



Action Research in Education

Josephine Oranga , Billiah Gisore 

Kisii University, Kenya

Email: josephineoranga@kisiiversity.ac.ke

How to cite this paper: Oranga, J. and Gisore, B. (2023) Action Research in Education. *Open Access Library Journal*, 10: e10306.

<https://doi.org/10.4236/oalib.1110306>

Received: May 28, 2023

Accepted: July 8, 2023

Published: July 11, 2023

Copyright © 2023 by author(s) and Open Access Library Inc.

This work is licensed under the Creative Commons Attribution International License (CC BY 4.0).

<http://creativecommons.org/licenses/by/4.0/>



Open Access

Abstract

Studies demonstrate that when new school and classroom development activities emanate from research, they are easy to implement as they, essentially, are evidence-based and contextual in nature. From this analysis, the significance of action research in education include: revitalisation of school communities through practical involvement in research, enabling educators to address challenges within the school, providing a wealth of data and evidence on topics related to learning, teaching and assessment, aids the process of reflection amongst learners and educators, helps improve quality of learning, allows for the implementation of action remedies and the monitoring and evaluation of their effectiveness, changes and inspires classroom practices, enhances teacher and student empowerment as problem solvers while also helping link research to practice, thereby enhancing the lives of professionals in educational systems. Subsequently, this review recommends that school communities conduct action research in response to contextual problems and have as many players as possible brought on board for the realization of seamless participatory implementation of solutions that emanate from the research. From the discourse it is evident that action research, if adopted as a proactive inquiry tool in school systems, promises immediate, factual and contextual solutions to varied problems that arise time and again.

Subject Areas

Educational Research

Keywords

Education, Action Research, Educational Action Research

1. Introduction

It is almost certain that at some point, educators will encounter challenges that require redress in the classroom or generally in the courses they handle. Educa-

tors will approach the challenges differently and in varied ways. Some educators may go the traditional way in a bid to solve the problems while others will seek expert advice to determine solutions to the problems. However, really good educators will undertake a systematic inquiry or investigation to establish and address the problems while also analysing many other issues concerning learning and the school environment. Holter and Frabutt (2012) [1] indicate that research, generally, provides a wealth of data and evidence on topics related to learning, assessment, curriculum, students' affective and cognitive needs and socio-cultural and socio-economic factors that affect education systems worldwide. As a result, contemporary educational stakeholders rely on evidence gathered from research to formulate policies and make informed decisions that ultimately influence the quality of education and schooling accorded to students within different jurisdictions. Studies (Johnson, 2012 [2]; Holter & Frabutt, 2012 [1]) contend that the main purpose of educational research is to generate knowledge on topics imperative to students, teachers and entire school communities. Consequently, the approaches to conducting research in education are as varied as issues and topics in education. Subsequently, an individual's approach to educational research is majorly informed by the context and professional identity of the investigator.

Accordingly, the most imperative and impactful of all inquiries that can be undertaken in the school environment is action research. Action research refers to a systematic investigation or inquiry that is geared towards the improvement of specifically identified aspects of an organisation or individuals' daily lives (Burns, 2011) [3]. Consequently, action research is dynamic, real and collaborative in nature and results in the implementation of valid and beneficial changes in the immediate environment. Similarly, Burns (2015) [3] indicates that action research is primarily interventionist and that the researchers are significant participants in the action. Additionally, it is basically exploratory and decision-generating and ultimately invokes key questions and actions in the researcher's mind leading to implementable actions and further research in the area. Notably, the research also helps in the formative evaluation and assessment of the effects of the actions implemented. Furthermore, studies (Johnson, 2012 [2]; Stringer, 2008 [4]) contend that action research seeks to link action and reflection and theory and practice in the pursuit of practical remedies and solutions to issues of pressing concern to individuals in the society, the world over. Further, it enables researchers to develop a systematic, investigative and inquiring approach toward their own practices. Moreover, it is focused on effecting positive change (Holter & Frabutt, 2012 [1]; Mills, 2011 [5]).

Similarly, studies (Paret, 2003 [6]; Bradbury & Reason, 2001 [7]; Heron & Reason, 2001 [8]) indicate that action research is fully grounded and anchored on practical actions and generates theory from its findings. Accordingly, these two components work together, each mutually supporting and informing the other throughout the research process. To this end, Stringer (2008) [4] contends

that action research enables educators and learners to conduct enquiries into areas of concern and address challenges within the classroom and the school in general.

