Exploring Action Research as an Approach to Interactive (Participatory) Evaluation

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Introduction

This investigation seeks to understand 'action research' as an approach to 'interactive form of evaluation'. The first half of the investigation illuminates the approach with the help of the selective body of literature and the second half draws attention to its application in the field with the help of an authentic evaluation plan.

Part 1: The Approach and Its Theoretical Inspiration

Evaluation is the systematic assessment of the worth or merit of an object (The Joint Committee, 1994). 'Evaluate' or its root word 'value', finds its origin in the old French 'value' and 'valoir' and the Latin 'vale're', which had the meanings of 'to be worth (something)' and 'to work out the value of (something)' (Stufflebeam and Shinkfield, 2007; Mark, Greene and Shaw, 2006). Action research, our subject in this paper, embodies 'evaluation' as an integral component in its conception. In this context, the phenomenon 'action' denotes flexibility and participation in its process of introducing change and improvement, and 'research' indicates quality data and correct interpretations to document this knowledge. Action research as an interactive or participative approach to programme evaluation has gained the attraction of evaluators and is being increasingly 'adopted and adapted' into evaluation practice to answer the needs of the practitioners in the context of site-level improvement and local control (Owen, 2006; Rogers and Williams, 2006; Reason and Bradbury, 2001). Interactive evaluation (participatory evaluation) occurs during the delivery of a programme and provides knowledge for decisions regarding continuous improvement by involving programme providers in the evaluation process (Owen, 2004). Action research evaluation has also been used as practitioner research (Zeichner and Noffke, 2001), teacher research (Cochran-Smith and Lytle, 1999), insider research (Kemmis and McTaggart, 2000), and if applied on one's own practice, self-study research (Zeichner and Noffke, 2001).

Although participatory or interactive forms of inquiry have ceaselessly remained contributing to human cultures forever, it has lived as a formal field of practice for a very short time. To suggest a coherent history of action research as an approach to interactive evaluation is not easy. As the tradition exists, action research traces its

origin back to the work of John Collier (Commissioner for Indian affairs) in the 1930s, and the social experiments of Kurt Lewin at Tavistock Institute in the 1940s. Its origin may be linked to the modern critique of positivist science, in the movement to search new epistemologies of practice, and also in the feminist theories. The roots can be located from Marxist saying 'what more important is not to understand the world but how to change it' through theorizing of Gramsci (Italian, political theory) to Paulo Freire's (a Brazilian educationist) dialogue, praxis, i.e. action that is informed, voice, experiences of participants in educational activity. As well, the spiritual teachings from Buddha (a spiritual teacher from ancient India) and Abu al-Mughith Husayn al-Hallaj's (a Persian mystic) *Ana al-Haq* 'I am the Truth' to Gurdjief's (Armenian-Greek mystic) 'Life is Real Only Then, When I Am' can also contribute to our understanding of the inquiry. John Dewey (American educational reformer), who wrote extensively on democratizing education, can also be seen relevant in this respect. Thus the ownership is wide.

In general, action research draws its sources of theoretical inspiration on pragmatic philosophy (Greenwood and Levin, 1998), critical thinking (Carr and Kemmis, 1986), the practice of democracy (Toulman and Gustavsen, 1996), liberationist thought (Borda, 2006), humanistic and transpersonal psychology (Rowan, 2006), constructionist theory (Ludema, Cooperrider, and Barrett, 2006), systems thinking (Flood, 2006), and more recently, complexity theory (Reason and Goodwin, 1999). Now action research has been widely established as a form of professional learning across the disciplines. At this stage it would be appropriate to encapsulate the previous discussions into establishing a basic idea of action research (Table 1). Action research, therefore, is

a collaborative research, centred in social practice, which follows a particular process, espouses the values of independence, equality and cooperation, and is intended to be a learning experience for those involved, to produce a change for the better in the practice and to add to social theory (Orton, 1992, p. 222).

a systematic and orderly way for teachers to observe their practice or to explore a problem and a possible course of action (McNiff, Lomax & Whitehead, 1996).

Table 1: The basic idea of action research (Adapted from Whitmore and Cousins, 1998; Patton, 2002).

