



**Monograph Series
No. 7**

**Thumbs Up for Action Research in Case
Studies from the Evaluative Study of Action
Research**

**Eileen Piggot-Irvine, Wendy Rowe
and Lesley Ferkins**

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Eileen Piggot-Irvine, Wendy Rowe and Lesley Ferkins

With thanks to the wider ESAR team:

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Deborah Zornes, Fiona Robinson

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Eileen has published six books, multiple book chapters, 70 refereed journal articles and presented too many keynotes etc. to count. Up until 2014, she was chief editor of the ALARA Monograph series and is currently an editor on four other journals.

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Abstract

A four-year, global, evaluative study of action research (ESAR) has sought to explore precursors, processes and impacts/outcomes of action research (AR) projects. This paper outlines the ESAR findings from six case studies designed to contribute to understanding of how AR works, and to deepen the recently reported mixed method (MM) findings from a widespread survey with 174 respondents. The previously published ESAR indicators were used as a guide for evaluation of the cases using interviews, a survey, documentary analysis, and Goal Attainment Scaling (GAS). In seeking to advance knowledge and understanding of the elements of AR that enhance outcomes and impact, considerable alignment with the MM survey findings was revealed. The results indicate that almost all the case projects exhibited strong AR elements associated with activity for precursors (focus clarification, engagement of key stakeholders, funding and support), processes (phased and planned yet flexible activity, data collection and analysis, ongoing collaboration, leadership and management), and outcomes/impacts (change outcomes, knowledge mobilisation, continuing action). Early and ongoing collaboration within the AR team and with stakeholders was most associated with effectiveness of projects to the extent that this element will be the entire focus of a further paper. An interesting finding also was a trend to MM data collection in projects. Overall, the findings considerably address a key aim of the ESAR, that is, to advance knowledge and understanding of the elements of AR that enhance outcomes and impact, including why or why not they have been effective.

Key Words

Action research, case studies, evaluation, precursors, processes, impacts/outcomes, mixed methods, knowledge mobilisation

Executive Summary

In 2013 a group of seven action researchers from around the world met to plan how action research (AR) projects could be evaluated. The group subsequently won a Canada national Social Science and Humanities Research Council (SSHRC) grant to allow us to meet and more deeply plan for what would become the evaluative study of action research (ESAR).

An early reconnaissance phase in the ESAR included establishing an AR project directory (which resulted in 195 projects globally) and conducting a literature review on the topics of: evaluation of AR; indicators for evaluation; and utilising a mixed method AR (MMAR) design i.e. the qualitative and quantitative data collection approach determined to match the rigour needed for such a wide-ranging study. Following the literature review, the next component of the reconnaissance phase was to establish research questions for the study and develop evaluation indicators relevant to AR. The indicators (falling under headings of precursors, processes and impacts/outcomes of AR projects) were subsequently opened to critique within the AR community. An overall MMAR framework, the Evaluative Action Research (EvAR) framework, was then designed for the entire study and guided the implementation phase data collection and analysis. An evaluation phase followed which included comprehensive reporting of findings utilising journal articles and presentations and on-going feedback from the AR community. The principles of MMAR, the EvAR, the three 'strands' of the MMAR in the ESAR, and background to the ESAR are all provided in the early sections of this monograph.

Although there were three 'strands' in the MMAR design of ESAR, this monograph reports on the findings of just Strand 2, a predominantly qualitative data collection strand. The Strand 2 findings from six case studies were designed to contribute to understanding of how AR works, and to deepen the recently reported (Robinson, Piggot-Irvine, Youngs & Cady, 2018) MMAR findings from a widespread global survey with 174 respondents. The previously published ESAR indicators framework (Piggot-Irvine, Rowe & Ferkins, 2015) was used as a guide for evaluation of the cases which had employed interviews, a survey, documentary analysis, and Goal Attainment Scaling (GAS) as data collection methods.

The discussion of findings from the case studies in this monograph is presented under the indicator headings of precursors, processes, outcomes/impacts and knowledge mobilisation. The precursor results indicate that all six case projects had a clear focus predominantly on improvement. For half of the cases that focus was established early in the preparatory phase of projects and for the other half it was more emergent as the project progressed. Early and ongoing collaboration with key stakeholders was strong in all but one case, and early funding and institutional support was considered to be crucial to the launch and sustainability of projects.

Process elements identified as important in almost all the cases included: establishment and ongoing implementation of strong collaborative and democratic processes; following a logical sequence/process of AR phases; flexibility and responsiveness; well-documented research methods for data collection and analysis with evidence of use of MM emerging; and use of findings for next AR phases. Strong management of the AR process was evident in all but one case – the case which had low collaborative elements in its preparatory phase.

Extensive impacts and outcomes were reported in the case projects. Five of the six cases had also established systems and processes for knowledge sharing and mobilisation, and positive feedback from stakeholders was strong. The weakest impacts and outcomes were reported in the case noted earlier which had low levels of collaborative activity.

There was remarkable similarity between the case study results and those of the broad global survey with 174 respondents (Strand 3 the MMAR design). Of particular interest in both sets of findings was the overall conclusion that action researchers could both adhere to the principles and phases of AR whilst also applying and valuing the unpredictability, and contextual and cultural specificity, of AR. The two sets of results also echoed the trend towards more rigorous data collection and mention of MMAR. A key factor linked to perceived 'effectiveness' in both Strands of the research was that of early and ongoing collaboration and democratic processes within the AR team and with stakeholders. Overall, the findings from the ESAR case studies have led us to confirm a 'thumbs up' to AR as a thriving, increasingly rigorous approach to research, which has extensive outcomes and impacts on communities.

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Introduction

The Evaluative Study of Action Research (ESAR) has been a large meta-evaluative study of multiple action research (AR) projects (Piggot-Irvine & Zornes, 2016). In the ESAR, the emphasis has been on a comprehensive exploration of how an extensive number (195) of globally located AR projects have met their espoused ideals around processes and change/transformation goals. The ESAR aimed to explore precursors, processes, outcomes and impacts of AR projects using indicators defined at the initial stage of the ESAR by the research team (see Piggot-Irvine, Rowe & Ferkins, 2015, for a summary).

This monograph is the companion to the report of a widespread survey component of data collection in the ESAR (Robinson, Piggot-Irvine, Youngs & Cady, 2018). The monograph findings are designed to provide more in-depth qualitative data sourced from six AR project case studies. Reporting of the findings is organised under headings that match the original indicators developed for the study, that is, precursors, processes, impacts and outcomes.

Given that previous papers have extensively covered features of AR and the ESAR, this monograph begins with a brief background only to these topics. An outline of the mixed method AR (MMAR) design for the ESAR overall is provided in order to locate the positioning of the case study findings which are a focus of this monograph. Case study generally as a methodology is discussed next, followed by case and participant selection. An outline of data collection methods (interviews, a long survey, Goal Attainment Scaling – GAS, and documentary analysis) employed within the case studies is then provided as introduction to the collective findings. Finally, an overall discussion, limitations and recommendations for further study are summarised.

Brief background to Action Research

AR is variably defined and utilised (see Piggot-Irvine et al., 2015). Just one example of the variability is illustrated in its description as a paradigm, a methodology and a method (Ferkins & Shilbury, 2010). Zuber-Skerritt (2011) encourages that we view AR as having an integration of theory and practice, research and development. Reason and Bradbury (2008) further summarise that AR falls within an emergent participatory worldview drawing from the interpretivist–constructivist research paradigm (Denzin & Lincoln, 2011).

Regardless of definition or description, AR has been employed within almost every context, country, sector and level (individual, team, organisation, community, and societal) and descriptions of elements supporting AR are common (see de Brúne et al., 2017; Liu & Wang, 2017; Piggot-Irvine, 2012; Rowe, Graf, Agger-Gupta, Piggot-Irvine & Harris, 2013; Snoeren, Niessen & Abma, 2012). Despite variations, AR almost

always includes intent of change and development (Coghlan & Shani, 2014). Putman and Rock (2017) suggest that such intentionality is important in AR.

