Dealing with Crucial Aspects of Action Research
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Abstract
Action research, which is a dynamic iterative process, is a deliberate and solution-oriented investigation accomplished collectively or personally in order to solve an existing problem. It entails the participants who scrutinize their own instructive practice systematically and cautiously. It is characterized by spiraling cycles of problem identification, systematic data collection, reflection, analysis, actions taken based on data, and finally problem redefinition. It is an applied form of inquiry useful in divergent situations. It involves such people who keep working to improve their performances, skills, strategies and techniques. The prime objective of this article is to deal with the crucial aspects of action research, such as definitions of action research, field of action research, process, steps, principals, characteristics, benefits and demerits of action research. This article has been prepared on the basis of secondary data gathered from research books and journal articles. It is useful especially to the researchers, because it focuses on the indispensable aspects of action research, and it is undoubtedly necessary for them to have basic ideas about its underlying facets to carry out action researches in their real life situations.

Keywords: Action research, characteristics, principles, process, steps

1. Introduction
One of the most striking traits of the Modern Era is the scholars’ fondness for research works in numerous arenas to solve existing problems. Diverse research topics and multiple methods have been used to carry out research studies. Such diversities make the researchers both cautious and interesting. Action research (AR), which is a systematic and orderly way for researchers to observe their practices along with exploring problems and possible courses of action, has been termed as a spiral of self-reflection (Kemmis, 1994). It is one of the most recurrent research designs used in the field of teaching learning activities. How to conduct an appropriate action research is problematic, because there are diverse ways of collecting data. It can be carried out by employing qualitative, quantitative or mixed data. It is an invaluable tool that allows educational leaders to reflect upon their practices, programs, and procedures (Glanz, 2003). It can be taken as a disciplined inquiry. It is one of the most recurrent research designs used in the field of teaching learning activities. Its application in the education arena is to solve an immediate problem. It is a type of inquiry that is preplanned, organized, and shared with others (Johnson, 2003).

The application of data depends on the nature of the subject matter and the purpose of the research. AR can be accomplished by keeping these aspects in mind. It is normally an educational research which involves collecting information regarding current educational programs and outcomes, analyzing the information, developing a plan to improve it, collecting changes after a new plan is implemented and developing conclusions regarding the
improvements. It is a course of action in which participants scrutinize their own educational practice thoroughly and cautiously, using the techniques of research (Watts, 1985). It is an inquiry or research in the context of focused efforts to improve the quality of an organization and its performance. It is basically designed and conducted by practitioners who analyze the data to improve their own practice. It is a sort of inquiry that is realistic as it involves making transformation to perform. It is pertinent when the research topic requires the series of actions over time in a specified group, community or institute where the members require studying their own performances in order to modify or improve their working conditions (Coghlan & Brannik, 2005). It is more thoroughly planned and more formal. It is a methodology which provides a framework for approaching a piece of research. This framework encourages researchers to look at their practices and assessments where change may be valuable for researching the issues and possible actions, implementing and evaluating action steps and articulating learning from the process. It provides a framework that channels the energy of teachers in the direction of a better understanding of why, when, and how students become better learners (Miller, 2007).

Although it can be applied in other fields of activities, it is very vital in the field of education, especially in teaching learning activities to assess the effectiveness of teaching techniques and learning strategies. It is recurrently discussed and exceedingly cherished in the vicinity of education as the Master level students in the Faculty of Education under Tribhuvan University, Nepal are required to carry out such a research study for the fulfillment of their academic degrees. The obligation in the beginning as a subject teacher and the interest at the moment drove this writer to write this article regarding the action research by highlighting some fundamental aspects to be pondered while bringing forth an action research. This article will be helpful especially to the young researchers who are interested in carrying out action research in reality. AR is utterly significant as its goal for people is to increase the effectiveness of the work in which they are personally engaged (Stringer, 2014). Ultimately, it contributes to the quality enhancement of the institutions and performances of the concerning persons.