Consequently, this chapter analyses various relevant articles with a view to definitively determining the place of action research in education. Notably, collection, collation and synthesis of existing research from published papers, books and institutional websites was undertaken to establish the types, roles and essence of action research in education.

2. Conceptualizing Action Research

Generally, the action research process entails problem identification followed by generation of general ideas about the problem. The actual investigation of the problem or issue then follows resulting in the collection of primary data, majorly. Analysis of the data is then conducted, which entails identification of consistent themes and patterns across the data before ultimately utilizing it to respond to research questions while also trying to prove the research hypothesis earlier generated on the problem (Johnson, 2012 [2]; Burns, 2015 [3]). From the research findings, the researcher determines the right interventions and strategies to address the problem. This is then followed by an evaluation to determine new knowledge and skills learnt from the whole research process. This is summarised in **Figure 1**.

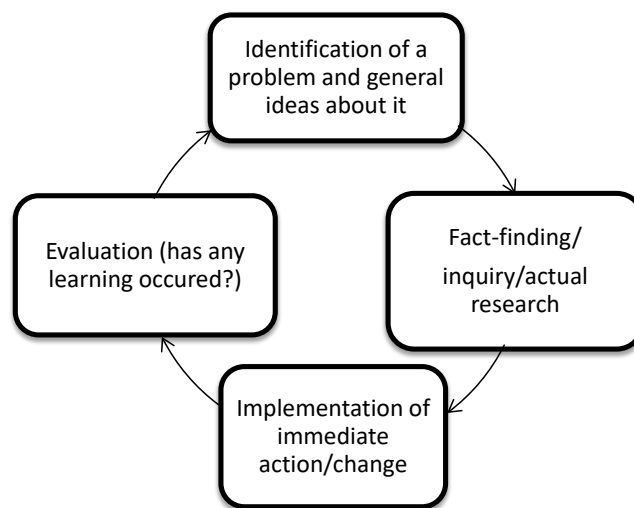


Figure 1. Action Research model Adapted from Lewin (1951) [9].

Action research as demonstrated above is cyclic and information gained from the research may open other research trajectories and avenues. Thus, educators may choose to move back to the top of the cycle and begin the process all over again in an attempt to investigate a related or emerging variable after evaluating the process. Hence, action research is an on-going process and educators are continually evaluating the processes and seeking ways to improve classroom or school practice in general.

Mertler and Charles (2008) [10] conceptualise action research as a cyclic process that entails eight significant steps that include: identification and description of the problem or topic, examination and review of related literature, development of a suitable research plan and the execution of the research plan through data collection. Ultimately, this is followed by data analysis and the development of an action plan for the required change/action. Action implementation as informed by the findings then takes place followed by the dissemination of the results of the whole process. In the end, a reflection of the whole action research process takes place. Consequently, the steps can be systematically repeated to address different emerging issues.

3. The Essence of Action Research in Education

The need for educators, administrative staff and students to engage in learning improvement activities arises immediately following students' enrolment in school. More so, staff development activities become necessary immediately following entry into the teaching workforce. Holter and Frabutt (2012) [1] recommend undertaking a course in action research by educators in an effort to gain reflective and systematic perspectives with which to address issues and areas of shortcomings in the classroom and school community at large. Students too could be guided by their instructors to find contextual solutions to school problems. Accordingly, actions should be purposeful and age-appropriate in order for the students to develop systematic problem solving techniques through investigating solutions and the implementation of appropriate action remedies. Consequently, action research promises professional growth and allows educators, students and administrators to explore and determine solutions to school problems in school communities through careful systematic data collection and analysis techniques, implementation of action remedies, evaluation and reflection of the effectiveness of the remedies and back to the planning stage again to address emerging variables. The cycle can be repeated severally, focusing on the same or on a different emerging variable/problem altogether (Lassonde, Galman & Kosnik, 2009) [11]. A summary of this is shown in **Figure 2**.

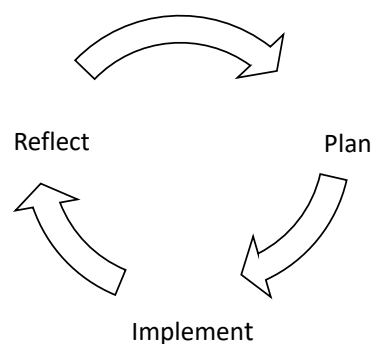


Figure 2. Simplified cycle of action research
Adapted from Phillips and Carr (2014) [12].