Collaboration and engagement both within AR teams and with key stakeholders is considerably emphasised as outlined in Rowe et al., (2013). Early funding and institutional supports are also seen as crucial to the launch and sustainability of AR initiatives, as articulated by Minkler, Blackwell, Thompson & Tamir (2003). Good leadership and management of projects is another element reported as important in AR. We refer you to Zuber-Skerritt's (2011) writing on action leadership in AR associated with this element. In terms of impacts and outcomes of AR, we value Meyer's (2000) thinking that: "success of action research is not whether change can be positively demonstrated, but more what was learnt from the experience of trying to change practice" (p. 9). Outcomes include knowledge sharing and mobilisation so that enhanced continuing action occurs from projects.

Although AR typically follows phases such as preparation, reconnaissance, change/improvement, and evaluation, flexibility and responsiveness are also considered to be critical features by authors such as Somekh and Zeichner (2009) and Wicks, Reason and Bradbury (2008). Such flexibility is especially important in transformational change (Ackerman Anderson & Anderson, 2010). Flexibility, however, does not discount AR activity being informed via data collection (sometimes rigorous) and theory generation (Piggot-Irvine et al., 2015). An emerging trend in AR is the use of mixed methods (MM) in data collection, as shown in the works of authors such as Ivankova (2015), Marti (2015), Mayoh and Onwuegbuzie (2015), Pearce (2016), and Strambler and McKown (2013). We adopted a MM design in the ESAR but before discussing that design, we next briefly background the ESAR itself.

The ESAR

Over four years, the seven-strong international ESAR team has collaborated on the evaluation of AR. The ESAR has dual aims: To explore whether and how often the often-touted espousals of individual, community, organisational and/or societal impact are actually realised through a meta-level evaluation of AR projects from around the world; and to advance knowledge and understanding of the elements of AR that enhance outcomes and impact, including why or why not they have been effective (Piggot-Irvine et al., 2015). As outlined in Robinson et al. (2018), a companion article to this monograph, the aims were addressed through a multi-strand, meta-level MMAR design which has been consistently guided by a set of evaluation indicator domains covering preconditions/precursors for AR, AR processes and activities, and AR impacts/outcomes (Piggot-Irvine et al., 2015).

There were three key 'strands' of data collection in the MMAR design employed in the ESAR and detail of those strands is outlined in a later section. In summary, both qualitative and quantitative data collection has enabled us to triangulate and enhance

validity of findings. We have engaged in multiple method and cross method comparison where data have been integrated; an example of the synergistic typology (Tashakkori & Teddlie, 2010) which was partnership-based and a fully integrated design within the flexible (e.g. diverse methods) and pragmatic AR principles. We believe the MMAR design has enabled us to conduct robust analysis of data and report strong findings showing that AR around the globe is thriving in aspects of precursors, processes, impacts and outcomes. Overall, we consider that combining the qualitative and quantitative data allowed for a more holistic understanding of AR project participant perceptions.

This monograph reports on the case study findings from Strand 2 of our MMAR design. Because the ESAR overall employed MMAR, we will outline such a design in a little more detail next.

MMAR as design for the overall ESAR

The eclectically orientated (Mutch, 2009) MM research (MMR) approach generally has been extensively employed beyond the AR field and is seen to be located in the middle of the postpositivistic to constructivist continuum (Leech, Dellinger, Brannagan, & Tanaka, 2008). Ivankova, Creswell, and Stick (2006) note MMR as “integrating both quantitative and qualitative data . . . within a single study” (p. 3) and Creswell (2007) describes it as “research that best addresses the research problem” (p. 23). Combining quantitative and qualitative approaches within research has a long history (Rallis & Rossman, 2003) and it is increasingly being used in the social sciences, particularly in evaluation (Russ-Eft & Preskill, 2009) where traditionally quantitative surveys and syntheses of professional development literature have dominated (Guskey, 2000). The encouragement of combining qualitative and quantitative data however has been accompanied by rigorous debate about the compatibility of the non-dichotomous, non-purist, combination (Alise & Teddlie, 2010; Creswell & Plano Clark, 2007; Denzin, 2010; Onwuegbuzie & Combs, 2010). We refer you to Rossman and Wilson’s (1985) earlier writing summarising the debate surrounding the incompatibility thesis argument against ontological and epistemological assumptions being mixed.

The arguments for utilising MMR are usually based on the benefits of pragmatism. For example, the quantitative and qualitative data are seen to complement each other, robust analysis is considered to be enhanced via the use of triangulation, flexibility is enhanced (Johnson & Onwuegbuzie, 2004), and meaning is extended and clarified (Creswell & Plano Clark, 2007). Further, deepened understanding of perspectives can result. As Marti (2015) notes, “These designs commonly also address a quantitative dimension aimed at measuring social phenomena and a qualitative dimension aimed at understanding actors’ perspectives as a means of providing participants with valid and rich data and facilitating their ability to develop successful action strategies” (p. 178). Tashakkori and Teddlie (2010) suggest that qualitative and quantitative data can influence each other to create meta-inferences, integrated results, which can provide a

more comprehensive understanding of data. Ercikan and Roth (2006) indirectly offer that this non-purist approach also allows for greater focus on research questions and the collaboration of researchers with qualitative and quantitative expertise. The latter is important because MMR often necessitates large teams to cover the range of research skills required (Rallis & Rossman, 2003).

An extensive range of models and frameworks for conducting MMR generally have been developed. We refer you to the works of Creswell and Plano Clark (2007), Onwuegbuzie and Leech (2005), Tashakkori and Teddlie (2010), and Ivankova (2015) for a comprehensive overview of those generalised models. Tashakkori and Teddlie (2010) have comprehensively described the 'typologies' for MMR and it is the 'synergistic' typology that is particularly relevant for AR. It allows for the complexity of interconnecting decision-making around whether data are integrated with blending, multistrand, parallel, sequential, or multilevel variations. The authors describe the synergistic typology as a 'partnership-based fully integrated design' which creates opportunities for combining elements of the other typologies and allows for collaborative and stakeholder participatory approaches.

Regardless of the typology, the MMR design offers a choice of techniques/methods and subsequently requires decisions about the: weighting of quantitative and qualitative (lower case, e.g. qual, and upper case, e.g. QUAN, signalling weighting) data (prioritising); sequencing of data collection and analysis (implementation); and stages of mixing of the quantitative and qualitative data (integration). We note here though that the weighting between qualitative and quantitative data does not need to be equal in the MMR design.

There are overlaps between the synergistic MMR and AR. As Ivankova (2015) suggests, this more pragmatic MMR design and AR share principles of systemic inquiry (for a comprehensive discussion of this link see Piggot-Irvine, Ferkins & Cady, 2017), methodological triangulation to enhance validity, reflection, transformative intent, collaboration, inclusion of comprehensive information, a dialectical and cyclical orientation. It is the 'added-value' from the enhanced validity and richness of data that we consider to be most convincing in MMAR.

