. ISBN 0761916024.
- Schön, D.A. (1983). *The Reflective Practitioner: How Professionals Think in Action*. Basic Books, New York. ISBN 1857423194.
- Schön, D.A. (1987). Educating the Reflective Practitioner: Toward a New Design for Teaching and Learning in the Professions. Jossey-Bass, San Francisco, CA. ISBN 1555422209.
- Waddell, D.M., Cummings, T.G. and Worley, C.G. (2004). Organisation Development and Change, 2nd Ed. Thomson, Melbourne, Vic. ISBN 0170111350.
- West, D. and Stansfield, M.H. (2001). Structuring Action and Reflection in Information: Systems Action Research Studies Using Checkland's FMA Model. *Systemic Practice and Action Research*, 14 (1): 251-281. ISSN 1094429X.

Before undertaking his doctoral studies, **John Molineux** had completed a Bachelor of Business, a Graduate Diploma in Management, and a Master of Management. John has worked for over three decades in the field of HR and is currently a human resource manager for a large Australian government agency. He completed his PhD in Management at Monash University. This involved applying his ideas around systemic human resource management in a major organisational cultural change program, using an action research methodology.