Action Research: A Powerful Tool To Improved Organizational Management, Practice, And Efficiency

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Abstract: With need for innovations and reformed organizational management, practice and improved efficiency, action research can be an ultimate tool to productive management, enriched outcomes, improved practice and practitioner efficiency. It is important to acknowledge that action research uses traditional research procedures; from problem identification to action plan and seeking effective solutions; and only differentiated by the spiral and cyclic process involved. And most scholars today have largely coined action research with educational dynamics and reforms; though all practitioners can apply it. This paper is good for all practitioners because it targets equipping them with know how about the way to go in changing their organizations with new reforms and innovations; through self-reflection and identifying an area of focus in their respective fields; collecting data; analyzing and interpreting of data to understand their implications; developing an action plan. Similarly, this form of inquiry can be conducted on an individual basis; group or collaborative; organizational (schoolwide), either with practical or participatory goals; and it is ideal for organizational management because of its contextualization in a particular field of practice.

Keywords: Action research, practitioner, organization, efficiency, practice, assumptions.

I. INTRODUCTORY BACKGROUND

Action research started as a way of applying the scientific method to the study of social science and educational problems, (McKay, 1992) as in (Caro-Bruce, 2000). The term "action research" was developed by Collier in 1945 as a descriptive of collaborative activities where research contributed to the improvement of Native America farming practices. During the 1940s, Lewin, K. (1948), a leader in the study of group dynamics, used action research on experiments on change with community workers; meaning that action research is not only restricted to teachers as most of the scholars have been publishing but also to other practitioners in their respective professions of practice. With the early success of action research itself as a process of change, Corey (1953) as cited in (Caro-Bruce, 2000); then the Dean of Teachers College at Columbia University, was instrumental in 1950s in applying the principles of action research to the teaching process. He believed that teachers were more likely to improve and modify their behavior if they were involved in reflecting on their own practices. This clearly brings out action research rigor because it is conducted by those who know about themselves (can be teachers, medical workers, social workers, managers, and others).

In 1960s, action research was primarily used in the areas of organizational development and human relations training. During the 1970s and 1980s, action research was instrumental in educational reform in Australia and England. Because of school reforms in these two countries, action research regained legitimacy in the United States as an integral part of teacher training and staff development, (Caro-Bruce, 2000). The recent history of action research tells that, action research started targeting organizational improvement, practice and practitioner efficiency; with its flexibility to any field of practice (education and other areas).

II. KNOW WHAT IS ACTION RESEARCH?

Action research is a systematic inquiry conducted by teachers, principals, school heads, councilors or other stakeholders in the teaching-learning environment that involves gathering information about the ways in which their particular schools operate, the teachers teach, and the students learn, (Lorraine, R. G.; Mills, G., E.; Peter, A., 2012). Practitioner-Participants are able to examine their own educational practice (off course not limited to only educational setting), systematically and carefully, using techniques of research, (Caro-Bruce, 2000). It is a search for answers to questions relevant to educators' (any practitioners) immediate interests, primarily to putting the findings immediately into practice; to solve organizational problems. Practitioners (teachers, medical workers, managers, social workers) collaborate in evaluating their practice jointly; raise awareness of their personal theory; articulate a shared conception of values; try out new strategies to render out the values expressed in their practice more consistent; record their work in a form which is readily available and understandable by other teachers (and other practitioners); and thus develop a shared theory of teaching by researching practice, (Elliot, 1991). Reflecting on Elliot (1991), any other organization practitioner can conduct action research inquiry for immediate solution to practice in a related field of practice.

Action research can be of different types, (Caro-Bruce, 2000); and can be group in two broad categories / types of (1)participatory, and (2) practical action research, (Creswell, 2012). Individual action research usually focuses on a single classroom or organizational concept problem and the practitioner seeks solutions, and the primary audience of the individual action research is the practitioner conducting research, however, other clients may also be included only if they have directly participated in the investigation; Collaborative or small group or team action research focuses on changes and problems in a single or in several organizational departments depending on the number of staff involved. In an education setting, research team might even take on a district wide research but focusing on classrooms. The team members are the primary audience in collaborative action research, school administration, district education personnel and, or external agencies if they sponsored the program; With School wide (organization wide) action research, researchers identify an area of collective interest, collects, organizes, and interprets on-site data to meet the necessary reforms and changes required for efficiency in a particular organization field.