2. Literature Review

Literature review has been done by incorporating the following aspects of action research:

2.1 Action Research

The phrase ‘Action Research’ was first coined by Kurt Lewin in his paper on ‘Minority Problems’ published in 1946 (Zuber-Skerritt, 1992; Holter & Schwartz, 1993). He has been credited the actual foundation stone of action research (French & Bell, 1995; Lippitt, Watson, & Westley, 1958; Tomal, 1996). Lewin (1946), a noted German social psychologist, has been recognized to have advanced the concept of action research. He attempted to seek the peoples’ real world experience based method.

AR which signifies as a consistent model of professional advancement endorses a collaborative investigation, a reflection and a dialogue. It stands as a procedure of systematic examination that seeks to advance social issues affecting the lives of ordinary people (Lewin, 1946; Bogdan & Biklen, 1992; Stringer, 2008). It is a tactic for examining questions and finding out solutions to problems people meet in their daily lives (Moen & Solvberg, 2012; Stringer, 2014). It exists as a method employed for improving practice (Koshy, 2010). It mingles a substantive performance with an inquiry procedure and that it is action controlled by enquiry and a personal attempt at understanding while involved in a course of improvement and change (Hopkins, 2003). It obviously indicates that an action research is very vital in the field of education to improve teaching and learning activities. It is a period of investigation, which describes, interprets and elucidates social situations while performing an alteration of intervention directed to the improvement and involvement (Waterman, Tillen,
Dickson, & De-Koning, 2001). Burns (2010) outlines action research to be related to the ideas of “reflective practice” and “the teacher as researcher” (p. 3). It can be taken as a research study of a social condition brought forth by those engrossed in that condition to recover both their practice and the eminence of their understanding (Winter & Munn-Giddings, 2001). In the view of (Mertler, 2016), it is a four-step cyclic process with planning, acting, developing the action plan and finally reflecting on the process.

It is a systematic multi-staged cyclic process, which pursues to improve practice through the operation of informed and accretive change. It is not executed in segregation but seeks out chances for collaboration and the involvement of other agents (Koshy, 2010). It is a method used for improving practice and it mingles a substantive performance with an inquiry procedure and that it is action controlled by enquiry and a personal attempt at understanding while involved in a course of improvement and change (Hopkins, 2003). Action research, normally used by academic practitioners and professionals, is an approach that falls under the education research. It aims at examining and improving the pedagogy and practice adopted by the researchers. In action research, the researcher is concerned with using a systematic process in solving educational problems and making improvements (Tomal, 2010). It signifies a significant extension of reflection along with critical self-reflection that educators employ regularly in their classroom. As students are actively involved in a learning process, the classroom is assumed to be dynamic and curious, demanding the persistent attention of the educators. It is by nature a comparative research which embraces a spiral step on the situations and impacts of varied forms of social action.


It is usually defined as an inquiry conducted by educators in their own settings in order to advance their practice and improve their students’ learning (Burton & Bartlett, 2005; Fox, Martin, & Green, 2007; Herr & Nihlen, 2007; Jarvis, 1999; Menter, Eliot, Hulme, & Lewin, 2011). It provides educators with a powerful strategy for being active partners in leading school improvement (Cochran-Smith & Lytle, 2009; Hopkins, 2008).

The main purpose of action research is to improve institutional programs within working institutions. Within all the definitions of action research, there are four basic themes. They are the empowerment of participants, collaboration through participation, acquisition of knowledge, and social change. There are many traditions of action research, some more rooted in activism and social movements (Freire, 1970; Fals-Borda, 2001) others arising from organizational learning and management and others related to qualitative social science methods. It is often carried out in a small scale. It follows a pattern, or cycle, which always involves planning, making a change and then reviewing the situation to generate learning. There are many models of action research that break these key phases down in to smaller steps. It has evolved through various conceptual and interpretive generations (McTaggart & Garbutcheon-Singh, 1988; McKernan, 1996; Noffke, 1994), the technical-scientific and problem-solving from1950s to 1960s drawing on scientific and quantitative methods (Corey, 1949), the practical and illustrative in 1970s, utilizing case study and description to contribute to educational and curriculum theory (Elliott, 1978; Reid, 1978; Schwab, 1969; Stenhouse, 1971); and the critical-emancipatory from the mid 1980s, drawing on critical, constructivist and dialectical methodologies (Carr & Kemmis, 1986; FalsBorda, 1979; Freire, 1982; Hall, 1979; Kemmis & McTaggart, 1982). It is an essential research through which colleagues,
stakeholders and institutions are benefitted. It provides an alternative approach to bringing about changes in policy, practice and knowledge (Pettit, 2010). All these citations signify what action research is and why it is carried out. A key essence of action research is the spirit of improving the existing problems.