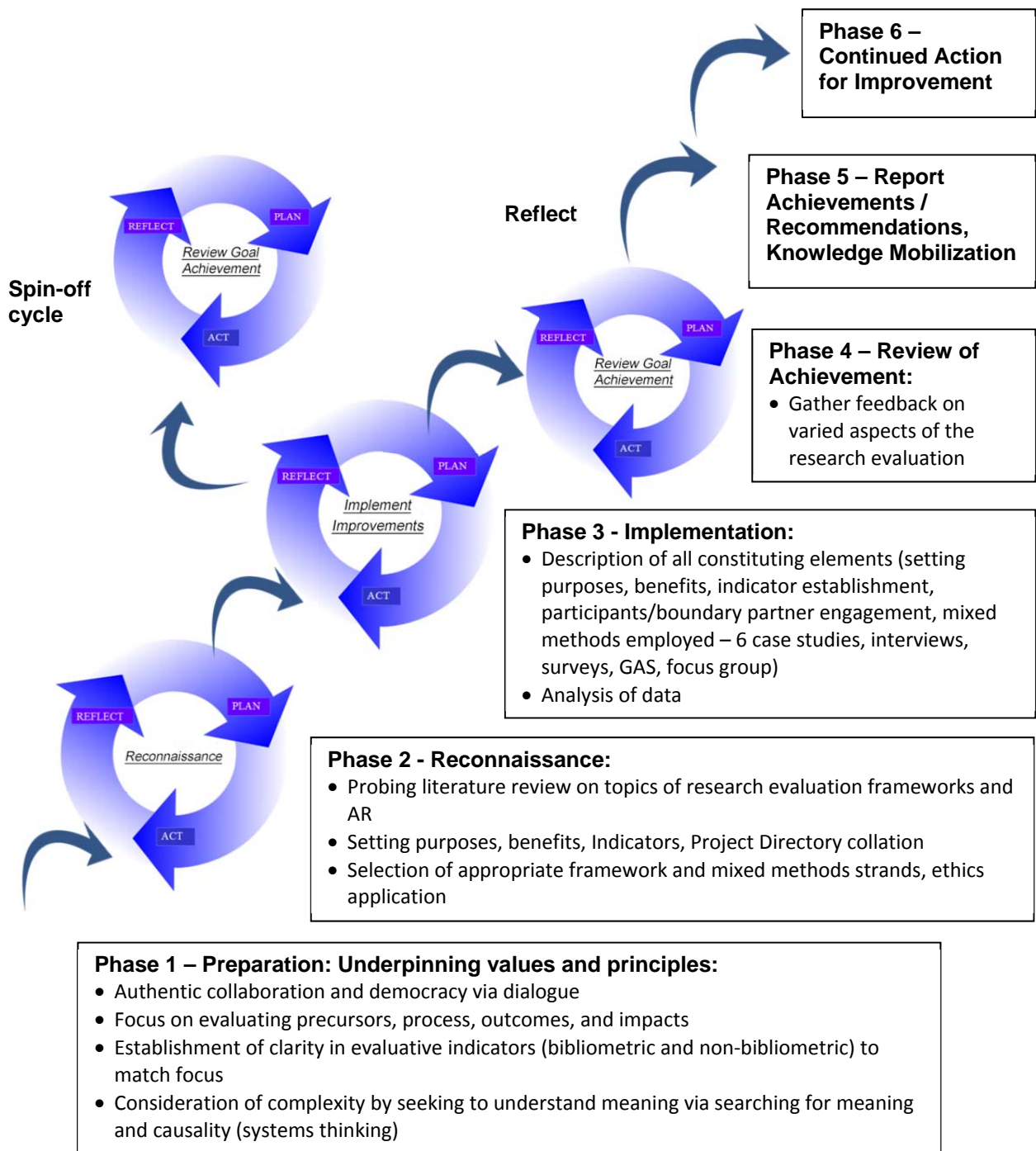
With the exception of a categorisation by Marti (2015) based on the intercept between participatory elements and quantitative methods and whether the two were sequential or embedded, there are few set templates for a MMAR study (Ivankova 2015). We think the lack of set templates is a positive feature, given the messy, unpredictable (Coghlan & Brannick, 2014), and pragmatic orientation of AR (Wicks, Reason & Bradbury, 2008). The pragmatic characteristics of AR offer flexibility and scope for customising a MMAR design to match the context. We believe that flexibility should not, however, create sloppy MMAR lacking validity. We think it is important to be planful about the sequencing, weighting and integration of qualitative and quantitative

methods. Our commitment to being planful is demonstrated in the way we established a MMAR framework early in our ESAR design.

The MMAR framework employed in the ESAR

Typically, in MMAR a diagram of some sort defines a framework for a study, with AR phases guiding the research inquiry (Ivankova 2015). In the ESAR, we created the Evaluative AR (EvAR) framework (Figure 1) to guide the meta-AR process i.e. employing MMAR to evaluate the precursors, processes, impacts and outcomes of

Figure 1: Evaluative Action Research (EvAR) Framework



(Adapted from Piggot-Irvine & Zornes, 2016)

global AR projects (Piggot-Irvine & Zornes, 2016). The EvAR, in effect, acted as our master plan with the principles and Lewin’s (1946) ‘moments’ (planning, acting and reflecting) of AR as essential elements. The core phases of AR outlined in the EvAR were based on the classic AR reconnaissance, implementation, evaluation, and continuing action cycles.

Of particular interest in this monograph is what happened specifically with the MM elements in the implementation phase of the EvAR. Table 1 elaborates the sequencing of the methods to show this specificity.

Table 1: ESAR data collection strands

Project Phase	Strands	Description	QUAL/qual or QUAN/quan
Development of Indicators	Strand 1	Indicator feedback	QUAL
Case Studies	Strand 2a	Interviews	QUAL
	Strand 2b	Long Survey	QUAL(Descriptive Quan)
	Strand 2c	GAS	Descriptive Quan
	Strand 2d	Document Analysis	QUAL
Short Survey	Strand 3	Short Survey Mix of categories, Likert scales and open-ended responses	QUAN(Qual)

The ESAR MMAR approach falls under a QUAL → QUAL + (Quan) → QUAN + (Qual) design within the *triangulation* and *convergence* typologies (Creswell & Plano Clark, 2007). We will unpack what that summary of the elements in Table 1 means. The first thing to note in is the use of the word of ‘strand’. That is the typical descriptor for each segment of the MM design. We followed Ivankova (2015) in our designation of weighting of data at each strand with capitalization of QUAN and QUAL (versus lower case Qual and Quan) showing greater weighting of a method. A plus sign (+) and/or arrow (→) indicate whether data collection or analysis occurred concurrently (+) or sequentially (→). For a more sophisticated outline you might also want to refer to Robinson, et al. (2018).

In the ESAR, in Strand 1 qualitative (QUAL) data only were collected linked to respondent feedback to the evaluation indicators we had developed. Sequential to that, in Strand 2, the focus of this monograph, six case studies were conducted with data collection methods including interviews, focus group, goal attainment scaling (GAS), a long (85-question) survey, and documentary analysis (see Robinson et al.,

2018). In Strand 2, QUAL again dominated but some low-level descriptive statistics (quan) allowed for percentage and mean calculations and the Cronbach alpha coefficient was used to check the survey tool Likert scale reliability. A Cronbach score of .78 showed good internal consistency of the scales. In Strand 3, QUAN dominated with qual support. In this Strand 3, the short survey (25 questions) issued to AR project leads from our Directory resulted in 174 responses. Correlation coefficients, standard deviations, means and percentages were all employed on the quantitative data in Strand 3. Pearson correlation values were also used to determine any degree of association between pairs of variables. Qualitative open-ended elements in all Strands provided scope for exploration and elaboration of patterns and linkages in the data. This monograph reports on the case study findings from Strand 2.

Case study as methodology

In case study methodology, a single unit analysis is based upon an in-depth examination that is both holistic and exhaustive, but which also retains the meaningful characteristics of realistic events (Bassey, 2007). Yazan (2016) observes that most usages of case study methodology fall into one of three prominent approaches which differ in epistemological assumptions about reality, that is, those of Yin (2013), Stake (1995), and Merriam (1998). We adopted a social constructive orientation to the project case studies, a perspective espoused by both Stake and Merriam. As Merriam (1998) notes: "The researcher brings a construction of reality to the research situation, which interacts with other people's constructions or interpretations of the phenomenon being studied" (p. 22).

Consistent with Merriam's notions, we defined an AR case as a bounded project that is defined by context, activities, and stakeholders engaged in pursuit of common goals or purpose. Stakeholders include the researchers, sponsors and participants in a change process. In earlier publications we have referred to these also as boundary partners, but for the sake of simplicity we will just use the term stakeholder in this monograph.

Merriam (1998) stipulates that a case study methodology includes a literature review, a theoretical framework, questions and sample selection, draws data from multiple sources and uses qualitative data collection methods such as interviews and small group discussion. In using interviews, she emphasises the importance of an interview guide, using semi-structured questions and probing for deeper explanations to elicit participant experiences, understanding and interpretations.