Principal	Primary	Control of	Desired Results
author/s	Technical	Decision Making	
	Goal/Functions		
Whyte (1991);	Practical/philosop	Balanced:	Immediate action;
Argyris and Schön	hical: improve	researcher	solving problems
(1991)	practice while	(evaluator) and	as quickly as
	simultaneously	practitioner as co-	possible
	advancing	participants in	
	scientific	research	
	knowledge	(evaluation	
		process)	
Key Assumptions	Selection for	Depth of	Publication Mode
	Participation	Participation	
People in a setting	Primary users:	Extensive:	Interpersonal
can solve	most often	participation in all	interactions
problems by	programme	aspects of the	among evaluator
studying	implementers,	research	and practitioners;
themselves	although can be		informal,
	open to		generally
	beneficiaries and		unpublished
	others		

Conventional Evaluation VS Action Research Evaluation

Frederick Taylor, in 1920s introduced an influencing concept of 'scientific management' i.e. people's work could be judged by a manager holding a stopwatch (McNiff and Whitehead, 2006). In other words, people were assumed to be automata and their productivity could be assessed in terms of 'how many tasks, in how much time'. This view, with its evident influence on various social systems entered the field of evaluation too where implications slotted in the idea that an external

evaluator makes judgements about other people's practices, and the 'stopwatch' as argued by McNiff and Whitehead, is still visible though in modified form, as 'checklist'. This denotes the peripheral nature of practitioners where an evaluator functions as 'in-charge' and practitioners as 'subordinates' in the evaluation process (MacBeath, 1999; Cousins and Earl 1995; Lave and Wenger, 1991).

Table 2: Conventional and participatory evaluation (Adapted from Estrella and Gaventa, 1999).

	Conventional Evaluation	Action Research Evaluation	
Who	External experts.	Evaluators as facilitators;	
		community members.	
What	Pre-set indicators of success,	People set own indicators of	
	principally cost and production	success, which may include	
	outputs.	production outputs.	
How	Distancing of evaluators from other	Self-evaluation; simple methods	
	participants for 'objectivity';	adapted to local cultures; open,	
	standardized, complex procedures;	instant sharing of results through	
	delayed, limited access to results.	local collaboration and involvement	
		in evaluation process.	
When	Usually upon completion of project	More frequently, small-scale	
	or programme; sometimes mid-	evaluations.	
	term.		
Why	Accountability, usually summative,	Improve practices of local people to	
	to find out if funding carries on.	initiate, control and take corrective	
		action. Rightly said: knowledge	
		produced in this practice is verb	
		rather than a noun.	

As shown in the Table 2, action research evaluation, contrary to the traditional evaluation practice, challenges and shifts the paradigms by centralizing the practitioners in the 'knowledge' production and by equalising the powers between evaluators and practitioners, thus strengthens 'voice, organization and action' (Gaventa and Cornwall, 2006; Neuman, 2003). Sutherland (1995) also advocates the idea of collective knowledge production and considers it fairly deeper, more enriched and useful. Burke (1998) furthers this by outlining the key principles of

action research evaluation as: the evaluation involves and is useful to the programme's end-users with respect to their contexts, concerns, interests and problems; acknowledges and extensively benefits from the knowledge and experiences of key stakeholders; endorses the collective methods of knowledge creation in contrast to authoritarian, single-handed conclusions for others to follow for future planning; and finally, shares powers and outcomes with the stakeholders.

Action Research in Education and Teaching

Action research in the field of education specifically in the teaching profession entered in 1950s. The concept of teachers as in-charge of their own practice was developed by John Elliot and Jack Whitehead and legitimized the idea that teachers should understand their work from their own perspectives. Many educators have viewed reflective practice as a crucial component of teaching and teacher professional development, and action research is just a form of practice that addresses this characteristic of teaching, and professional development (Bullough and Gitlin, 1995; Norman, Sprinthall, and Thies-Sprinthall, 1996). The act of teaching, in a way, is the act of doing action research. For a typical teaching session, a teacher diagnoses learner's needs, plans and implements her lesson, evaluates her teaching, and as a result of this evaluation, improves her own practice and students' learning from the knowledge produced. This exactly is what evaluators using action research do. With the constructed knowledge as a result of evaluation, they not only improve the participants' practices, but also report the findings to add to existing body of knowledge.

The Process of Action Research

Various authors have illustrated action research method through a range of cyclical models depending upon their use in different contexts (Table 3). The common elements in the process of these models are: an evaluator negotiates with the stakeholders the purpose of the evaluation which is based on a 'problem' or an 'area of focus' (identification of an area of focus), observes practitioners' practice (data collection), synthesises information gathered (data analysis and interpretation), and

takes some form of action which invariably spirals evaluator back into the process repeatedly (development of an action plan).

Table 3: The cyclical models of action research evaluation.

