

Action Research Design

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When is the design used?

- Specific problem to solve
- Teachers reflect on their own practices
- Staff development
- Teacher professional development (PD)
- Addressing schoolwide problems
- Intent is for educators in schools improve their practices of taking action

Action research is used by researchers when there is a specific problem to solve, such as absenteeism, drop-out rates, or standardized test scores. Action research offers teachers an opportunity to reflect on their own practice. It also allows for an increase the development of skills in staff such as administrative assistants, educational assistants, and learning support staff. Action research is sometimes used for the purpose of teacher professional development because it offers teachers time to work alongside one another toward a common goal to either address or solve a schoolwide problem. Ultimately, the intention of action research is for educators in schools to improve how they take action.



Types of Action Research

- Practical
 - Professionals research problems in schools to bring about change or solve a problem (e.g. escalating violence in schools)
 - Requires study of the problem
 - Purpose: "research a specific situation... with a view toward improving practice (Schmuck, 1997)... involves a small scale research project... undertaken by professions within a school" (pg. 590).
- Participatory
 - Involves others outside of the school
 - Purpose: "to improve the quality of people's organizations, communities, and family lives (Stringer, 2007)... it differs by incorporating an emancipatory aim of improving and empowering individuals and organizations in education (and other) settings" (pg. 592).

There are two types of action research: practical and participatory. When I think about action research, I think about practical action research; being conducted by educators with the purpose to solve a problem. Participatory action research involves outside stakeholders with the intention to improve the greater community.



Critical Features

- Conducts research **with**, not “on”
- Encourages change in schools
- Fosters a democratic approach to education (many individuals involved)
- Positions educators as learners trying to resolve practice and own vision of education
- Encourages reflection on own practice
- Promotes testing new ideas

Action research is different than many other types of research with respect to how the research is conducted - the intent is to engage with members of the community to conduct research with them, not “on” them. Normally, educators and students are surveyed, tested, and observed by researchers and then never engage with the research itself in a purposeful way. In action research, educators and members of the community have a say in how, why, and the direction research is done. Due to the significant involvement of educators, action research encourages change in schools and offers a democratic approach to education, rather than the traditional view. Action research also allows educators to act as learners, opportunities to reflect on their own practices, and take risks.



Sampling

- Purposeful sampling
- Based on context
- Reliant on educators (schedules and buy-in)
- Probability sampling: stratified, systematic random, multi-stage cluster, simple random
- Non-probability sampling: snowball, theoretical, quota, judgmental

Sampling conducted in action research is purposeful because it is based on the context and needs of the school in which the research is being conducted. Since action research requires a significant amount of resources and effort from educators within that particular education system, it is reliant on the educators. The samples collected are based on the participatory educators efforts, schedule, and interpretations. Given that action research conducted in schools is largely conducted by educators and is based on their data collection, the sampling often falls into the category of non-probability sampling. Quota and Judgmental non-probability sampling are two popular choices because the sampling is conducted based on the question or issue being addressed, and professionals often use their judgment when analyzing data.



Instruments

- Experiencing (through observation and fieldnotes)
 - Participant observation (active participant)
 - Privileged, active observer
 - Passive observer
- Enquiring (when the researcher asks)
 - Informal interview
 - Structured formal interview
 - Questionnaires
 - Attitude scales (Likert, semantic differential)
 - Standardized tests
- Examining (using and making records)
 - Archival documents
 - Journals
 - Maps
 - Audio and videotapes
 - Artifacts
 - Fieldnotes

See figure 17.7 on page 600 of our textbook

In action research, data is collected through experiencing (observation), enquiring (questioning), and examining (making use of artifacts). It is unlikely every technique listed under each of these headings will be used in a given study, but the choice of data collection instruments is entirely up to the researcher. It might be reasonable to expect that each educator involved in an action research process would choose a different way of collecting data.



Data Collection

- Keep an accurate record
- Organize data numerically or thematically
- Examine the quality of the information

In collecting data, it is important to ensure the data is accurate so that no pieces are missing or misinterpreted. It is also important to keep the data organized numerically (by date, subject, or individual) or thematically as themes emerge. Over time, the information may be overwhelming, so organizing the data as it is collected is imperative to the success of action research, as is looking at the quality of information gathered.