As already noted, in the ESAR, the case study research was carried out using a previously designed indicator framework based on AR theory (Piggot-Irvine et al., 2015). The overarching purpose was to elicit deep understanding of case participant experiences on how the AR projects unfolded from conception.

Case and participant selection

A purposive selection approach, as Wellington (2015) suggests, can be employed to choose participants who meet the criteria set out for research, and who are most likely to be able to answer the proposed research questions in depth. Additionally, as Adams, Khan, Raeside and White (2007) note, purposive selection can be used when there is a need to access participants with relative ease and in reasonably close proximity to the research team members.

In the ESAR, a database of potential AR projects was created and subsequently has been expanded as an AR directory of 195 projects. Authors of the identified AR published projects, who were both accessible and in close proximity to ESAR team members, were sent an email outlining the aims and background to the ESAR, criteria for the meta-evaluation, data collection methods to be employed, proposed knowledge distribution approaches, and an invitation to participate as a case study project. Through this purposive, invitational, approach, the leaders from six projects who agreed to participate were each subsequently asked to identify other key members of their project team and/or stakeholders impacted by the project. Informed consent was obtained from a total of 18 individuals from the six projects.

The cases are described in Table 2, with locations ranging from Canada, New Zealand, and Australia. Sectors are inclusive of sport, health, education, community and indigenous populations.

Table 2: Cases

Case number	Sector and focus	AR team respondents
C1	Sports Governance: Developing governance capability in national sport organisation in Australia	2 leaders (L), 2 AR participants
C2	Music Therapy Education: Reviewing and improving goal setting process within a non-profit music therapy organisation in New Zealand	1 L, 2 AR participants
C3	Health Management: Leadership and LEAN capacity development in a health organisation in Canada	1 L, 1 AR participant
C4	Tribal Community and Social Development: Community program with Indigenous peoples in Canada to assist in addressing social issues	1 L
C5	Indigenous Homeless Housing: To understand and improve housing support needs and practices for homeless Indigenous peoples in Rural Northern Canada	1 L, 1 AR participant
C6	Neurological Health: Developing best practice guidelines for engagement and assessment of Indigenous persons with acquired brain injury and their communities in Australia	1 L, 1 AR participant

Data collection tools

Documentary analysis, an on-line survey, one-on-one interviews with all participants, and a GAS tool (see Piggot-Irvine, et al., 2017) were employed. Each of these methods is briefly described in the next subsections.

Documentary analysis

Documentary analysis usually adds to research data with secondary sources complementing or competing with interviewees' perceptions (Bryman, 2012; Davidson & Tolich, 2003). Bryman (2012) suggests that documentary analysis can show: "divergent interpretations among different groupings of key events and processes" (p. 551). In the ESAR, published reports, meeting minutes and other documents for each case project were reviewed as a preliminary step to ascertain evidence of AR indicators as well as to guide the interview process. These documents were written for entirely different purposes than those specific to the goals of the ESAR project so while information was noted as evident, the absence of AR indicators was treated cautiously. Missing information was addressed through the one-to-one interviews. A secondary analysis of publication documents was later carried out following the thematic analysis of the interviews. The purpose was to assess whether documentary evidence was consistent with the interview analysis themes.

On-line 'long' survey

The survey was employed to determine "the opinions, attitudes, and behaviors of persons who are contacted to participate" (Ballou, 2008, p. 861). Fink (2009) outlined similar intent when suggesting that surveys are used to "describe, compare, or explain individual and societal knowledge, feelings, values, preferences, and behaviour" (p. 1). In the ESAR, the sample group (AR project leads, their team participants and/or stakeholders impacted by the project) completed the on-line survey. This survey (named the long survey) for the case study participants was considerably longer (82 questions) than the shorter survey (25 questions) which was distributed to all AR projects listed in the Directory, as reported on in Robinson et al. (2018). Survey items pertained to the key AR indicators identified by the research team and reported in Piggot-Irvine et al. (2015).

Interviews

Semi-structured interviews, in O'Toole and Beckett's (2013) terms, are an appropriate tool for data collection when the researcher seeks qualitative information and a range of responses. A benefit of semi-structured interviews, according to Hartas (2010), is that they enable coverage of the researcher's agenda as well as offering opportunities for interviewees to describe what is significant for them. Interviews in the ESAR (see Appendix 1) were semi-structured, related to the indicators, and adopted the approach suggested by Dick (1998) to: "... first put the person at ease ... ask a single, broad question. Then keep the person talking for as long as you can, about one hour or a

little longer. Then and only then ask any specific questions” (p. 1). All interviews were recorded and then transcribed.

Goal Attainment Scaling (GAS)

A comprehensive outline of GAS as a data collection tool is provided in a previous paper linked to the ESAR (Piggot-Irvine et al., 2017). In summary, GAS usually allows for reasonably objective, individual, quantifying (scoring from -2 to +2) of the achievement of goals. In the ESAR, however, we employed it in an extended way by encouraging project leads and participants to engage in dialogue about their individualised scores post completion of the GAS table. The GAS findings for each case study were initially utilised to confirm or disconfirm, and to triangulate data in our conclusions drawn about cases.

Findings

In keeping with reporting in previous papers for the short survey (Robinson et al., 2018) and GAS (Piggot-Irvine et al., 2017), the case study findings are also outlined under the general categories of AR precursors, preconditions, processes, impacts and outcomes. Where appropriate, for each category an initial summary of the GAS findings is recorded to show the overall trend for the cases. Next, data collected in the interviews, documentary analysis and the long survey are used to elaborate, confirm, or show contrast in the results.

Precursors/Preconditions: Focus and funding

The GAS results showed that all cases scored positively (five of the six cases +1 or higher) for having a clear focus in their project. In the long survey, almost three quarters of respondents identified developmental change as a focus of their project and just under a quarter as transformational change. Respondents identified a variety of goals for their project; addressing needs in the community (community development) being the dominant purpose followed by organisational improvements and increasing organisation or community collaborations, as noted in Table 3.

Table 3: Purpose and general focus of case projects

Response	Count
Community development	8
Organisational improvement	7
Enhancing collaboration	6
Leadership development	5
Quality improvement	3
Team improvement	3

Response	Count
Social responsibility	3
Operational improvement	2
Personal improvement	2
Other	0
Total Responses	18

The interviews and documentary analysis allowed us to investigate the strength and source of that focus. For three projects (C2, C4, C6) there was an intentional statement of purpose and focus. Illustration of intentional focus is shown in the following quote from a respondent in C2: “There was that common focus, but we think it was more than that. It was about shared interest, shared motivation, shared commitment and part of that shared commitment was about wanting to do the very best by our clients.” Purpose was about making sure the needs of the community or organisational sponsor were being met, as identified by a respondent in C4 who stated: “We were very careful to ensure that the community’s voice was the loudest.” Three of the projects (C1, C3, C5) were more emergent and evolving in terms of outlining focus and expectations. As a respondent in C1 stated: “We couldn’t have known what the problem was before we started to engage with the board and teased out the problems as they saw them.”

Regardless of whether the focus was strongly initially designated or was emergent, one or two instigators of the project served as the initial ambassadors. In all but one project that core leadership expanded to include other key stakeholders in their organisation or the community, as shown in C3: “My CEO was the one who sponsored it and we decided together what we thought was going to be important ... Yes, I did have a project team ... [they] were going to have an active role ... they were going to be involved in the research itself.”

In total, three quarters of all case project respondents agreed that AR desired outcomes or inputs were developed in consultation with the wider community. Two advocated that this was a basic tenant of AR, and one commented: “The strength of the AR process is that the whole system is engaged in the process ... both the project team and the wider community.” In C6, the project was conceptualised by two project leads from a consulting research group. They then brought in two other organisational players (a university group and a policy group) to create a combined application for funding (they ended up getting half a million dollars). The partnership approach adopted in C6 reinforced the mission/purpose across the funding collaborative.