Author	Action Research Evaluation Processes
Stephen Kemmis (1988)	O General Plan First Action Step Monitoring Evaluation Revised General Plan Second Action Step Monitoring Evaluation
Emily Calhoun (1994)	O Select Area Collect Data Organize Data Analyse and Interpret data Take Action
Gordon Wells (1994)	O Act Observe Interpret Plan Change
Y. Wadsworth (1997)	O Act Observe Reflect Plan Change
Jeffrey Glanz (1998)	O Select a Focus Collect Data Analyse and Interpret Data Take Action Reflect Continue/Modify
Richard Sagor (2000)	O Selecting a Focus Clarifying Theories Identifying Research Questions Collecting Data Analysing Data Reporting Results Taking Informed Actions
Earnest Stringer (2004)	O Look Act Think Act
John Creswell (2005)	O Identifying Problem Locating Resources Identifying Information Collecting Data Analysing Data Developing a Plan of Action Implementing Plan Reflecting to See Difference
Cher Hendrics (2006)	O Reflect Act Evaluate Reflect Act Evaluate

Thus, as illustrated by the above models, the key features of action research process that clearly distinguish it from other improvement-oriented evaluation methods are as follows.

 The process is cyclical, evolving, rigorous, and collaborative (Rogers and Williams, 2006).

- the process is participatory which keenly involves all the important stakeholders in the decision making which includes time frame and the mechanism for evaluation, the selection of methods to be used, the collection, analysis and reporting of data, and the decision making for putting results into practice (Feuerstein, 1986).
- The process recognizes and attends to inequalities of power and voice among participating stakeholders.
- The process uses promiscuous approaches to codify data to make them coherent with the local contexts and particular groups of people (Chambers, 1997).
- The process uses reflection i.e. a careful, purposeful thinking to understand experiences which assists the knowledge construction process (Jonassen and Reeves, 1996).
- The process is educational so that practitioners could learn collaboratively
 from the strengths and the weaknesses of one another, about techniques to
 improvise their programme and about 'understanding and intervening their
 social reality' (Tandon, 1988).

Action Research and Data Collection Methods

Some qualitative researchers (e.g. Zeni, 2001) insist on using qualitative data only; however, there are many (e.g. Greenwood and Levin, 2000) who give first thought to resolving problem rather than to debating method choices; thus, stress on qualitative, quantitative or both type of data: "... action research is inherently multimethod research ... to address the problem at hand. Effective action research cannot accept priori limitation to one or another research methodology." The mixed-methods not only give way to creative potential, but also let evaluators to triangulate, i.e. to enhance the validity or credibility of evaluation findings by looking at the problem or the situation from several angles for fuller and more comprehensive study (Bamberger, Rugh, and Mabry, 2006; King, Keohan, and Verba, 1994). According to the situation and context, Garaway (2004) has suggested a long list of instruments of data collection that may be used in programme evaluation (Table 4).

Table 4: Instruments of data collection in action research

Surveys	Problem stories using real events,
Interviews	evaluated as a group
Audio and video recordings	Tests
Analysis of records and reports	Participant observations
Unobtrusive measurements	Diaries
Individual and community drawn	Case studies
pictures Mapping	Group meetings
Problem stories using fictional	Focus groups
characters	

Limitations or Challenges of the Approach

The aspects of legitimacy and validity of this practice - especially its dual role 'action' and 'research' have received most criticism. In general, some critics have labelled it as 'not publishable ... only a means of professional development (Clifford, 1973; Good, 1963); unable to replicate at other sites as it concerns only the participants who conducted it; less rigorous at standards (Foshay, 1994; Hitchcock and Hughes, 1995); and a bit messier (Sansone, Morf and Panter, 2004). Specifically, critics hold that evaluators and practitioners may be research 'subjects' and consumers of research findings but not producers of worthy educational knowledge (Lagemann, 1996). Secondly, time that it needs to build trust, say and relationships to address needs of different partners in the evaluation activities makes it more costly. Moreover, circumstances, like finding alternative methods of disseminating information owing to stakeholders' low literacy levels (Gardner, 2004) and absence of participatory role of female practitioners or stakeholders due to societal 'taboos', would demand high standards of crisis management, critical thinking, interpersonal, and social skills. Thirdly, ability to rise above the internal and external biases, distortions and delusion will be a huge challenge for evaluators (Huberman, 1996).

Part 2: Application of Action Research as an Approach to Interactive Form of Evaluation

In this section, we have prepared an exemplar to illustrate how this approach to evaluation can be put to practice as a site-level measure to directly assist the provision of better learning and development to teachers.