2.2 Fields of Action Research

Action research is accomplished within diverse disciplines (Sagor, 2011; Shanks, Miller, & Rosendale, 2012; Mills, 2014). Action researches carried out in diverse disciplines have produced a large number of variations of its rudimentary tenets. The variations comprise cooperative inquiry (Reason & Rowan, 1981; Heron, 1988), participatory action research (Sappington, Baker, Gardner, & Pacha, 2010), and action science (Argyris & Schön, 1978). It is a participatory approach which inquires couples of actions and reflections in the search of practical solutions to issues existed within a community. Angelelli (2008) stresses that action research projects steered collaboratively between researchers and institutes can advance the profession. Action Research for language teachers is “an approach to collection and interpreting data which involves a clear, repeated cycle of procedures” (Bailey, 2001, p. 490). Although it is primarily carried out in the field of education, it can be applied in different fields to solve immediate problems regarding strategies, Processes, activities etc.

It now encompasses various disciplinary fields and national contexts, comprising the field of applied linguistics. These other fields cover industry, work organisation and worker democracy in Norway (Selander, 1987), health care professions in Hong Kong (Kember, Nichols, 1997), business and management in Europe (Somekh & Thaler, 1997), organizational and human development in the European Union (Biott, 1996), higher education in Australia (Zuber-Skerritt, 1992), vocational education and training and social work in Europe (Hutchison & Bryson, 1997), community activism in Brazil (Knijnik, 1997), and environmental sustainability internationally (Tilbury & Wortman, 2004). All these inferences mentioned above pinpoint the multifarious fields where the improvements are necessary and solutions to the existing problems must have been realized.

2.3 Process of Action Research

AR consists of a cyclic process of action and a study with four key phases: planning, acting, observing and reflecting. This process, which embraces planning, taking action and evaluating, leads to further planning, action and evaluation (Coghlan & Brannick, 2010; Burns A., 1999).

It involves a sequential process of teaching, learning and making a decision. This process can be executed in numerous ways to advance teaching-learning activities. Ferrance (2000) asserts that “action research is a process in which participants examine their own educational practice systematically and carefully, using the techniques of research” (p. 1). It is a way of cultivating student achievement by adopting the more effective teaching and management of teaching institutes (Cohen & Manion, 1994; Elliott, Action research for educational change, 1991; Stenhouse, 1975). Diverse researchers have mentioned the dissimilar process to take place in action research. Zuber-Skerritt and Perry (2002) describes four major phases: planning, acting, observing and reflecting as the processes of action research. In general, it holds the following process:
2.4 Purposes of Action Research

Action research aims at increasing the efficiency of the people in their work where they are personally involved (Stringer, 2014). It is used for various purposes: school-based curriculum development, professional development, systems planning, strategy enhancement, school restructuring, evaluation and so on. It is a form of research that focuses on actively engaging in and studying a problem or issue within a specific context in order to identify ways to improve or solve it. It is typically used in educational and social science settings, as well as in business and organizational contexts. There are several purposes for conducting action research, including:

1. To identify and understand a problem or issue within a specific context
2. To identify and implement solutions to a specific problem or issue
3. To improve the effectiveness of a specific program, process, or intervention
4. To increase the understanding and knowledge of a specific topic or area of study
5. To involve stakeholders in the research process, including practitioners, policymakers, and community members
6. To facilitate the transfer of knowledge and results to other contexts or settings

2.5 Steps of Action Research

Action research is often characterized by its cyclical nature, with researchers engaging in a series of steps that involve planning, acting, observing, and reflecting. This allows researchers to continually refine their understanding of the problem or issue, and to identify
and implement appropriate interventions or solutions. Winter (1989) offers the following six steps of action research

**Figure 2: Steps of action research**

**Identification of the problem:** The first step in action research involves identifying a problem and defining an area of interest for solving a current problem faced by the researcher(s) in the work place.