In all six cases, the interviewees identified that funding and institutional supports were crucial to the launch and sustainability of the initiative. In the long survey 16 out of the 18 respondents felt they were sufficiently resourced to carry out the AR project. Three

interviewees described securing grant funds which provided some level of financial compensation for the principal investigator or principal researcher time, while the other three projects had access to in-kind university professor or graduate student resources. All projects received institutional support from the sponsoring organisation such as library resources, meeting space, computer and telecommunication resources, printing and other supplies etc.

Precursors/Preconditions: Use of collaborative, consultative and democratic approaches

Collaboration in the case projects emerged as the predominant AR element and for this reason it will be the focus of a further, specific, article. Here, we provide a summary only of the findings on this topic. We note that this collaborative category is relevant to all phases of AR, but it has particular importance as an early project activity. Collaboration includes relational aspects within the core team and with stakeholders impacted by the project. The latter, wider collaborative reach is discussed first.

The GAS results for the element of collaboration, overall in the project, again showed that the majority of participants in cases scored this element positively (+1 or higher). The long survey (confirmed by documentary evidence and interviews) explored more deeply collaboration and engagement with stakeholders and all but one of the respondents either strongly agreed or agreed that stakeholders were engaged to explore issues, needs and strategies of action. In the long survey 16 of the 18 respondents said they strongly agreed with the statement they had “identified stakeholders who were deemed critical to the ongoing goals of the AR project”. In interviews, all respondents said they used selective invitation (often based on their community or organisation role) to recruit key stakeholders. In C5, however, interested parties were encouraged to show up at events as they wished, and the project researcher involved other people only in support roles.

The importance of stakeholder involvement is summed up in the following comment from a C4 respondent: “I think the role of our community partners made it successful ... they were familiar within the community. They explained to the community and to the university how to work in the process.” Respondents also noted that engaging the wider community was a challenge, as one person explained: “Many were invited, but a portion of the community chose not to participate in all aspects of the project.”

The long survey results indicated (16 out of 18 responses) that democratic approaches were used, especially within the core project team. All long survey respondents said there was shared decision-making within the AR project. The interviews offered further depth with a C1 respondent stating that though disagreements occurred, the team was respectful of different views and this led to more consultation. In C2 and C6, extensive

note was made of conscious intention to coordinate leadership and collaborative decisions.

Processes/Activities: Use of an AR approach and phases

Overall, almost all long survey respondents (17 out of 18) strongly agreed or agreed that their AR project followed a logical process and a similar number agreed that their AR project adhered to AR phases. The documentary analysis confirmed that most cases followed a logical sequence with typical AR phase components of issue identification, establishment of research objectives, reconnaissance of the context and issue in focus, becoming informed about the issue through theorising, clear planning and then implementation of changes for improvement, and evaluation of effectiveness of those improvements. A respondent in C1 described that they engaged in: "... phases of action research starting off with a reconnaissance or current situation kind of understanding ... then determining the nature of populating our particular action or intent ... and then going ahead and implementing and evaluating that."

We also explored whether there was adaptability, flexibility, and responsiveness within those phases. The documentary analysis confirmed the long survey results with all respondents agreeing that the project activities were adapted to be flexible and responsive to the goals of the project, with individual reasons for that including the need to allow for busier people to participate, appeasing local government, and organisational necessity.

As part of phased activity, in C2 a structured plan and processes were considered to have been outlined from the beginning. In C4, although the original focus was clear, there was a more flexible, emergent and evolving approach that followed tribal protocols and yet also relied heavily on the voice and desire of the community.

At the other extreme was C5, the rural indigenous homeless project, where it was expressed that there was a level of contradiction associated with the thought that AR was, or should be, a logical process. One interviewee in this project said: "to basically drop in a template and hold to a script is very problematic and it is problematic especially with an addictive population in a small community where everybody knows everybody it becomes doubly problematic." A low level of logical process was followed in this interviewee's opinion.

Processes/Activities: Managing the process

Project management was associated with arranging logistics, keeping the project on track and achieving milestones, coordinating people and their interactions, addressing any differences of perspectives and resolving conflicts. All projects followed structured or semi-structured processes with regular meetings and delegation of specific tasks. In the C6 project, a respondent described a kind of hub collaborative leadership system involving the project team and layers of other key stakeholders who carried out certain tasks.

However, no respondents spoke about having formal processes for reviewing and monitoring achievement of milestones and this was confirmed in the documentary analysis. There were no formal debriefing or feedback processes described and generally there was a feeling this was unnecessary because monitoring was an integral component of AR. As one C6 interviewee suggested in the following quote, the process of constant data gathering, analysis and discussion created its own built-in monitoring process: “We didn’t do any monitoring (of process) as we were going ... if it wasn’t working we would have known because we had those cycles of consultation and the cycles of action as key milestones and the outcomes of those milestones were payments to the Institute.”

Processes/Activities: AR project data collection methods and analysis

The GAS results indicated that most cases had employed data gathering techniques in the precursor (pre-change) and evaluative (post-change) phases of their AR project. The interview, documentary analysis, and long survey results revealed a little more about the types of data collection and analysis methods. Almost all respondents (17 out of 18) in the long survey noted the use of appropriate, well-documented, research methods for data collection. The most popular methods noted included surveys (reported 69 times), interviews (mentioned 64 times), focus groups (noted 38 times), and observation (mentioned 31 times). Slightly fewer respondents (16 out of 18) agreed that they employed a rigorous process for analysing data and using findings to plan the next phases of the project. Frequently reported processes of analysis included thematic analysis (cited 26 times) and coding (mentioned 14 times). The need for triangulation was cited eight times and eight respondents reported using mixed methods, that is, mentioning the use of both qualitative and quantitative data. Our review of documents associated with the cases confirmed these results.

In C1, the primary methods of data collection were documentary analysis and facilitated group discussions. In C3, systematic and diverse data collection tools were utilised, as the following interviewee reported: “We actually did 360 evaluations on all those leaders...[then] decided to do talking circles first and then when we did the World Cafes. So, we were actually educating them at the same time.” In C4, as the project unfolded visual arts-based methods (e.g. drawing and photovoice) were combined with interviews and focus groups, surveys, qualitative and quantitative data. As a C4 interviewee reported: “So that meant we ended up with a few statistics to go alongside the visual images and pictures that fit right in.”

Processes/Activities: Ongoing involvement of stakeholders

As already noted, the importance of collaboration was predominant in the findings and will be addressed in a separate paper. We have already summarised the early collaboration elements, but ongoing collaboration was seen as equally important. More than three quarters of the long survey respondents said stakeholders were involved in helping to gather data to assess the impact of actions arising from the project.

Frequent and intense informal and formal conversations occurred to collaborate with stakeholders in discussion of issues, gather opinion, share decisions, to extend learning and deepen ownership – and this was confirmed in documentary analysis associated with cases. A variety of social processes were used to bring people together and create social connection, with food and fun activities mentioned by some interviewees.

Keeping the stakeholders involved was not always easy. It was noted by several interviewees that while the leadership team was quite cohesive, there was considerable diversity in the larger community or organisation. Strong facilitation and leadership actions were needed to encourage the expression of diverse opinions and then to manage the tensions that sometimes emerged. Three of the projects (C4, C5, and C6) involved indigenous community members and an important process was engaging in culturally appropriate practices. Several respondents noted that conflicts did break out and careful actions were needed to facilitate ongoing dialogue processes.

AR outcomes and impacts

The final area of investigation with the case studies was linked to outcomes and impacts. Overall, just over half of the respondents in the long survey revealed that less than 100 people were directly impacted and an additional third reported that between 100 and 250 were impacted. Outcomes and impacts are discussed under the headings of creation/strengthening of networks and increased collaboration, skill development and other impacts, and continuing commitment and motivation associated with the project.

AR outcomes and impacts: Creation/strengthening of networks and increased collaboration

In the long survey over three quarters of the participants agreed that the AR project resulted in the creation or expansion of networks, network relations, or new contacts. Those who disagreed (two respondents) cited reasons such as their own lack of knowledge of post-project outcomes (mentioned twice) or unpreventable organisational/political shifts that disrupted would-be networks (mentioned three times). One also simply stated: "That was not the goal."