Figure 2 shows action research as conceptualised by Phillips and Carr (2014) [12]. Accordingly, action research is cyclic in nature and is easily summed-up into 3 main steps, namely; planning, implementation and reflection. The rest of the processes and details as earlier discussed fit-in in the three main steps. Consequently, reflection results in further planning as more variables requiring redress emerge in the school systems. Johnson (2012) [2] defines educational action research as the process of studying a school situation with the aim of understanding and improving the quality of learning and all educative processes. Accordingly, educational research provides a wealth of data and evidence on topics related to learning, teaching, assessment, curriculum, students' affective and cognitive needs and socio-cultural and socio-economic factors that affect schools. As a result, educational stakeholders rely on evidence gathered from research to enact policies and make informed decisions that ultimately influence the quality of education and schooling accorded to students within different jurisdictions.

Thus, the main purpose of any educational action research is to generate knowledge on topics imperative to students, teachers, schools, administrators and other educational stakeholders. Furthermore, the approaches to conducting educational research are as many as the issues and topics in education, generally.

The approach to educational action research will be determined by the individual's context, background and professional identity. This notwithstanding, Mertler and Charles (2008) [10] stipulate that action research is an imperative research option for teachers, researchers, school administrators and other stakeholders in different learning environments. Moreover, action research provides education practitioners with current knowledge, skills and understanding on how to enhance educational practices or solve significant challenges and problems in schools and classrooms (Mills, 2011 [5]; Stringer, 2008 [4]). Besides, action research involves a process that is dynamic, systematic and participatory and accords myriad benefits to professionals in the teaching profession (Johnson, 2012 [2]; Burns, 2015 [3]).

Consequently, educational action research inquiry would typically concern the school, students, programmes and/or instructional practices and a description of the aspects to be investigated or determined by the research. For instance an investigation could be conducted to determine student outcomes (achievement, disposition); curriculum (course content, instructional materials, frameworks); instruction (utilisation of media and technology, teaching strategies); school climate (teacher morale, student morale, attitudes of teachers towards supervision), parental involvement in relation to provision of learning resources and subsistence to learners, attendance to school events or participation on school committees (Mertler & Charles, 2008) [10]. Johnson (2012) [2] and Mills (2011) [5] also highlight opportunities offered by action research to educators and the school community at large. These opportunities include: facilitation and enabling professional growth and development of educators (Schmuck, 1997 [13]; Muyunda, Yue & Oranga, 2023 [14]), enhancement of teacher empowerment

(Paret 2003 [6]; Fueyo & Koorland, 1997 [15]) and linking research to practice. Ultimately, within education, the main aim of action research is to establish ways to improve and enhance the lives of learners (Mills, 2011) [5]. Similarly, Stringer (2008) [4] indicates that action research revitalizes entire schools and learning communities and aids teachers in the process of reflection and change in their classroom practices. Additionally, educational action research supports and actualizes initiatives from individual teachers, schools and school communities. Moreover, different types of action research can be conducted at the same time and in the same setting. Notably, the vast majority of researchers categorise action research into: individual, collaborative and school-wide as discussed in the ensuing sections:

3.1. Individual Teacher Action Research

This is undertaken with a focus to improving practise in specific classrooms wherein an individual teacher seeks to address a problem in classroom practise and management, students' social or cognitive behaviour, teaching resources or instructional strategies. Accordingly, students do not necessarily have to be involved in generating alternatives or determining effects. However, parents may act as a source of information in this kind of studies (Hotter & Frabutt, 2012) [1]. Individual teacher researchers experiment with a variety of actions geared toward addressing the problem, examine and record the effects of the actions, and ultimately keep, modify, or discard practices based on the findings (Wen, 2019 [16]). Teachers may utilize either qualitative or quantitative processes or both. Some teachers may adopt phenomenologism and thus, let hypotheses emerge from these processes on their own (Mertler & Charles, 2008) [10].

The primary audience and recipient of the findings of individual teacher action research is usually the teacher himself/herself. If students participated directly in the study, then they too, would form part of the primary audience. Ultimately, the decision on whether or not to share the findings with secondary audiences rests with the individual teacher who undertook the study. If the teacher chooses to share the results, he/she could share or disseminate them through professional workshops and conferences and staff development workshops (Lassonde, Galman, & Kosnik, 2009) [11].