**Defining and delimiting the problem:** There might be several problems in the researchers’ work place. One of the most burning problems is chosen to carry out the research as all the problems cannot be solved at a time. It means other problems have to be ignored and only a specific problem needs to be focused.

**Analyzing the causes of the problem:** The possible causes of the specific problem are analyzed. The most reliable cause is chosen and tried out to work on it. The pertinent cause can be discerned through interview, test items, questionnaire, observation etc.

**Formulating the hypotheses:** Predictable statements are made by regarding the causes and problems.

**Designing for testing the hypotheses:** Such predictable statements are made to be tested by using inferential statistics.

**Conclusion of the action:** Conclusions are drawn after analysis and interpretation of data along with the results of the hypothesis test.

Creswell (2012) has pointed out eight steps in conducting an action research: determining if action research is the best design to use, identifying a problem to study, locating resources to help address the problem, identifying information that is needed, implementing the data collection, analyzing the data, developing a plan for action and implementing the plan and reflecting it.

**2.6 Principles of Action Research**

Borgia and Schuler (1996) assume the following principles of action research:

**Commitment:** Participants in the action research should have time commitment carefully.

**Collaboration:** All participants do have an equal chance for offering ideas, suggestions or any actions to bring forth a substantial change.

**Concern:** Participants build up a team of friends with reliance on each other and they realize the worth of the project.

**Consideration:** It demands a sheer concentration and careful considerations to purses the configuration and relationship to create the essence within the investigation.
Change: Change is a persistent and significant element for teachers to maintain the effectiveness of their teaching.

2.7 Characteristics of Action Research

Action research is a systematic multi-staged cyclic process, which pursues to improve practice through the operation of informed and accretive change. It is not executed in segregation but seeks out chances for collaboration and the involvement of other agents. Koshy (2010) has highlighted the following salient characteristics of action research:

- It is a sequential process of action, evaluation plus reflection intended to enhance educational practices.
- It involves the participation and collaboration of concerned individuals with a shared goal.
- It is situational and contextual.
- Reflection practices in action research are developed on the basis of the interpretations exposed by participants.
- Knowledge comes from actions and applications.
- It is based on problem solving if solving the problem leads to real improvement.

Action research is iterative. The plan is created, implemented, revised and then implemented. This helps with the constant procedure with reflection and revision. Action research creates knowledge during the development and implementation of actions. However, they are continuous, not definitive or absolute (Koshy, 2010).

McDonough and McDonough (1997) offer four characteristics of action research:

- It is participant-driven and reflection.
- It is collaborative.
- It leads to change and the improvement of practice not just knowledge in itself.
- It is context-specific.

Creswell (2012) puts forward six key characteristics of action research. They are:

- A practical focus.
- The education-researcher own practices.
- Collaboration.
- A dynamic process.
- A plan of research.
- Sharing research.

He emphasizes that understanding these characteristics will assist teachers to better design their own study to read, assess and use an action research study.

Rudimentary characteristics of action research are as follows:

- Empirical based research
- Applied research
- Centered on evaluating local problems
- Tenacity to solve immediate problems
- Objective in nature
- Limited to local population
- Cyclic process
- Broad Scope
- Flexibility in nature

2.8 Action Research Cycle

There are four basic stages in the cyclical action research process: reflect, plan, act, observe, and then reflect to continue through the cycle (Dickens & Watkins, 1999). Action research fundamentally follows the four cycles:
Figure 3: Cycle of action research

**Plan:** The most imperative outcome of the planning phase is a comprehensive plan of the action the researchers intend to take or the alteration they propose to make. The planning phases includes the facets like Who, what, when and how.

**Act:** The researchers try to employ their plan into action as they expected, but slight deviation can be accepted in the light of experience and feedback. In this phase, new insights are possible to arise. These can either be integrated into their current project or can be recorded for future research.

**Observe:** Comprehensive observation, monitoring and recording facilitate the researchers to assess the effect of their action or intervention.

**Reflect:** Regular reflection within the project team is a vital feature of an action research mission. The reflection includes the aspects like how the changes were effective, what they have learnt, types of barriers to change, how they improved the changes and how the changes can be improved to make researches in future.