Since collaboration was a strong focus for all activities, it stands to reason that it was also articulated as an outcome for all projects. Once again, this was such a large outcome that it is dealt with in a further paper, but in summary the long survey results indicated that, for the most part, project team members strengthened relationships with one another and stakeholders (16 of the 18 respondents).

AR outcomes and impacts: Knowledge sharing and mobilisation

The GAS results showed that almost all cases involved knowledge sharing (reporting out) and mobilisation, and this was further affirmed in documentary analysis and interviews. The long survey results also showed that most respondents (17 of the 18) agreed they had established formal and informal systems or processes of sharing knowledge generated with examples including reports, discussion forums, news releases, presentations (at local and national levels) and paper publications on project process, outputs and impact. This is illustrated by an interviewee in C6: “We gave a lot of presentations and people were excited about it. They knew that this was their information and they still have it and it’s up on line.” The range of sharing is shown in the following quote from a C3 interviewee:

I sent out emails regularly ... I gave updates at our senior leadership table probably at least once a month ... I gave updates to the provincial groups when we met. And then after the research was done, I mean I was given huge opportunities, like I’d pretty much just give an open forum to talk, to communicate the results out to the organisation as a whole, to leadership in the organisation, to leadership across the province, and to other organisations who were interested in what was going on.

In C5, where little community, stakeholder, or team involvement had been encouraged, bringing stakeholders together for presentations was not easy, as a C5 respondent expressed: “They advertised these functions and we set up two different presentations and both were very poorly attended.” In all projects, interviewees mentioned that the findings and data from the AR initiative were foundational to follow up initiatives and/or to the implementation of ongoing programs, changes in the organisation, or with service providers.

AR outcomes and impacts: New self-awareness, skill development and change outcomes

In the long survey, new self-awareness and skill development resulting from the AR project was reported by 17 of the 18 respondents. Interviewees referred to new awareness among team members and partners about the environment in which they were working, of each other’s diversity and perspective, and of their own perspectives on the issues they were exploring.

Skill development included: archiving, multimedia narratives, leadership, presentation skills, project planning, business plan development, facilitation, reflection, creative thinking, coaching, collaboration, research, data analysis, compromise, active listening, decision-making and negotiation. The skills gained were also noted as aiding individuals in ongoing work in the community or future employment, as shown in the following comments from the C6 team interviewee:

I think when you talk to [project researcher], she'll be able to tell you about some of the new skills that she learned from this and she's now managing a service organisation which I don't think she would have thought of herself as doing three years ago when she was doing this work with us.

In the long survey, 16 of the 18 respondents indicated that their AR project resulted in changes in outcomes overall. Improved systems/processes included: the establishment of committed task forces; revised governance structures; modified teaching practices; establishment of mentorship programs; development of educational material and toolkits; and use of knowledge sharing tools such as websites and social media.

Further, 16 of the 18 respondents agreed that the AR project produced evidence of positive feedback from people who were impacted by the project which included positive results realised for stakeholders (mentioned 15 times), changes in perspective and knowledge of stakeholders, engagement and inclusivity in the process (mentioned 13 times), and the ability of AR to create expectations for change (mentioned twice). As one respondent noted: "The project brought an issue to the fore and created an expectation for change."

The long survey comments also revealed why change outcomes may not have been achieved. Constraints to changes included: lack of implementation (noted four times); political/policy issues (mentioned twice); and lack of time to realise real change (cited once).

AR outcomes and impacts: Future planning and continuing commitment

In the GAS results, for the element of 'future planning for improvement' almost all participants scored in the positive ratings and such positivity was also reflected in the long survey where the majority of respondents (16 out of 18) agreed that their project reports included a plan for next steps, additional research and potential follow-on projects and activities. Comments (14) also inferred that further future change could be anticipated, as noted in the following comment: "Changes have been limited to one test class at this stage, however passion developed during the AR process will see these outcomes shared in the future and training given to other teachers to achieve similar results."

With respect to continuing commitment to the AR project, the long survey results showed that almost three quarters of respondents agreed that people involved in the project showed an increased commitment to the project's change-related goals. However, the quarter of respondents who were either neutral or disagreed with this statement noted conditions where either themselves, as researchers, or key community members had moved on to other priorities (mentioned 12 times).

In concluding comments, case study interviewees reflected generally upon the outcomes and impact of their AR projects. The following C2 comment sums this up:

Through this project, the whole community are working together to improve outcomes for children. It demonstrates the effectiveness and importance of action research and enabling local people to be actively involved in developing programmes and interventions.

Discussion and comparison with the Strand 3 broad survey results

In terms of precursors, all ESAR case projects had a clear focus (intentionality in Putnam & Rock's (2017) terms) and for most that focus was on improvement, that is, change and development intent. In three of the cases, the focus was established early in the project; in the other three, it was more emergent. In all but one project, early and ongoing collaboration with key stakeholders was emphasised, and there is widespread literature support for such 'engagement' oriented collaboration, as outlined in Rowe et al. (2013). In all six cases, early funding and institutional supports were seen as crucial to the launch and sustainability of the initiative, as also suggested by Minkler et al. (2003).

Multiple other process elements were identified as important in the case projects. The establishment and ongoing implementation of strong collaborative and democratic processes were considered to be vital in the AR case projects. As noted, this element will be the focus of a further paper. Apart from C5, in all cases a logical sequence/process was adopted, typically following the AR phases of preparation, reconnaissance, change/improvement, and evaluation. Flexibility and responsiveness were critical features of the projects – features honoured in AR by authors such as Somekh and Zeichner (2009) and Wicks, Reason and Bradbury (2008).

Well-documented research methods for data collection and analysis and use of findings for next phases were reported by case respondents, with evidence of use of MM emerging. An omission in all projects was mention of self-review or monitoring of AR phase activity by the core team, though such activity is usually seen as an integral and ongoing component of AR.

Strong management of the AR process (planning, meeting facilitation, delegation, information sharing, milestone reporting, etc.) was evident in almost all cases. This topic alongside the importance of collaboration and relationship building signals the significance of leadership, an element so extensive that we are writing a separate paper on the subject.

Impacts and outcomes were considered to have been widespread in the case projects. In keeping with Meyer's (2000) thinking, what respondents learnt from the experience was important.

All projects, with the exception of C5, had established systems and processes for knowledge sharing and mobilisation, particularly around information on how projects had progressed, impacts and outcomes. This sharing was also seen to have enhanced continuing action with the project and positive feedback from stakeholders was strong.

Of particular interest was the comparison of the case study results and those of the broad global survey with 174 respondents (Strand 3 in our MMAR design). In summary, the results between the two Strands were remarkably similar. The global survey showed that by far the majority of projects had established the principles of clear desired outcomes/impacts in consultation with their project communities, AR frameworks and phases were developed democratically early in the projects, phased data collection activity occurred pre- and post-improvements, and 85.7% of survey participants reported that their AR project resulted in changes in outcomes including the creation or expansion of networks, increased commitment to change-related goals, and evidence of positive feedback from those impacted. We concluded from the global survey results that practitioners demonstrated they could adhere to these principles whilst also applying and valuing the unpredictability, and contextual and cultural specificity, of AR.

As with the case study Strand 2 results, the global survey indicated that whilst the latter pragmatic and flexible characteristics of AR predominated there was a trend towards more rigorous data collection and mention of MMAR. Further, the engagement with research participants was often reported as a limiting factor in both the Strand 2 and 3 results. We have noted in Robinson et al. (2018) both the challenges of engagement and collaboration of stakeholders, and the critical importance of engagement, as a precursor in the initial phases of AR linked to high ownership and commitment to creating change.