The Context, the Issue and the Purpose of Evaluation

CTEPP (Certificate in Teacher Education and Professional Practice) is a six week long teacher education course offered by a local university in Pakistan to both inservice and pre-service teachers. This course has successfully completed four years of its presence in the field and has attracted teachers from all over Punjab. However, there are always calls from the field about the course being too tightly structured and delivered through top-down teacher training strategies. The key aim of this evaluation, therefore, is to transform this course into a more learner-centred, socioconstructivist experience for teachers. Through this immediate improvisation in the already operating programme, teachers will adopt an active role in their learning process, reflect and see new content in relation with their own teaching experiences, hold dialogue with their colleagues and learn from their experiences. Thus, the purpose of the use of action research evaluation is to stimulate and affect the delivery of this teacher education course by taking site-level measures and directly assist the provision of better education and training to teachers. Action research evaluation in this respect will best serve the purposes of all – practitioners, in learning how to deliver the course effectively; participants, in meeting their learning needs; commissioners, in utilising the findings to direct the programme to reach its desired goals. The tables (Table 5 and 6) below summarise the evaluand and the stakeholders.

Table 5: The evaluand.

Evaluand	Teacher education course: CTEPP
Unit of Analysis	Teacher educators
Development State	Operating programme
Programme Type	Educational
Purpose of Evaluation	Improvement in course delivery with a focus on
	instructional strategies being used
Evaluation Time	During implementation
Evaluation Form &	Interactive evaluation: action research
Approach	

Table 6: The stakeholders.

Stakeholders	Group	Relationship to	Use of Evaluation
	Description	Teacher	Findings
		Education	
		Programme	
Primary	CTEPP teacher	Course	Will use the findings to
Stakeholders	educators	deliverers/	learn how to deliver the
(A)		facilitators	course effectively.
Primary	University	Funding body	Will use the findings to:
Stakeholders	administration		o understand how the
(B)			course is being
			delivered.
			o ensure that the funds are
			being spent
			appropriately and
			effectively.
			o bring about any changes
			in the course to make it
			more effective for future
			implementation.
Secondary	Teachers	Course	Will meet their learning
Stakeholders		Participants	needs in a better
			environment.
Tertiary	Universities	Participants'	Will increase their trust in
Stakeholders	and Post-Grad	parent	the usefulness of the course
	colleges	workplaces	for their teachers.

The Major Evaluation Questions

The specific questions in this evaluation study have been given in the table below along with their theoretical premises. In addition, the evaluators on the site can further negotiate with the commissioners if there are any local questions that may be incorporated in the evaluation.

Evaluation Questions	Theoretical Premises	
1. How do trainers (in this	Adult learners not only learn by	
particular setup) direct their	themselves but also from others. They	
teaching to support and enhance	construct their knowledge by	
sociocultural learning?	communicating, analysing problems,	
	identifying solutions, and meeting goals	
	together as a collective activity -	
	sociocultural learning (Dobrovolny,	
	2006).	
2. What strategies do trainers use	Adult learners learn from self-	
to facilitate reflection?	assessment and self-correction –	
	metacognition i.e. knowledge of our	
	strengths and weaknesses as a learner	
	(Grabinger, 1996; Schraw, 1998).	
3. How do (through examples and	Adult learners construct new	
analogies) trainers integrate new	information on the basis of their prior	
information into learners' previous	experiences (Dewey, 1938; Merriam	
knowledge and experiences?	and Caffarella, 1999), and these	
	previous experiences act as a base line	
	against which they compare and	
	contrast new information.	
4. How do trainers engage learners	Adults learn best through authentic	
to utilise their new knowledge to	experiences i.e. opportunities to practice	
find ways to answer their day-to-	their new knowledge and skills – also	
day problems in their professional	real world, task-centred learning	
practices and settings?	(Clark, 1996).	
5. How far trainers are interactive,	Adult learners do best when are exposed	
and facilitate active participation	to active learning environments	
of learners in their learning	(Wittrock, 1992) where trainers act as	
process?	facilitators and do not merely supply	
	information but actively engage them in	
	the construction/generation of their own	
	meanings and relationships through	
	various activities (Grabowski, 1996).	

The Project Approach:

This evaluation is a qualitative study and will employ action research approach to interactive evaluation. This approach is ideal for the improvement of the delivery of programmes by improving the practices of their participants. The evaluators work closely with stakeholders to negotiate the purpose of evaluation which is based on a problem or an area of focus (identification of an area of focus), interview participants and observe their practice (data collection), synthesise information gathered (data analysis and interpretation), take some form of 'action' which invariably spirals evaluators and participants back into the process repeatedly (development of an action plan). The results are then reported to its stakeholders.