### 2.9 Action research in the Classroom

AR is a useful approach to practice in the educational system. It steered in a classroom provides a precise insight into pattern of student responses and teaching strategies over the whole teaching session. It is an educational research conducted by educators for themselves (Mertler, 2017). It is executed in a classroom by a certain teacher or group of teachers who work together to pursue a modification or improvement in their teaching and learning problems. It seeks to answer the questions and solves problems that arise in every day classroom to set findings into instant practice (Twine & Martinek, 1992; McKay, 2006). It can be carried out by an individual effort, but it turns to be stronger when it encompasses cooperation and collaboration among colleagues with students.

Dissimilarities of action research approaches also occur in educational surroundings (Atweh, Kemmis, & Weeks, 1998; Elliott, 1991; Greenwood & Levin, 2007; Hollingsworth, 1997; Stark & Torrance, 2005) including approaches known as teacher research (Burnaford, Fischer, & Hobson, 2001; Cochran-Smith & Lytle, 1993; Kincheloe, 2012), reflective practice (Evans, 2002), and community service learning (Angelelli, 2008; Kaye, 2004; Wade & Anderson, 1996; Zeichner & Melnick, 1996). It is executed in a classroom by a certain teacher or group of teachers who work together to pursue a modification or improvement in their teaching and learning problems. Wallace (1991) states that AR can have specific and immediate outcome which can be directly related to practice in the teacher's own context' and
is an extension of the normal reflective practice of many teachers, but it is slightly more meticulous and might conceivably lead to more effectual outcomes. AR for language teachers is an approach to collection and interpreting data which involves a clear, repeated cycle of procedures (Bailey, 2001). A teacher can solve classroom problem using action research (Salahuddin & Khatun, 2013). It is taken as a process through which teachers collaborate on assessing their practice (Elliott, 1991). It lies within a range of joint research approaches with the general characteristics of generating practical relevant knowledge around a situation or problem which indicates sensitivity to the context (Reason & Bradbury, 2008). It aims at the co-construction of knowledge and innovative possibilities for an action through collective cycles of meaning-creating and understanding (Cassell & Johnson, 2006).

Language teachers retain their growing interest in action research as the classroom-based research (Allwright, 1988; Chaudron, 1988; Day, 1990; Long, 1983; VanLier, 1988) and learner-centered curriculum development (Nunan, 1988; Johnson, 1989). Repositioning the teacher as a reflective, enquiring and self-motivated practitioner (Zeichner & Liston, 1996) was an inevitable concomitant of the rise of communicative and learner-centered language teaching (Breen & Candlin, 1980; Richards & Rodgers, 1986; Rivers & Temperley, 1978; Widdowson, 1972) on the one hand, and of renewed debates about what should be considered legitimate goals for teacher professional development (Larsen-Freeman, 1983; Richards, 1990). It involves systematic observations and data collection for reflection, decision making and the development of more effective classroom strategies (Parsons & Brown, 2002). The inquiry process gets deepened if we use the approaches which are experiential, presentational, conceptual, and practical (Heron, 1999; Heron & Reason, 2001).

The classroom research is based on the following assumptions: teachers work best on problems they have identified for themselves; they become more effective when encouraged to examine and assess their own work and then consider ways of working differently; they help each other by working collaboratively; and working with colleagues helps them in their professional development design.

2.10 Benefits of Action Research

AR is taken as a means of improving student attainment through more operative teaching and management of teaching institutions (Cohen & Manion, 1994; Elliott, Action research for educational change, 1991; Stenhouse, 1975). Educators engaged in action research turn out to be more flexible in their thinking, more open to innovative ideas, and more capable in solving new problems (Pine, 1981). It enhances teachers’ thinking skills, sense of effectiveness, disposition to communicate with colleagues, and attitudes toward professional growth and the process of change (Simmons, 1985). Teachers involved in action research depend more on themselves as decision makers and attain more self-reliance in what they trust about curriculum and instruction (Strickland, 1988). Action researchers were found to be reading, discussing, rationalizing, and evaluating ideas from related research with extended analytical skills (Simmons, 1985). Constructive changes take place in the school setting through the action research procedure. It makes teachers become lifelong learners, and students realize success in a learning process. Teachers gain knowledge of what it is that they are able to influence and they make changes that generate results that confirm change. The process provides the chance to work with others and to learn from the sharing of idea.