Limitations

Meyer (2000) believes that the process and/or findings from evaluation of AR are potentially contentious given the emergent nature of AR. We have recognised and experienced that contention especially when seeking early feedback on our indicators for evaluation. The contention, though a limitation, has also encouraged us to be vigilant and respectful in the ESAR and to model democratic values in working with respondents. A key limitation was the length of the case study survey and our respondents gave us clear feedback about that which led to a re-design of the later widely employed 'short survey'. As with all complex change, a limitation has been associated with discriminating whether changes reported were AR linked or due to multiple other contributing factors. Further, where AR projects had emergent and unspecified early foci, such discrimination was difficult. A final limitation could be associated with non-generalisability of the findings. Each project had its own distinctive context and, as with all case studies, we hope that we have honoured that individuality.

Further research

AR is fundamentally aimed at improving/changing/transforming conditions and the latter infrequently occurs short-term. We encourage that longitudinal studies are required to determine the sustainability of improvements. We also suggest exploration of projects across sectors, rather than the non-sector specific approach adopted in the ESAR. Further, almost every element of precursors, processes and impact/outcomes identified in the case studies could be investigated much more deeply. For example, examination of how funding influences impacts and outcomes, and how early engagement of stakeholders enhances ownership, are just two interesting areas to further explore. We also encourage further expansion of the Directory to explore additional questions on what processes contribute to outcomes. Further investigation should include tracking of whether there is an emergent trend to enhanced use of MMAR.

Conclusion

From its early origins set by Lewin's (1946) work, AR has become an acknowledged methodology to empower change and has had remarkable employment of its practices and principles. The ESAR case study results confirm the more extensive aggregated MM survey results of multiple AR projects recently reported in Robinson et al., (2018). The case study results indicate that almost all the case projects exhibited strong AR elements, that is, precursor (focus clarification, engagement of key stakeholders, funding and support), process (phased and planned yet flexible activity, good data collection and analysis, ongoing collaboration, leadership and management), and outcome/impact (change outcomes, knowledge mobilisation, continuing action) activity. The case studies therefore have considerably addressed a research aim of the ESAR, that is, they have advanced knowledge and understanding of the elements of AR that enhance outcomes and impact, including why or why not they have been effective. They have also helped to answer the key research question for the ESAR by illuminating the ways that AR can be validated as a contributor to meaningful individual, community, organisational and societal change.

Many themes emerged in the case study findings which are worthy of deeper discussion. We signal that forthcoming articles will focus on two of those themes, that is, collaboration, and leadership and management of the AR projects.

References

Adams, J., Khan, H.T.A., Raeside, R., & White, D. (2007). *Research methods for graduate business and social science students*. New Delhi, IND: Sage Publications. Retrieved from: <http://site.ebrary.com/id/10272446>

- Ackerman Anderson, L., & Anderson, D. (2010). *Awake at the wheel: Moving beyond change management to conscious change leadership*. Durango, CO.
http://www.beingfirst.com/resource-enter/pdf/SR_AwakeAtTheWheel_v3_101006.pdf.
- Alise, M. A., & Teddlie, C. (2010). A continuation of the paradigm wars? Prevalence rates of methodological approaches across the social/behavioral sciences. *Journal of Mixed Methods Research*, 4(2), 103-126.
- Ballou, J. (2008). Survey. In P. J. Lavrakas (Ed.), *Encyclopedia of survey research methods* (pp.861-862). Thousand Oaks, CA: Sage Publications. Retrieved from <http://ezproxy.royalroads.ca/login?url=http://SRMO.sagepub.com/view/encyclopedia-of-survey-research-methods/SAGE.xml>
- Bassey, M. (2007). Case study research. In M. Coleman & A. R. J. Briggs (Eds.), *Research methods in educational leadership and management* (pp. 108-121). Paul Chapman: London.
- Bryman, A. (2012). *Social research methods*. Oxford: Oxford University Press.
- Coghlan, D., & Brannick, T. (2014). *Doing action research in your own organisation* (4th ed.). Thousand Oaks, CA: Sage Publications.
- Coghlan, D., & Shani, A. (2014). Creating action research quality in organization development: rigorous, reflective and relevant. *Systemic Practice & Action Research*, 27(6), 523-536. doi:10.1007/s11213-013-9311-y
- Creswell, J. W. (2007). *Qualitative inquiry and research design: Choosing among five approaches* (2nd ed.). Thousand Oaks, CA: Sage.
- Creswell, J. W., & Plano Clark, V. L. (2007). *Designing and conducting mixed methods research*. Thousand Oaks, CA: Sage.
- Davidson, C., & Tolich, M. (2003). Competing traditions. In C. Davidson & M. Tolich (Eds.) *Social science research in New Zealand: Many paths to understanding* (2nd ed.). Auckland: Pearson Education.
- de Brúne, T., O'Reilly, M., van Weel, E., Burns, N., Dowrick, C., Lionis, C., & O'Donnell, C. (2017). Using participatory learning & action (PLA) research techniques for inter-stakeholder dialogue in primary healthcare: An analysis of stakeholders' experiences. *Research Involvement Engagement*, 3(28). doi:10.1186/s40900-017-0077-8.
- Denzin, N. (2010). Moments, mixed methods, and paradigm dialogs. *Qualitative Inquiry*, 16, 419-427.
- Denzin, N. K., & Lincoln, Y. S. (Eds.). (2011). *The Sage handbook of qualitative research*. Thousand Oaks, CA: Sage.
- Dick, B. (1998). *Convergent interviewing: A technique for qualitative data collection*, <<http://www.scu.edu.au/schools/gcm/ar/arp/iview.html>>.
- Ercikan, K., & Roth, W. M. (2006). What good is polarizing research into qualitative and quantitative? *Educational Researcher*, 35(5), 14-23.
- Ferkins, L., & Shilbury, D. (2010). Developing board strategic capability in sport organisations: The national–regional governing relationship. *Sport Management Review*, 13, 235–254.

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- Fink, A. (2009). *How to conduct surveys: A step-by-step guide* (4th ed.). Thousand Oaks, CA: Sage.
- Guskey, T. R. (2000). *Evaluating professional development*. Thousand Oaks, CA: Corwin Press.
- Hartas, D. (2010). *Educational research and inquiry: qualitative and quantitative approaches*. London: Continuum International Publishing Group.
- Ivankova, N.V. (2015). *Mixed methods applications in action research*. Thousand Oaks, CA: Sage Publications.
- Ivankova, N. V., Creswell, J. W., & Stick, S. L. (2006). Using mixed-methods sequential explanatory design: From theory to practice. *Field Methods*, 18(3), 3-20.
- Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed methods research: A research paradigm whose time has come. *Educational Researcher*, 33(7), 14-26.
- Leech, N. L., Dellinger, A. B., Brannagan, K. B., & Tanaka, H. (2008). Evaluating mixed research studies: A mixed methods approach. *Journal of Mixed Methods Research*, 4(1), 17-31.
- Lewin, K. (1946). Action research and minority problems. In G.W. Lewin, *Resolving social conflict*. London: Harper & Row.
http://krishikosh.egranth.ac.in/bitstream/1/17809/1/IVRI_B_529.pdf.
- Liu, W., & Wang, Q. (2017). The processes of teachers' engagement in action research: An ethnographic study in Beijing. *Educational Action Research*.
doi:10.1080/09650792.2017.1307128.
- Marti, J. (2015). Measuring in action research: Four ways of integrating quantitative methods in participatory dynamics. *Action Research*, 14(2), 168–183.
<http://doi.org/10.1177/1476750315590883>
- Mayoh, J., & Onwuegbuzie, A.J. (2015). Toward a conceptualization of mixed methods in research. *Journal of Mixed Methods Research*, 9(1), 91–107.
doi:10.1177/1558689813505358.
- Merriam, S. B. (1998). *Qualitative research and project study applications in education*. San Francisco, CA: Jossey-Bass.
- Meyer, J. (2000). Evaluating action research. *Age & Ageing*, 29(2): 8–10.
- Minkler, M., Blackwell, A. G., Thompson, M., & Tamir, H. (2003). Community-based participatory research: Implications for public health funding. *American Journal of Public Health*, 93(8): 1210–1213.
- Mutch, C. (2009). Mixed method research: Methodological eclecticism or muddled thinking? *Journal of Educational Leadership, Policy and Practice*, 34(2), 18-30.
- O'Toole, J., & Beckett, D. (2013). *Educational research: Creative thinking and doing*. Melbourne, AU: Oxford University Press.
- Onwuegbuzie, A., & Combs, J. P. (2010). Emergent data analysis techniques in mixed methods research: A synthesis. In A. Tashakkori & C. Teddlie (Eds.), *Sage handbook of mixed methods in social and behavioral research* (2nd ed., pp. 397-430). Thousand Oaks, CA: Sage.