Data Collection Methods and Procedures

This evaluation study will employ three tools for data gathering:

- 1. Open-ended questionnaires to seek feedback from the programme participants.
- 2. In-depth interviews with key stakeholders.
- 3. Participant observation

The procedures for data collection that the evaluators will follow have been explained as follows.

1. An open-ended questionnaire will be distributed among teacher educators and course participants and they will be asked to respond to it in as much detail as possible. The data generated through the questionnaires will be collated, analysed, and processed carefully to a) seek basic familiarity with the respondents; b) understand their experiences and views on effective programme delivery; c) understand the nature of the problem or discrepancy; d) decide how much and what kind of efforts might be needed for action planning.

- 2. One-on-one interviews with the teacher educators will be organised to a) discuss their own responses in the questionnaire; b) discuss and explain discrepancy to them; and explain what they are expected to do; c) discuss in detail how they can transform their practice by moving from teacher-centred to learner-centred approach to teaching.
- 3. The evaluators will organise a day workshop to collaborate and share and discuss with the teacher educators the learner-centred teaching strategies. This workshop will be designed in such a manner that it will be in itself an exemplar and a good practice for teacher educators to observe and experience themselves how an adult learners' classroom and teaching look like. This practical demonstration will help teacher educators in the planning of their own teaching and learning in the course.
- 4. The evaluators will observe participants' classes to determine whether teacher educators are successful in introducing learner-centred approach to their teaching and what needs further improvement. The evaluators will prepare careful, objective notes about what they observe, recording all accounts and observations as field notes in a field notebook. Informal conversation and interaction with course participants will also be valued and recorded in the field notes in as much detail as possible.
- 5. The field notes will be collated, analysed, and processed to generate insights that may suggest themes, trends or understanding not previously envisaged. This detailed analysis will help evaluators to identify what is going well and what needs further improvement. Through a careful and objective analysis a new action will be planned to improve the discrepancy.
- 6. The evaluators will collaborate again with the educators in one-on-one interviews to plan new action. They will discuss with educators the participant observation findings and will take their opinions about how they see the situation. Further changes and options for options for improvised

action will be thoroughly studied and suitably incorporated in their course delivery.

7. The evaluators and the teacher educators will enter in the second spell of action research i.e. the teacher educators' teaching will again be studied, data will be collected, analysed and discussed with them.

Dissemination of Findings

The results of this study will be disseminated to its key stakeholders: the University and the CTEPP administration and the CTEPP teacher educators. The forms in which these findings will be received and how they will be utilised have been explained with the help of the table as follows.

Table 7: Dissemination of findings

Who will receive	In what form?	How will reporting ensure use?
the evaluation?		
University and	1. Working sessions	Systematic interpretation of the
CTEPP	2. Final comprehensive	findings illustrating how the site-
administration	report including	level intervention improved the
	recommendations	delivery of the course, and how
	3. Executive summary	the results of the evaluation can
		further guide any changes in the
		course or its implementation in
		future.
CTEPP Teacher	1. Up to the point	Up to the point findings of the
Educators	working sessions	evaluation shared with the
	2. Executive summary	participants will improve the
		teaching practices of the teacher
		educators, in general, and improve
		the delivery of the course, in
		particular.

Codes of Behaviour

The evaluators' sustained and intensive presence in the field will certainly raise ethical issues. This evaluation, relying heavily on human interactions, will be vulnerable to misunderstandings, conflict of opinions, embarrassment, and anger. Any signs of uneasiness, resistance, or other indications of emotional or psychological distress will be recognized and promptly addressed by negotiating them with the participants. The evaluators will ensure maximum confidentiality and no information shared will be disclosed to any unauthorised party. All the personal data that will be provided or displayed in the evaluation report will remain behind a shield of anonymity i.e. the identity of participants will be disguised with the use of pseudonym and the individuals will only be recognised by their position or title. The in-depth interviews, when necessary, will be tape-recorded by seeking permission from the participants. This practice will a) ensure accurate record of the interviews; b) make evaluators hold a good eye contact with the interviewee; make evaluators sensitive to any anomaly that may need to be addressed at once.

Timeline and Budget

1. Timeline

Schedules of the CTEPP course to be evaluated and the planned evaluation have been presented in a table form (Table 8 and 9) below:

Table 8: Schedule of the CTEPP course to be evaluated.