Organizations and individuals choosing the type of action research that will best serve their needs should consider these five elements; purpose and process; support provided by outside agencies; the kind of data utilized (qualitative, or quantitative, or mixed data); the audience for the research; and the expected side effects, (Caro-Bruce, 2000). Without being conscious of these aspects can make the practitioner-researchers face challenges in trying to look for action agenda to their organization's problems.

III. WHERE CAN WE APPLY ACTION RESEARCH; AND WHO CAN PRACTICE IT?

Action research is a practitioner-based research inquiry. However, most of the experts today have coined action research closely to educational setting and reforms and practices, (Kindiki, 2009); (Lorraine, R. G.;Mills, G., E.; Peter, A., 2012); (Louis, C.; Lowrence, M.; and Keith, M., 2007) & (Marguerite, G. L.; Dean, T. S.; Katherine, H. V., 2010). It can also be applicable to any other practitioner's professional field of practice seeking immediate action plans to the problems being confronted in practice.

Professional practitioners of different fields like doctors, medical nurse, teachers, agricultural practitioners, social workers, financial managers, or anyone else can conduct this self-reflective and cyclic inquiry once aware of his environment of practice and professional operation.

IV. UNDERLYING ASSUMPTIONS OF ACTION RESEARCH

Action research encourages autonomy and decision making by practitioners in their fields of practice. This means that practitioners (educationists, medical workers, managers, social workers) can work best on problems they have identified for themselves, (Caro-Bruce, 2000). Practitioners are capable of independent action and systematic inquiry into own organizational practices and operations. their (Marguerite, G. L.; Dean, T. S.; Katherine, H. V., 2010). This can reflect to some degree, that practitioners (individual or teams) can determine the nature of the investigation to be undertaken, (Lorraine, R. G.; Mills, G., E.; Peter, A., 2012). This means that an action research inquiry has to be specialized to particular field of practice by practitioners in such particular fields (educationists, medical workers, managers, social workers) to improve on what they do, including how they work with, and for others, (Kindiki, 2009). Practitioners' study themselves and their organizational communities as they try to change and improve their organizational operating processes and outcomes, (Marguerite, G. L.; Dean, T. S.; Katherine, H. V., 2010). This significantly contributes to the professional stance as they examine the dynamics of their classrooms, and validate and challenge existing practices, and take risks in the process, (Lorraine, R. G.; Mills, G., E.; Peter, A., 2012). Let us talk of a medical practitioner monitoring a patient and trying out different drugs to establish whether it can treat and cure the disease. What does it imply? It requires that medical practitioner to be aware of the previous prescriptions before designing an alternative drug for the patient. This is the same way that action research works; reflecting, planning, acting, and observing the outcomes to arrive at effective decisions to foster the organizational success.

Action research is collaborative or group or team inquiry. Practitioners can provide help, support, and encouragement by working collaboratively, (Caro-Bruce, 2000). Teachers can collaborate across subject areas, and shared goals are surely voiced in diverse content areas, (Lorraine, R. G.;Mills, G., E.; Peter, A., 2012). Similarly, let us take an example of Covid-19 vaccine trials in United Kingdom, (Dean, 2020); this was after a collaboration between medical practitioners at Oxford University, trial administration of ChAdOx1 vaccine required the doctors to collaborate and keep monitoring the patients to notice the side effects, and potential results to necessary revisions on the vaccine for effective solution Covid-19 Pandemic; and this still needs extreme collaboration from different professional medical practitioners in finding an immediate action plan to Covid-19 pandemic.

Practitioner-researchers use systematic approaches for reflecting on their practices, using identifiable procedures to study their own problems. Teachers improve their practices in terms of being more aware of and more open-minded to different teaching methods and practices to use in practice and also to share their practice experiences with each other, like new ways of teaching. In the same way, a finance manager can revise previous bank history practices as pertaining to loans distributions, and payback rates, client communication measures, and public awareness on the services offered by that particular bank. It is only through systematic procedures (identifying a focus, collecting data, interpreting data, and developing an action plan and reflecting for remaining areas for reforms) that such a bank manager makes new changes, reforms and revise the already in place practices to improve on efficiency and make progress.