As a result, the findings and effects of individual teacher research may not be impactful beyond the classroom. Notably, other teachers within the same school may be undertaking their own individual action research on similar topics and are not obligated to discuss their findings and experiences with their colleagues. Eventual sharing depends on the collegiality of the educators or instructors themselves.

3.2. Collaborative Action Research

Depending on the numbers of faculty, instructors or educators involved, collaborative action research may focus on problems occurring in a single or several classrooms. The collaborative action research team may even take on a problem

affecting a district but focus the inquiry on classrooms. The team may include just two persons, or several administrators and teachers working with staff from a university or other external agencies. As a result, collaborative action research often involves school-university partnerships (Mertler & Charles, 2008) [10]. It entails a group of people coming together to study a given phenomenon jointly. For instance, a group of learners in more than one class being tested or investigated and the results analysed. In the end, collaboration offers more advantages in comparison to individual action research. District personnel, professors or principals may also recruit teachers to investigate an area needing improvement or to field-test established promising approaches. The team may adopt the quantitative or qualitative approach or both depending on need and level of scientific rigor expected. Collaborative action research research teams generally utilise more varied research methods as compared to individual teacher action researchers. In a given single collaborative action research study, one member may survey parents; the second may interview teachers with the third conducting observations using predetermined checklists. Additionally, the fourth may conduct a focus group discussion, all working towards the determination of a solution to the same research problem (Johnson, 2012 [2]; Burns, 2015 [3]).

As a result, the members of the research team are the primary audience and consumers of results from collaborative AR; however students and parents may also form part of the primary audience depending on their involvement in the inquiry. Additionally, if the district education office, the school administration, or a university sponsored/funded the research, then these groups would automatically be part of the primary audience. Collaborative action research thus helps grow and improve research skills while also enhancing collegiality and team work.

3.3. School-Wide Action Research

In this kind of AR, a school, faculty or university selects a problem of collective interest, then defines the study bounds and ultimately collects, collates and interprets on-site data followed by a determination of the actions to be taken. In this case, action research results from a concern in the entire school. The school may have concerns about the lack of parental involvement in learning and general school activities. The whole school staff would then collaboratively work together to study the problem, gather data and take action by implementing changes and addressing the problem as a result of the study findings (Lassonde, Galman & Kosnik, 2009 [11]; Oranga, Obuba & Nyakundi, 2020 [17]). Accordingly, school-wide action research focuses on school improvement, as a result it is hoped that school members become better able to work together in identifying and addressing emerging problems. Further, school-wide research strives to improve results and equity for students. Besides, school-wide action research widens the scope of the inquiry by increasing the content and breadth of the investigation as compared to individual teacher researches. This is because every

classroom and teacher may be involved in the collective study. Moreover, faculty members may involve parents, students and the general school community in the data collection and interpretation process and ultimately in the determination of options for action (Burns, 2011 [3]; Mills, 2011 [5]; Reason & Reason, 2007 [18]).

Ideally, school leadership teams or district administrators initiate school-wide action research inquiry as a major school improvement strategy and any research approach(es) deemed most responsive to the problem at hand can be adopted. Here, data collection can be as simple as counting different types of writings done by students or as complex as a multi-year research case study. As a result, faculty members may have to divide the investigation amongst team members as in the case of collaborative AR.

In line with this, Lassonde, Galman and Kosnik, (2009) [11] and Johnson (2012) [2] explicate that in order to have the greatest impact, data on school improvement issues should be regularly collected and a formative evaluation of actions taken periodically conducted. This would mitigate reliance on summative assessment/research and evaluations such as yearly norm-referenced assessments that work to lessen the dynamism of the process. However, as recommended, norm-referenced assessment/research can be employed to corroborate the results of formative assessment/research. Nevertheless, in almost all cases, varied assessment methods are preferred (Burns, 2015 [3]; Heron & Reason, 2001 [8]; Mills, 2003 [5]). Ultimately, the primary consumers and audience of the results of school-wide action research includes all the primary participants, which in this case, is the whole school or faculty. Nevertheless, the school or faculty might want students, parents, the school-board and the general community to make part of the primary audience and consumers as well. As a result of collective action, the institution learns to build, manage and sustain collegiality and group dynamics and processes.

That notwithstanding, school-wide action research may get uneven and messy resulting in conflicts at the onset as is usually the case whenever a diverse group is involved in a collective complex process. As a matter of fact, collection of school-wide data on instructional initiatives require trust and total collaboration, while sharing research findings from individual classrooms that collaborated in the study require patience and understanding towards self and others.