Course start date	Course end date	Meetings/week	Sessions/meeting
July 01, 2011	August 08, 2011	Two	Two sessions of 3
			hours each

Table 9: Timeline for evaluation

Stage	Tasks	Timeframe
Pre-	Approval of evaluation plan by the	June 6, 2011
Evaluation	commissioners	
	Development of evaluation tools -	June 20
	questionnaire and interview questions with	
	the primary stakeholders	
	Scheduling interviews and classroom	June 25
	observations	
Field Work	Conduct preliminary meetings/interviews	29 and 30 June
	with the teacher educators	
	Administer questionnaires	1st week of July
	Conduct workshops	1st week of July
	Conduct participant observation	2nd week of July
	Conduct one-on-one interviews (2 nd spell)	3rd week of July
	Conduct participant observation (2 nd spell)	3rd week of July
	Quick one-on-one sessions (2 nd spell)	4th week of July
	Finalise fieldwork	1st week of
		August
Post-	Finalise analysis of acquired evaluation data	25 August
Evaluation	and field notes for comprehensive reporting	
	Preparation and presentation of evaluation	15 September
	report	

2. Evaluation Budget

The evaluation budget will accommodate the labour and other direct costs needed to complete the evaluation. The priority areas where spending would be made are:

- a) evaluators and evaluation staff
- b) boarding and lodging
- c) travelling to and from site
- d) equipment and stationery
- e) telephoning, printing, mailing, and copying
- f) printing of report and dissemination
- g) miscellaneous including emergency expense

Final words

Teachers are always expected to grow and develop in their own profession not by studying their own practices or experiences but by studying the findings of those who are not themselves school-based teachers (Cochran-Smith and Lytle, 1993). It is, therefore, very important that teachers take a lead and adopt active roles in their learning and development and create a different knowledge base by acting not just as objects of study, but also as architects of study and generators of knowledge (Cochran-Smith and Lytle, 1993). Thus the hallmark of action research - research, education and action, transcends it from the traditional line of evaluation approaches and presents it as a way more befitting and more coherent to attend to the issues of not only programme improvement, but also the needs of teacher growth, development and renewal in this challenging era. Its procedures may be time consuming, costly, complicated, and challenging but, for sure, the alternative will be less rewarding.

References

Argyris, C. & Schon, D. A. (1991). Participatory Action Research and Action Science. In W. F. Whyte. Participatory Action Research. Newbury Park, California: Sage Publications.

Bamberger, M., Rugh, J. & Mabry, L. (2006). Real World Evaluation. Thousand Oaks, CA: Sage Publications. p. 305.

Borda, O. F. (2006). Participatory Research in Social Theory: Origins and Challenges. In P. Reason & H. Bradbury (Eds.), *Handbook of Action Research* (pp. 27-37). London: Sage Publications.

Bullough, R. V., & Gitlin, A. (1995). Becoming a student of teaching:

Methodologies for exploring self and school context. New York: Garland.

Burke, B. (1998). Evaluating for a Change: Reflections on Participatory

Methodology. In E. Whitmore (Ed.), Understanding and Practicing Participatory

Evaluation (pp. 43-44). San Francisco: Jossey-Bass Publishers.

Calhoun, E. (1994). How to Use Action Research in the Self-Renewing School. Alexandria, VA: ASCD. p. 2.

Carr, W. & Kemmis, S. (1986). Becoming Critical: Education, Knowledge and Action Research. Besingstoke: Falmer Press.

Chambers, R. (1997). Whose Reality Counts? Putting the First Last. London: Intermediate Technology Publications.

Clark, R. (1996). Designing cognitive apprenticeship training programmes to accelerate expertise. Paper presented at the Interactive '96 Conference, Atlanta, GA. Clifford, G. (1973). A history of the impact of research on teaching. In R. M. W. Travers (Ed.), Handbook of research on teaching (pp. 1-46). New York: Rand McNally.

Cochran-Smith, M., & Lytle, S. L. (1999). The teacher research movement: A decade later. Educational Researcher, 28(7), 15-25.

Cochran-Smith, M., & Lytle, S. L. (1993). Inside outside: Teacher research and knowledge. New York: Teachers College Press. pp. 1-2

Cousins, J. B., & Earl, L. (Eds.) (1995). Participatory evaluation in education. London: Falmer.

Creswell, J. W. (2005). Educational research: Planning, conducting and evaluating quantitative and qualitative research. Upper saddle River, NJ: Merrill.