Organizational practitioners are committed to improve and develop their fields and practice. Practitioners are dedicated to professional development and organizational improvement and have to reflect on their practices systematically, (Lorraine, R. G.; Mills, G., E.; Peter, A., 2012). Practitioners (educationists, medical workers, managers, social workers) are more effective when examining and assessing their own work and then consider ways of working differently, (Caro-Bruce, 2000). A vivid example, a hotel manager who integrates a system of self service at the dining table in a hotel to check on clients' complaints about small portions served in the hotel. The manager observes and reflect to find out whether the self-service system has improved on the customers' satisfaction about the food portion problem before the system was introduced; all intended to implemented to reform, innovate, develop and modify on practice and lift efficiency.

Practitioners are more aware of what needs to be changed in their practice (self-reflection and conscious). As decision makers, practitioners (educationists, medical workers, managers, social workers) will choose their own areas of focus in their fields of profession or practice, determine their data collection techniques, analyze and interpret the data, and develop action plans based on their findings, (Lorraine, R. G.;Mills, G., E.; Peter, A., 2012).

A good example is when you fall ill, it is you who knows about any itching part of yourself not any other outsider. Then, who knows your body more than yourself? It is obvious that no one except yourself! This is the same way practitionerresearchers are, because they are more aware and conscious of their practices, reflections, and profession operations in their fields.

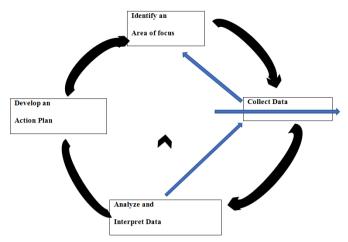
Action research inquiry needs special program design from practices duty. Practitioners needs ample time and space away from their daily working routine to think deeply about their work and practices, (Caro-Bruce, 2000). Practitioners have valuable knowledge that needs to form the basis for making decisions about their institutions and organizations, (Marguerite, G. L.; Dean, T. S.; Katherine, H. V., 2010); and this valuable knowledge requires the practitioners to think critically, develop measures to get more data (can use questionnaires, interviews, experiments, discussions, analyze documents and records, observe) so that they can make effective informed decisions.

Take an example of a teacher in his professional duty, he has to make further readings, prepare lesson plans, and schemes of work, prepare the teaching-learning materials for enriched learning and good grade academic outcomes. As a teacher, he needs time away from class timetabled duration in order to be well prepared; similar to a practitioner researcher in seeking effective measures to improve on organizational efficiency for continuous and successful progress.

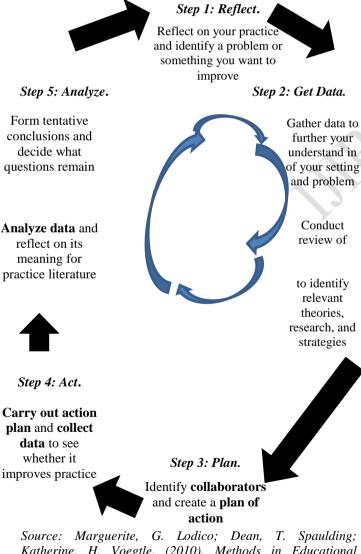
V. ESSENTIAL PROCESSES IN PLANNING AND IMPLEMENTING OF ACTION RESEARCH

Action research-practitioners (educationists, medical workers, managers, social workers) might use processes to conduct an inquiry in their areas of profession or practice. Action research is called *Dialectic Action Research Spiral*, (Lorraine, R. G.;Mills, G., E.; Peter, A., 2012). This model provides practitioners with a four-step guide for their action research project inquiries in their areas of operation. They further posit that it is a model for teachers to use to study themselves and improve on their practices, but not a process of conducting research on teachers. However, other practitioners can also adopt to action research to establish the challenges, causes and develop relevant action plans to meet those challenges.

Mills (2011) fig.1 considered action research to be a spiral because it involves four stages where investigatorpractitioners cycle back and forth between data collection and a focus and data collection and interpretation. It is portrayed in a way that investigator-practitioners have to identify an area of focus, collect related data, analyze and interpret the findings, and develop an action plan. The cycle again draws back to identifying an area to focus to check on new emerging issues that may also need new reforms.



Source: George, Mills, (2011) in "L.R. Gay, Geoffrey, E. Mills"; Peter Airasian, (2012). Educational Research: Competences for Analysis and Application. Pearson Education, Inc. 10th Edition. ISBN-13: 978-0-13-261317-0 Figure 1: Mills (2011) Dialectic Action Research Spiral



Source: Marguerite, G. Lodico; Dean, I. Spaulding; Katherine, H. Voegtle. (2010). Methods in Educational Research; From Theory to Practice. 2nd Ed. John Wiley and Sons, Inc.