It offers teachers with an arduous learning process on their practice, which after all is the most imperative thing for teachers. It brings consistency to teacher’s learning through the forms of reflection that requires reading, writing, and preferably discussing with other colleagues. It is taken as a method which enables and supports educators in performing operative pedagogical practices by renovating the quality of making decisions and actions to successively enhance the student involvement and learning. In an action research, the information is gathered with the goals of gaining insight, developing reflective practice,
effecting positive changes in the school environment and on educational practices in general, and improving student outcomes (Donato, 2003). It is situated within a range of collaborative research approaches with the common characteristics of producing practical relevant knowledge around a situation or problem, a sensitivity to context (Reason & Bradbury, 2008), and the co-construction of knowledge and new possibilities for action through shared cycles of meaning-making and understanding (Cassell & Johnson, 2006). Several scholars have proposed action research as a fruitful methodology for narrowing the gap between knowing and practicing (Marshall, 2011; Reason & Bradbury, 2008; Shani, Mohrman, Pasmor, Stymne, & Adler, 2008; Sykes & Treleaven, 2009) as it proffers a collaborative way for academics and practitioners to address “issues of concern to individuals and communities in the everyday conduct of their lives (Reason, 2006). It bridges the gap between theory and practice (McDonough & McDonough, 1997).

2.11 Demerits of Action Research

No research is perfect. It retains both merits and demerits. AR keeps hold of the following striking demerits:

- The researcher requires a long time to accomplish an action research.
- The researcher’s own evaluation may lack objectivity in the selection of participants.
- There might be a problem concerning the validity in writing and presentation of the final report by the research practitioner.
- There may be a lack of the objectivity in writing of report.
- The results in action research are not generalizable. The results can only be applicable to the portion of the population studied.
- It is more difficult to conduct than conventional research as it takes longer time and requires refinement of the methodology as the research goes on with.
- Personal evaluation by the research practitioner may not meet the required needs and the result may not depict the real situation (Coghlan & Brannik, 2005).
- It emphasizes a change, but there is a very strong confrontation to modify in all workplaces (Parsons & Kimberlee, 2002).

3. Method and Materials

This article is based on a qualitative research study. Research data involve words, phrases and sentences elicited from the secondary sources which are books and journal articles. The data, which focus on the aspects of action research, are pinpointed and elucidated. The aspects like definitions, processes, steps, cycles, characteristics, benefits and demerits of action research can be taken as attribute variables that cannot be manipulated, changed or controlled, but can be described.

3.1 Ethical Issues in Action Research

Collaboration with participants is one of the central features of action research. Action researchers collaborate with others (Schmuck, 2009). The intimate and open-ended property of action research makes ethics challenging for teachers researchers (Mills, 2011). The close relationship between the researcher and participants may not make data collection coercive (Creswell, 2012). The researchers need to adopt “covenantal ethics” on the basis of concerned relationship among community research associates and a shared commitment to societal justice (Brydon-Miller, 2009). It is necessary for the researchers to take practical steps while using the consent form in action research to address ethical issues regarding the solicitousness of the researcher (Newkirk, 1996). The action researcher requires executing the inquiry in such a way that respects the concern of the participants, engrosses them collaboratively in all phases of the research, and is responsive to obtaining the consent and proceeding the purpose of the study despite all the phases being initially unknown.
4. Conclusion

Action research, a recurrently applied research in diverse fields of human activities, aims at improving the existing situation of an organization or the performance of the persons involved in the organization. It is a systematic investigation process which seeks to identify problem areas and provides solutions after accomplishing the sequential steps. Such a solution-oriented activity is necessary in every field. It brings a positive change in the field; therefore, institutions and organizations must include action research as a prime unit for enhancing the professionalism in the staff and for bringing forth a positive alteration in working situations.

5. References


Holter, I., & Schwartz, B. D. (1993). Action research: What is it? how it has been used and how can it be used in nursing? Journal of Advanced Nursing, 128, 298-304.