4. Conclusion

Engaging in action research strongly supports the all-important site-based decision making that is imperative in school communities while also enhancing relationships amongst school personnel and between the school and university personnel and intermediate agencies that jointly collaborate in action research activities. Additionally, school-wide action research enhances the problem-solving capabilities of schools and districts. Thus, action research stands out as a proactive inquiry tool in school communities that promises immediate, factual and

contextual solutions to various problems that exist or arise from time to time and provides the impetus and reflection needed in support of learning. Thus, action research significantly strengthens and actualizes learning outcomes if incorporated in seeking solutions to school problems and in the determination of best practices. It is also evident from the discussion above that the utilisation of action research results in knowledge and energy needed to support and sustain healthy learning communities. Thus, as capacity building and knowledge about action research accumulates and educators delve into it, school improvement efforts flourish.

Conflicts of Interest

The authors declare no conflicts of interest.

References

- [1] Holter, A.C. and Frabutt, J.M. (2012) Mission Driven and Data Informed Leadership. *Catholic Education: A Journal of Inquiry and Practice*, **15**, 253-269. <https://doi.org/10.15365/joce.1502082013>
- [2] Johnson, A.P. (2012) A Short Guide to Action Research. 4th Edition, Pearson Education, Nairobi.
- [3] Burns, A. (2015) The Action Research in ELICOS Program: Refining the Development of a National Model. *Cambridge English: Research Notes*, No. 60, 4-8.
- [4] Stringer, E.T. (2008) Action Research in Education. 2nd Edition, Pearson, London.
- [5] Mills, G.E. (2011) Action Research: A Guide for the Teacher Researcher. 4th Edition, Pearson, London.
- [6] Perrett, G. (2003) Teacher Development through Action Research: A Case Study in Focused Action Research. *Australian Journal of Teacher Education*, **27**, Article 1. <http://ro.ecu.edu.au/cgi/viewcontent.cgi?article=1317&context=ajte>
- [7] Bradbury, H. and Reason, P. (2001) Conclusion: Broadening the Bandwidth of Validity: Issues and Choice Point for Improving the Quality of Action Research. In: Reason, P. and Bradbury, H., Eds., *Handbook of Action Research*, Sage, London, 447-455.
- [8] Bradbury, H. and Reason, P. (2001) The Practice of Co-Operative Inquiry: Research “with” Rather Than “on” People. In: Reason, P. and Bradbury, H., Eds., *Handbook of Action Research*, Sage, London.
- [9] Lewin, K. (1951) Field Theory in Social Sciences. Harper & Row, New York.
- [10] Mertler, C.A. and Charles, C.M. (2008) Introduction to Educational Research. 6th Edition, Pearson Education, Boston.
- [11] Lassonde, C.A., Galman, S. and Kosnik, C. (2009) Self-Study Research Methodologies for Teacher Educators. Sense Publishers, Rotterdam. <https://doi.org/10.1163/9789087906900>
- [12] Phillips, D.K. and Carr, K. (2014) Becoming a Teacher through Action Research: Process, Context and Self-Study. Routledge, London. <https://doi.org/10.4324/9781315867496>
- [13] Schmuck, R.A. (1997) Practical Action Research for Change. IRI/ Skylight Training and Publishing, Arlington Heights.
- [14] Muyunda, G., Yue, L. and Oranga, J. (2023) Teachers’ Professional Development in

- Zambia: Perceptions and Practices. *International Journal of Social Learning (IJSL)*, **3**, 222-233. <https://doi.org/10.47134/ijsl.v3i2.177>
- [15] Fueyo, V. and Koorland, M.A. (1997) Teacher as Researcher: A Synonym for Professionalism. *Journal of Teacher Education*, **48**, 336-344. <https://doi.org/10.1177/0022487197048005003>
- [16] Wen, J. (2019) A Study on Creating a Successful Classroom Learning Community via Action Research. *Open Journal of Social Sciences*, **7**, 387-396. <https://doi.org/10.4236/jss.2019.710033>
- [17] Oranga, J., Obuba, E. and Nyakundi, E. (2020) Education as an Instrument of Poverty Eradication in Kenya: Successes and Challenges. *Open Journal of Social Sciences*, **8**, 410-424. <https://doi.org/10.4236/jss.2020.89031>
- [18] Reason, C. and Reason, L. (2007) Asking the Right Questions. *Educational Leadership*, **65**, 36-40.