Figure 2: Action Research Cyclic Process

VI. AN OVERVIEW OF ACTION RESEARCH CYCLE STAGES / PROCESS

STEP 1: REFLECTING / IDENTIFYING AN AREA OF FOCUS

At this phase, practitioner-researchers identifies an area(s) of focus by defining and reflecting on his area of practice. Personal and professional experiences in one's area of practice are so central to practitioner-initiated action research. A practitioner selects a concept to tackle that he feels more interested in. What if a problem happens to be in your field but you are not best it? What can you do? It is simple! You can use school-wide (cross organizational) or collaborative action research and share experiences with other teacher-(researchers) who can be better than you are on that particular concept of inquiry.

After identifying and limiting the topic, the next step is preliminary information gathering. *Literature review* is an object, thorough summary and critical analysis of the relevant available research and non-research literature on the topic being studied, (Hart, 1998) as cited in (Patricia, C.; Frances, R.; Micheal, C., 2008). These sources of information might include professional books, research journals, complete Web sites or individual Web pages, practitioner resource manuals, school or district documents, and even discussions with colleagues, Creswell, (2005); Johnson, (2008). There is no limit to what can be used as related literature because the purpose of reviewing this information is to help the practitioner-researcher make informed decisions about the research focus and plan.

Once the research problem or topic has been identified and focused, it is then appropriate to state one or more research questions; as the action researcher seeks to answer questions through conducting the study. The research question provides the guiding structure to the study itself. Every part of the action research study should be done so as to facilitate finding an answer to the research question. This is largely the reason behind why it is important to specify the research question prior to making any other decisions about the methodology. It is typically best to try to keep the study as simple as possible by stating only one research question.

STEP 2: ACTING / COLLECT DATA

The acting stage involves collecting data and analyzing data. The process of conducting action research is the determination of the specific data to be collected and how to actually collect that specified data. Decisions must be made about the instruments or other data collection techniques that will be used in the study. There are three main categories of data collection techniques which include; (1) Practitioner-Researchers observing participants involved in their organization processes, and these participants may include students, other teachers, parents, and administrators, in case of educational setting; in a health setting, participants may include patients. other medical workers. Whenever observations are made by practitioner-investigators, it is a good idea to record as much as possible of what is observed. Field notes or journals are typically used to describe in detail

what is seen and heard. (2) Interviews may also be used to collect data from students or other individuals. However, interviews can also be conducted in written form through the use of a pencil-and paper medium, and is known as a questionnaire or survey. Often, data collected from observations can lead quite nicely to additional follow-up data collected through the use of interviews or surveys, Fraenkel & Wallen, (2003) as in (Kindiki, 2009). (3) Data collection techniques involves the examination and analysis of existing documents or records, and is often the least time consuming, since the data have already been collected; it is the responsibility of the action researcher to make some sense of what is already there in sources like attendance records, minutes of meetings, school magazines, newspapers, lesson plans, policy manuals, seating charts, and student portfolios.

It is important to collect multiple data in different sources; which allows a room for triangulation, which is the process of relating or integrating multiple sources of data in order to establish their quality and accuracy.

Analysis of data occurs primarily at two points during the process of a research study. Quantitative data analysis typically occurs following the completion of all data collection; and data analysis typically begins during data collection, continues throughout the process of collecting data, and is completed following data collection, (Creswell, 2005). Decisions about which type of data analysis to use are based initially on whether the data are qualitative or quantitative as the analysis of data must "match" the research question(s) being addressed, and hopefully answered, by the study. Quantitative data may be analyzed through the use of either descriptive statistics or inferential statistics. In most cases, descriptive statistics will suffice for the analysis of action research data; however, inferential statistics may be required if it is necessary to compare groups or measure relationships between variables.

Analysis and interpretation of data follows, including identifying themes, coding surveys, interviews and questionnaires, doing an organizational review, engaging in concept mapping (i.e. visualizing the relationship of ideas). Data collection also consists of validity, reliability and ethics.