Dobrovolny, J. (2006). How Adults Learn from Self-Paced, Technology-Based Corporate Training: New focus for learners, new focus for designers. Distance Education, 27(2), 155-170.

Dewey, J. (1938). Experience and education. New York: Simon & Schuster.

Estrella, M., & Gaventa, J. (1999). Who counts really? Participatory monitoring and evaluation. IDS Working paper 770.

Feuerstein, M-T. (1986). Partners in Evaluation: Evaluating Development and Community Programmes with Participants. London: Macmillan.

Flood, R. L. (2006). The relationships of 'Systems Thinking' to Action Research. In P. Reason & H. Bradbury (Eds.), Handbook of Action Research (pp. 117-127). London: Sage Publications.

Foshay, A. W. (1994). Action research: An early history in the US. Journal of Curriculum and Supervision 9, 317–325.

Gardner, S. (2004). Participatory Action Research Helps Now. Education Digest, 70 (3), 51-55.

Gaventa, J., & Cornwall, A. (2006). Power and Knowledge. In Peter Reason & Hilary Bradbury (Eds.), Handbook of Action Research. (p. 71). London: Sage Publications.

Garaway, G. (2004). Participatory Evaluation. In K. deMarrais & S. D. Lapan. Foundations for Research: Methods for Inquiry in Education and the Social Sciences (p. 260). Mahwah, NJ: Lawrence Erlbaum Associates, Publishers.

Good, C. V. (1963). Introduction to Educational Research. New York: Appleton Century Crofts.

Glanz, J. (1998). Action Research: An educational leader's guide to school improvement. Norwood, MA: Christopher Gordon.

Grabinger, R. S. (1996). Rich environments for active learning. In D. H. Jonassen (Ed.), Handbook of research for educational communications and technology. New York: Simon & Schuster Macmillan.

Grabowski, B. L. (1996). Generative learning: Past, present, and future. In D. H. Jonassen (Ed.), Handbook of research for educational communications and technology. New York: Simon & Schuster Macmillan.

Greenwood, D. J. & Levin, M. (1998). Introduction to Action Research: Social Research for Social Change. Thousand Oaks, CA: Sage Publications.

Greenwood, D. J. & Levin, M. (2000). Reconstructing the relationships between universities and society through action research. In N. K. Denzin & Y. S. Lincoln (Eds.), Handbook of Qualitative Research (pp. 85-106). Thousand Oaks, CA: Sage.

Hendrics, C. (2006). Improving Schools through Action Research: A

Comprehensive Guide for Educators. Boston, MA: Allyn and Bacon. p. 9.

Hitchcock, G. & Hughes, D. (1995). Research and the Classroom Teacher. London: Routledge.

Huberman, M. (1996). Moving mainstream: Taking a closer look at teacher research. Language Arts 73, 124–140.

Johnson, A. P. (2008). A short Guide to Action Research. Boston: Pearson. p. 28. Joint Committee on Standards for Educational Evaluation. (1994). The programme evaluation standards. Thousand Oaks, CA: Corwin Press. p. 3.

Jonassen, D. H., & Reeves, T. C. (1996). Learning with technology: Using computers as communication and technology. New York: Simon & Schuster Macmillan.

Kemmis, S. (1988). Action Research in Retrospect and Prospect. Victoria, Australia: Deakin University Press. p. 29.

Kemmis, S., & McTaggart, R. (2000). Participatory action research. In N. K. Denzin & Y. S. Lincoln (Eds.), Handbook of Qualitative Research. (pp. 567-605). Thousand Oaks, CA: Sage.

King, G., Keohane, R., & Verba, S. (1994). Designing Social Inquiry: Scientific Inference in Qualitative Research. Princeton, NJ: Princeton University Press.

Lagemann, E. (1996). Contested terrain: A history of educational research in the United States. 1890–1990. Chicago: The Spencer Foundation.

Lave, J., & Wenger, E. (1991). Situated learning: legitimate peripheral participation. Cambridge: Cambridge University Press.

Ludema, J. D., Cooperrider, D. L. & Barrett, F. J. (2006). Appreciate Inquiry: the power of the unconditional. In P. Reason & H. Bradbury (Eds.), Handbook of Action Research. (pp. 155-165). London: Sage Publications.

MacBeath, J. (1999). Schools must speak for themselves: the case for school self-evaluation. London: Routledge.

Mark, M. M., Greene, J. C. & Shaw, I, F. (2006). Introduction. In M. M. Mark, J. C. Green & I. F. Shaw (Eds.), The Sage Handbook of Evaluation (p. 6). London: Sage Publications.