Data Analysis

- Analyze data alone, with others, or data analysts
- Consult others
- Descriptive statistics
- Compare group data
- Relate variables
- Keep it manageable to form a plan of action

Data analysis in action research can be completed by the information gatherer or in groups, however, it is always a good idea to consult others in the analysis of the data to ensure similar findings are met. As humans, we carry biases with us, so having an impartial third party examine the data and findings will help. Data can be analyzed through descriptive statistics, as our textbook states, but comparing group data is important. In addition, relating variables will strengthen the analysis. Ultimately, the purpose of analyzing the data is to form a plan of action, so keeping the analysis organized and manageable is key.



Quality and Rigor

- Being uncomfortable while conducting action research is important
 - Cook (2009) states, "Entering the 'messy area' can be professionally and personally uncomfortable but vital to research that seeks to engage in contesting knowledge leading to changes in practice. If people are comfortable in the 'studium', within the general framework they use for understanding their work, it can become difficult to move beyond that phase" (pg. 285).
- The researcher must be a guide
 - According to Cook (2009), "It is argued that situating research in participatory engagement can lead to the danger of losing critical perspective. If the researcher remains aloof, their judgements are characterised as being untainted by participants who are perceived as necessarily biased towards their own particular beliefs and ways of working. Building democratic, participative, pluralist communities of inquiry is, however, considered to be central to an effective action research approach (Reason and Bradbury 2001; Reason and Torbert 2001)" (pg. 287).
- You cannot have rigor in action research without navigating how to be uncomfortable
 - In action research, "[the] notions of validity are particular pertinent to the argument for mess as rigor where mess is seen as the space for contesting interpretations" (Cook, 2009, pg. 288).

According to Cook, in *The purpose of mess in action research: building rigour though a messy turn*, action research is a messy process, and viewed by some researchers as an area of research that is very uncomfortable to work in. There is a fear held by some researchers that conducting action research is far too open to interpretation, even if the discomfort leads to widespread change. Cook states that the 'messy area' is so important for fostering change because it allows for stakeholders to find ways to fixing the problem at hand. Another criticism of action research comes in the form of losing critical perspective (Cook, 2009). While the intention of a researcher appearing to be aloof is to not affect the participants and their work, the participants may view the researcher as not caring about their cause, so an approach taken by researchers is to be a guide in the research process. In addition, navigating the feeling of being uncomfortable while conducting action research is important for understanding the validity of action research. Educators are not able to feel like they can or should take action without being uncomfortable.



Purpose Statements and Research Questions

- Area of focus
- Addresses a problem
- Dynamic
 - Identify a problem
 - Try a solution
 - Reflect
 - Apply new solutions

In action research, purpose statements and research questions are based on the needs of the school community. Together, stakeholders come together to find an area to focus on in their school community. After deciding on a focus area, they decide on a problem they wish to solve. During the process of collecting the research, the statements or questions asked at the beginning of the research may change slightly - as I mentioned on the previous slide, Cook states that this fluidity of action research makes people uncomfortable. However, by reviewing, revising, and applying new solutions, the action plan is established.



Key Players/Stakeholders

- Community
 - Private organizations
 - Nongovernmental organizations
 - Neighbourhoods and regions
 - Community of individuals with common interests
 - Educational institutions (administration, staff, teachers, school districts)

The key players or individuals invested in action research are members of a community. Action research may be conducted within any organization, neighbourhood, region, or smaller community. In education, the people involved in living and working within the educational institution is typically considered a stakeholder or key player. The staff, teachers, administration, and school district persons may be involved in action research through a desire for change to occur in the educational community.

Example of a non-peer reviewed Action Research Project

Teacher Change Through Participation in Action Research

Action Research as a Catalyst for School Change Lakeshore School Division Community Circle

<https://www.brandonu.ca/bu-cares/files/2020/01/Final-Research-Report-Action-Research-as-a-Catalyst-for-School-Change-Lakeshore-School-Division-Community-Circle.pdf>

Final Culminating Presentation by Jackie and Mike:

<https://www.slideshare.net/bumathman/wrap-up-presentation-voice>



This non-peer reviewed action research project is the reason why I chose this research design process more closely. When I lived and worked in Manitoba, I taught for a school division in the northern part of the province who desired to undergo a “reimagining process”. This meant that the superintendent wanted to create change in her school division but wanted the stakeholders (the members of the school community) to be involved in that process. A group of professors from a university in the province, called Brandon University assisted our school division in the process and offered support. The process started in the school division in 2013. I taught there until the summer of 2016. The project ended in the spring of 2017.