STEP 3: ANALYZE AND INTERPRET DATA / PLAN

Once the data have been analyzed and the results of the analysis interpreted, the next step in the action research process is the development of an action plan. This is really the ultimate goal of any action research study it is the "action" part of action research. The action plan is essentially a proposed strategy for implementing the results of your action research project. As the action plan is implemented, its effectiveness must continually be monitored, evaluated, and revised, thus perpetuating the cyclical nature of action research. The action plan may be proposed for an individual teacher or classroom, collaboratively among a group of teachers, or on a schoolwide or even a districtwide basis. In some situations, it may be necessary to prepare a formal document outlining the action plan, often delineated guidelines for implementing possible solutions may suffice. There must be enough documented information about the plan for implementation.

STEP 4: DEVELOP AN ACTION PLAN / ACT AND ANALYZE / REFLECT

An important part of any research study is the reporting or sharing of results with others in the educational community at large. Action research should be no different. Simply because you have undertaken this project in order to help you solve a problem that is more local and perhaps more personal in nature. Presentations which can sometimes include written summaries of results can also be made to school boards, principals, other administrators, students, and parents. On a more professional level, results of action research studies can also be disseminated to larger educational audiences, in more formal settings.

Action research is primarily about critical examination of one's own practice, meaning that a person must engage in systematic reflection of that practice, and with action research, it is something that must be done at the end of a particular action cycle as practitioners reviews what has been done, determines its effectiveness, and makes decisions about possible revisions for future implementations of the organization or project. Action research usually described as cyclic, with action and critical reflection taking place in turn. The reflection is used to review the previous action and plan the next one, (Dick, 2000).

VII. STRENGTH / APPRAISAL: SELF-REFLECTION A CATALYST FOR IMPROVED EFFICIENCY AND PRACTICE

Self-reflection and conscious builds a ground for evidence on the problem and focuses the inquiry. Being a practitionerbased research for immediate plan of action, action research has rigor, as it is carried out by those who best know their practice; in management of their practices. Action research is a powerful form of professional development, incorporating reflection and dialogue in small learning communities, (Caro-Bruce, 2000). The initial stage of action research is identifying an area of focus (Lorraine, R. G.;Mills, G., E.; Peter, A., 2012); (Marguerite, G. L.; Dean, T. S.; Katherine, H. V., 2010); (Caro-Bruce, 2000).

A highlight example of a medical practitioner whose hospital has faced a drastic decrease on the number customers or patients seeking treatment. The initial stage in planning to solve this, it is "self-reflection" considering a wide range of aspects like customer care, quality of services (inpatient and outpatient), charges levied on patients, and so on; so that an informed focus is achieved to direct the inquiry.

Action research is a flexible and adaptable tool to organizational improvement. An action researcher practitioner can arrive at informed decisions by considering constrains in their schools or departments (organizations departments); resources like inadequate technology, research sources such as computers, textbooks, lecture halls, and serving staff, (Kindiki, 2009).

Action research promotes transformation and applicability of new ideas. Practitioners (educationists, medical workers, managers, social workers) translates their ideas into action to solve weaknesses or make changes in their offices, lecture halls, classroom, and management of organizational environments leading to changes in practice in organizations schools or faculties and departments, (Kindiki, 2009). Practitioner-researchers (educationists, medical workers, managers, social workers) can integrate the practical and theoretical orientations within themselves. This means that practitioner teacher-researchers will choose an area of focus, determine data collection techniques, analyze and interpret data, and develop action plans, (Creswell, 2012); (Caro-Bruce, 2000) and try to solve educational problems to improve on teaching-learning success.

Action research focuses on organizational (school) improvement in multiple ways through generation of new insights. Action research is taken to be a problem-solving entity; focuses on improved equity for the students (other organization clients); and increased breadth and content of inquiry itself, (Kindiki, 2009); because action research is appropriately whenever specific knowledge is required for a specific problem in a specific situation, rather than traditional research. For example, when a new approach is to be grafted on to an existing system; like a school faculty, or any organization's department, carrying out inquiry (which is an action research) can best generate knowledge to that particular problem. Thus practitioners have to ensure suitable mechanisms for monitoring progress and for translating feedback into the ongoing system, (Kindiki, 2009); and this can help the organization to track its trend histories in case of need.