McNiff, J., & Whitehead, J. (2006). Action Research. London: Sage Publications. p.70.

McNiff, J., Lomax, P., & Whitehead, J. (1996). You and your action research project. New York: Routledge.

Merriam, S. B., & Caffarella, R. S. (1999). Learning in adulthood: A comprehensive guide. San Francisco: Jossey-Bass.

Neuman, W. L. (2003). Social Research Methods: Qualitative and Quantitative Approaches. Boston: Pearson. p. 25.

Norman, A., Sprinthall, A. J., & Thies-Sprinthall, L. (1996). Teacher professional development. In J. Sikula (Ed.), *Second handbook of research on teacher education* (pp. 666–703). New York: Macmillan.

Orton, J. (1992). Notes for a Graduate Course in Action Research. In J. M. Owen. Programme Evaluation: Forms and Approaches (p. 222). NSW: Allen & Unwin.

Owen, J. M. (2006). Programme Evaluation: Forms and Approaches. NSW: Allen & Unwin. pp. 39, 222.

Owen, J. M. (2004). Evaluation Forms: Towards an Inclusive Framework for Evaluation Practice. In M. C. Alkin (Ed.), Evaluation Roots: Tracing Theorists' Views and Influences (pp.356-369). Thousand Oaks, CA: Sage Publications. Patton, M. Q. (2002). Qualitative Research and Evaluation Methods. Thousand Oaks, CA: Sage.

Reason, P. & Bradbury, H. (2001). Introduction. In P. Reason & H. Bradbury (Eds.), *Handbook of Action Research* (p. 1). London: Sage Publications.

Reason, P. & Goodwin, B. (1999). Towards a science of qualities in organizations: Lessons from complexity theory and postmodern biology. Concepts and Transformations, 4(3), 281-317.

Rogers, P., & Williams, B. (2006). Evaluation for Practice Improvement and Organizational Learning. In Ian F. Shaw et al. (Eds.). The Sage Handbook of Evaluation. (pp. 83-84). London: Sage Publications.

Rowan, J. (2006). The Humanistic Approach to Action Research. In P. Reason & H. Bradbury (Eds.). Handbook of Action Research. (pp. 106-116). London: Sage Publications.

Sagor, R. (2000). Guiding School Improvement with Action Research. Alexandria, VA: ASCD.

Sansone, C., Morf, C. C. & Panter, A. T. (2004). The Sage Handbook of Methods in Social Psychology. London: Sage Publications. pp. 440-443.

Schraw, G. (1998). On the development of adult metacognition. In M. C. Smith & T. Pourchot (Eds.), Adult learning and development. Mahwah, NJ: Lawrence Erlbaum Associates.

Stringer, E. (2004). Action Research in Education. Upper Saddle River, NJ: Prentice Hall. p. 12.

Stufflebeam, D. L. & Shinkfield, A. J. (2007). Evaluation Theory, Models, & Applications. New York: Jossey-Bass. p. 9

Sutherand, A. (1995). Getting Everyone Involved: A Guide to Conducting Participatory Evaluation. Calgary, Alberta: YWCA of Calgary and Zambia. Tandon, R. (1988). Participatory Evaluation: Issues and Concerns. New Delhi: Society for Participatory Research in Asia (www.pria.org).

Toolman, S., Gustavsen, B. (Eds.). (1996). Beyond Theory: Changing Organizations through Participation. Amsterdam: John Benjamins.

Wadsworth, Y. (1997). Everyday Evaluation on the Run. St. Leonards, NSW: Allan & Arwin Australia.

Wells, G. (1994). Changing Schools from Within: Creating Communities of Inquiry. Toronto, Ontario: OISE Press. p. 27.

Whitmore, E., & Cousins, F. (1998). Framing Participatory Evaluation.

Understanding and Practicing Participatory Evaluation. San Francisco: Jossey-Bass Publishers. p. 13.

Whyte, W. F. (1991). Introduction. In W. F. Whyte (Ed.), Participatory action research (pp. 7-19). Newsburry Park, CA: Sage Publications.

Wittrock, M. C. (1992). Generative learning processes of the brain. Educational Psychologist, 27(4), 531–541.

Zeichner, K. M., & Noffke, S. E. (2001). Practitioner Research. In V. Richardson (Eds.), Handbook of research on teaching. Washington, DC: American Educational Research Association.

Zeni, J. (Ed.). (2001). Ethical issues in practitioner research. New York: Teachers College Press.