We, as teachers and administrators, were offered to participate and sign up to be a part of each of the different teams, or success pathways: technology, instructional strategies, and physical spaces (facilities). Being new to the community, single, and with nothing else to do besides prepare for each school day, I signed up to be a part of the technology and instructional strategies groups. The requirement of individuals involved was that they attend three meetings a year at the school division office and collect data of their individual projects. In the technology pathway, I decided to remove paper as a delivery method of instruction or assessment from my computer classes. My intention was to make my computer classes paperless.

During the meetings, the researchers asked participants to report out their observations, data, and other relevant findings. We met with the researchers one-on-one in the large boardroom among the rest of the participants and asked for help

filling out their required forms. The forms detailed our plans, how we were going to implement them, and the resources and expertise we needed to be successful. During the last meeting, participants were asked to complete a culminating form to detail the successes and obstacles to completing their project.

Now, having taken this class, I have found that there are significant inconsistencies in the report that the researchers compiled. I took note of the inconsistencies in my own name, the failure to include all reports provided by teachers, images taken for reporting purposes were not included, among other information I thought to be quite important. While some of the changes that were made were long-lasting, others were not. For example, I left the school division before the project ended, so I was not able to or given a chance to offer my thoughts about the entire process. There were other educators who joined in and dropped out of the research process as the years went on as well. There were significant stakeholders missing in the process, such as members of the community and the educational assistants. While they were invited to come, there was no pay or compensation offered to them for attending, whereas teaching and administrative staff received their typical pay on the days they attended the sessions.

While the research was highly dependent on the educational staff's buy-in, it is strikingly clear that this report was not intended to be submitted for peer review based on how it was compiled, as there was very little researcher input, interpretation, or scaffolding within the report. Given what I have said, I thought it would be suitable to compare this action research project with another which has undergone peer review.



Example of a peer reviewed action research project

A call on teachers to participate in action research:

"I Practice Teaching": Transforming Our Professional Identities as Literacy Teachers Through Action Research by Kristine M. Schutz and James V. Hoffman

Implementing action research:

The Recursive Process In and Of Critical Literacy: Action Research in an Urban Elementary School by Karyn Cooper and Robert E. White

In finding examples of peer reviewed action research I came across a paper called "I Practice Teaching": Transforming Our Professional Identities as Literacy Teachers Through Action Research. In this paper, the authors call on teachers to conduct action research in their own classrooms by changing their mindset from fixed to a growth mindset. To accept the belief that any teacher as a professional has reached their peak of understanding best practices and how students learn is problematic. Schutz and Hoffman are explicit in their paper about how teachers can conduct research by breaking the process down into five steps: "1. Identify a meaningful research question. 2. Plan how to collect data to address the question. 3. Review the literature to identify theories and instructional strategies that inform your study. 4. Collect and analyze data. 5. Write and publish your findings" (pg. 10). The authors also stress the importance of community, or stakeholders in their paper. While Schutz and Hoffman's paper identifies why action research should be conducted, they do not explicitly report on action research being conducted.

Cooper and White's report, on the other hand, focuses on the implementation of and reporting on action research being conducted. Their report, *The Recursive Process In and Of Critical Literacy: Action Research in an Urban Elementary School*, focuses on action research conducted in a Canadian elementary school with students-at-risk.

Cooper and White establish the community and school context, reference literature, explain the research team, and state their purpose for research. All of these elements were not covered either at all, or in depth in the Kirk and Nantais report mentioned on

the previous slide. The explicit, transparent, and nature of the Cooper and White report is clear. I would argue that the quality of research conducted is much more rigorous and of better quality. While I wish the stakeholders' thoughts and ideas were more clearly stated, it is significantly better presented than the work done on the previous slide, which in comparison seems like a culmination of other people's' work with no interpretation, conclusions, or work being done by the researchers.

Overall, there is much to be learned by reading literature where the research design is conducted with people who would identify themselves as "non-researchers" (as many educators would state). Action research is perhaps best described as a research design with the aim of growth and boosting the confidence of our educators who are already doing remarkable things.



Research Design Website

actionresearchdesign.weebly.com

I would invite you at this time to view my website on action research.



References

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