- Onwuegbuzie, A., & Leech, N. L. (2005). Taking the “Q” out of research: Teaching research methodology courses without a divide between quantitative and qualitative paradigms. *Quality and Quantity: International Journal of Methodology*, 39, 267-296.
- Pearce, L.D. (2016). Mixed methods social networks research: Design and applications. *Contemporary Sociology: A Journal of Reviews*, 45(2), 167–68.
- Piggot-Irvine, E. (2012). Creating authentic collaboration: A central feature of effectiveness. In O. Zuber-Skerritt (Ed.), *Action research for sustainable development in a turbulent world* (pp.89-107). Bingley, UK: Emerald.
- Piggot-Irvine, E., Rowe, W., & Ferkins, L. (2015). Conceptualizing indicator domains for evaluating action research. *Educational Action Research*. doi:10.1080/09650792.2015.1042984
- Piggot-Irvine, E., & Zornes, D. (2016). Developing a framework for research evaluation in complex contexts such as action research. *SAGE Open*, July-September: 1–15. doi: 10.1177/2158244016663800
- Piggot-Irvine, E., Ferkins, L., & Cady, P. (2017). Goal attainment scaling in action research: Enhancing a systems thinking orientation. *Systems Research and Behavioral Science*. doi: 10.1002/sres.2459
- Putman, M. S., & Rock, T. (2017). *Action research: Using strategic inquiry to improve teaching and learning*. Los Angeles, CA: Sage Publications.
- Rallis, S. F., & Rossman, G. B. (2003). Mixed methods in evaluation contexts: A pragmatic framework. In A. Tashakkori & C. Teddlie (Eds.), *Handbook of mixed methods in social and behavioral research* (pp.491-512). Thousand Oaks, CA: Sage.
- Reason, P., & Bradbury, H. (Eds.) (2008), *The Sage handbook of action research* (2nd ed., pp. 14–31). London: Sage Publications.
- Robinson, F., Piggot-Irvine, E., Youngs, H., & Cady, P. (2018). Struggling to achieve desired results from your AR projects? Insights from the Evaluative Study of Action Research may help. In press.
- Rossman, G. B., & Wilson, B. L. (1985). Numbers and words: Combining quantitative and qualitative methods in a single large-scale evaluation study. *Evaluation Review*, 9, 627-643.
- Rowe, W., Graf, M., Agger-Gupta, N., Piggot-Irvine, E. & Harris, B. (2013). Action research engagement: Creating the foundation for organizational change. *ALARA Inc Monograph Series No 5*. Action Learning, Action Research Association, Inc. https://www.researchgate.net/publication/259932785_Action_Research_Engagement_Creating_the_Foundations_for_Organizational_Change.
- Russ-Eft, D., & Preskill, H. (2009). *Evaluation in organizations: A systematic approach to enhancing learning, performance, and change* (2nd ed.). New York, NY: Basic Books.
- Snoeren, M. W. C., Niessen, T. J. H., & Abma, T. A. (2012). Engagement enacted: Essentials of initiating an action research project. *Action Research*, 10(2): 189–204.
- Somekh, B., & Zeichner, K. (2009). Action research for educational reform: Remodelling action research theories and practices in local contexts. *Educational Action Research*, 17(1): 5–21.

Thumbs Up for Action Research in Case Studies from the Evaluative Study of Action Research

Stake, R. E. (1995). *The art of project study research*. Thousand Oaks, CA: Sage.

Strambler, M. J., & McKown, C. (2013). Promoting student engagement through evidence-based action research with teachers. *Journal of Educational & Psychological Consultation*, 23(2): 87–114.

Tashakkori, A. & Teddlie, C. (2010). *Sage handbook of mixed methods in social and behavioural research*. Thousand Oaks, Ca: Sage.

Wellington, J. (2015). *Educational research: Contemporary issues and practical approaches* (2nd ed.). London, England: Bloomsbury.

Wicks, P., Reason, P., & Bradbury, H. (2008). Living inquiry: Personal, political, and philosophical grounding for action research practice. In, P. Reason & H. Bradbury, *The Sage handbook of action research*, 2nd ed., (14–31). London: Sage Publications.

Yazan, B. (2016). Three approaches to case study methods in education: Yin, Merriam, and Stake. *Avaliacao*, 8(22):149-182.

Yin, R. K. (2013). *Project study research: Design and methods* (5th ed.). Thousand Oaks: Sage Publications.

Zuber-Skerritt, O. (2011). *Action leadership: Towards a participatory paradigm*. Dordrecht: Springer International.

Appendix 1: Interview questions for AR project lead, team participants and/or stakeholders

Precursors	
1	<p>Can you tell me about how the project came about? How was the project concept developed?</p> <p>Prompts: need/concern or vision; leadership team; financial support; stakeholders, participants identified?</p>
2	<p>In what way were the outcomes/outputs/impacts clearly espoused?</p>
3	<p>Can you tell me who you considered to be the core group members (also referred to as project team members)? Who do you consider to have been 'team lead'? How/why were these team members identified/brought together?</p>
4	<p>Can you tell me about any processes and protocols that were negotiated for how to work together? Why do you think these processes were employed? How well do you think they worked? What makes you say that? In these, was there any assessment of risk, or discussion of enabling and constraining factors? Why do you think that was?</p> <p>Prompts: e.g., shared expectations, commitment, respectful dialogue and communication and a process for addressing potential conflict, ethical and moral issues, plan to address these issues, research ethics application?</p>
Processes/ Activities	
5	<p>Can you tell me about the processes used to undertake the project? Why do you think these processes were employed? How well do you think they worked? Why?</p> <p>Prompts: structure, coherence, scaffolding of processes/phases and transition between phases, communication, flexibility, recognizing progress/celebrating milestones, resources to support activities etc?</p>
6	<p>How was the process documented or tracked? What were the research methods employed for data collection? How well do you think they worked for the purpose intended? Why?</p>
7	<p>Can you tell me about the processes used to enable collaborative engagement and shared decision-making? Between whom? In what way might this have involved management of difference/diversity? How well do you think these processes worked? Why?</p> <p>Prompts: power differentials, control and avoidance issues, cultural differences etc?</p>
Outcomes and Impacts	
8	<p>Can you tell me about the outcomes, outputs and impacts of the project? What do you think were the key drives of these? In what way were they intended or unintended? How effective do you think your AR</p>

project was in reaching the outcomes, outputs and impacts that were espoused to achieve? Why?

Prompts: enhancing elements, barriers to success, tangible and intangible etc.

9 In what way might the participants and stakeholders have changed their perspective as the project progressed? Why do you think this was?

Prompts: knowledge, attitude, skills, self-awareness, networks, relationships etc?

10 How was knowledge from the project experience (process and outcomes) mobilized or transferred? What impact do you think this has had/might have? Why?

Prompts: reported outcomes on change, dissemination/presentation of findings and learnings, reporting on the process, method, assumptions and recommendations, a plan for next steps, additional research, 'follow on' projects and activities, knowledge products (books, articles etc)?

11 Overall, or by way of summarizing this interview, what elements of the AR approach do you think contributed to identifying, creating and sustaining meaningful change (in other words how did set-up, and implementation affect outcomes, outputs and impacts)?

Another overall question might be: If you were to undertake this project all over again what would you do differently? Why? Why Not?

Prompt: in hindsight (project may have taken place a few years ago)