Action research can lead to organizational improvement by helping the practitioners become aware of what is done, where they are, and what is missing in practice (evaluate). Adopting to new strategies by adopting an integrating approaches can help organization managers improve their organizations through change and reforms by being aware of their own practice, being critical of that practice, and being prepared to change it, (Kindiki, 2009). Further, Kindiki, (2009) explains that practitioner-researchers can evaluate procedures and improve assessment and production; such as keeping records to monitor the progressive performance of the organization. This can develop new attitudes and values, possibly encouraging more positive attitudes to work, modifying professionalism, organization's services delivery, skills, developing new methods of problem solving, increasing powers of analysis, heightened self-awareness. It encourages Management and control and the gradual introduction of the technique's behavior modification, (Hopkins, 1993).

Action research helps managers check on efficiency of their organizations. Practitioner-researchers arrives at decisions regarding appropriate methods by considering factors that will affect the outcomes organizational outcomes. Efficiency can be in organization's planning basis, (Kindiki, 2009); and further added that it challenges practitioners to plan a head in order to find out whether they have adequate resources. When there are inadequate facilities, an innovative teacher or head of department or lecturer can carry out an action research to find out if there can be alternative possibilities to have services delivered however, an organization may be in a crisis.

For example, as a manager of your family, if you plan cook food and find out that you have scarce resources like salt,

cooking oil; you can seek alternative ways to have food efficiently prepared, perhaps by borrowing a pinch of salt and a token of cooking oil from your neighbor.

VIII. WEAKNESS: IS SELF-REFLECTION / ACTION RESEARCH WEAK IN IMPROVING PRACTICE? HOW?

Nothing can be pure applicable without associated side effects, and so action research is. Being appropriate for the practitioners, it has related weaknesses. The open reply to action research being weak is "Yes". Let us study the below established weaknesses and find how it comes with action research in practitioner inquiries;

Generalizability of the findings. A practitioner-researcher can conduct a study on the causes of student absenteeism from his lesson. The findings and suggestions may not be applied to help on a similar problem in another different lesson. This can be due to differences in research participants' varying characteristics. Findings, suggestions, and recommendations as to why students dodge Kiswahili lessons may not be helpful and applicable to a physics lesson.

Individual practitioner researchers are limited in seeking action plans. Because practitioner-researchers are always fixed and busy in their profession practices, they have limited time in their daily routines to seek appropriate solutions to their challenges. This halt is mainly because action research process involves several stages in its process, and moreover, it requires reflections to identify new challenges, and applicability of new ideas; of which takes time and needs technical know-how.

Group or co-operative action research risks collegiality and trustworthiness. Action research can involve a collaboration of several practitioner researchers like experts from supporting universities and consortiums. Because organizational affairs seeking reforms are share in these team collaborations, some practitioners can feel shyness, feel humiliated, and even hide to share relevant ideas for reforms. Privacy of some issues is risked.

Self-reflection as a basis of action research inquiry is only limited to practitioner knowledge. Action research basically starts from the practitioner's self-reflections and conscious on their practices and operations, what is out of their field or position experiences are hard brought to light for revision. A teacher researcher handling advanced level (in upper secondary schools in Uganda) can hardly design strategies for improving Kiswahili teaching-learning for ordinary level (lower secondary level in Uganda).

Practitioner-researchers are liable to going native. Because action research is a practitioner-based inquiry, done by them to improve on their fields of practice; practitioners are liable to face "elite bias" by considering themselves as elites in their fields. For example, a teacher of Kiswahili language can deny or reject research findings, highlighting teaching methods as a problem to Kiswahili performance in a certain school he serves; only because the teacher takes himself as he knows much in his Kiswahili subject.

IX. CONCLUSION

In a twinkling mirror reflection, action research when conducted by practitioners in their fields of practice and trying to solve challenges in their practice, in a systematic and planned procedures, it can yield positive findings for effective practice reforms. This means that effectiveness of action research is all about being carried out by practitioners and inquiring about their practices not on another practitioner's field of practice. Action research is more favorite to practitioners in management as they can improve and ensure efficiency and progress of their organizations through collaborative inquiries with their subjects, rather than hiring external analysts; meaning that organizations have high chances to keep what happens inside to remain inside their organizations.

Practitioners being aware of the related short-comings associated to action research inquiries can make them develop related measures on how to go about them and come up with valid findings to form action plans to problems in organizational practices to make necessary reforms and improve on their efficiency.

The fact that different scholars agree that action research involves a spiral and cyclic process that require reflection, getting more insight, analyzing data, developing action plans and back to reflection again to monitor success of already applied ideas.

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