Beaconhouse School System

BSS GUIDELINES FOR ACTION RESEARCH

2019

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Introduction

Beaconhouse School System (BSS) strongly encourages and supports school based professional learning and professional development of the teachers and educators. Action research is one of the main tools and formats for on the job professional learning. Action research is an empowering experience for the teachers and educators who engage in it and it is always relevant to the participants. Relevance is ensured as researchers determine the focus of each research project and they themselves are the primary users of the findings. Hopkins (1985), as well as Ebbutt (1985), suggest that action research is a personal attempt to use a combination of action and research for disciplined inquiry to understand, improve and reform practice. Cohen and Manion (1994) define action research as,

"a small-scale intervention in the functioning of the real world and close examination of the effects of such an intervention"

Action research is a powerful tool for change and improvement. It requires teachers to select an aspect of their teaching to systematically investigate. They refer to theories from research literature, collect and record data from their classroom/school practices and in turn draw conclusions about how teaching and learning influence each other. This process informs their future instructional decisions. Kemmis and McTaggart (1992) argue that *"to do action research is to plan, act, observe and reflect more carefully, more systematically, and more rigorously than one usually does in everyday life."* With that as the guiding principle, this document provides guidelines for BSS school heads and teachers on the scope, principles and process of action research.

Scope

Action research can be undertaken by:

- individual teacher,
- group of teachers working cooperatively within on school,
- teacher/s working with the researcher (internal from BSS or external researcher/s working with BSS).
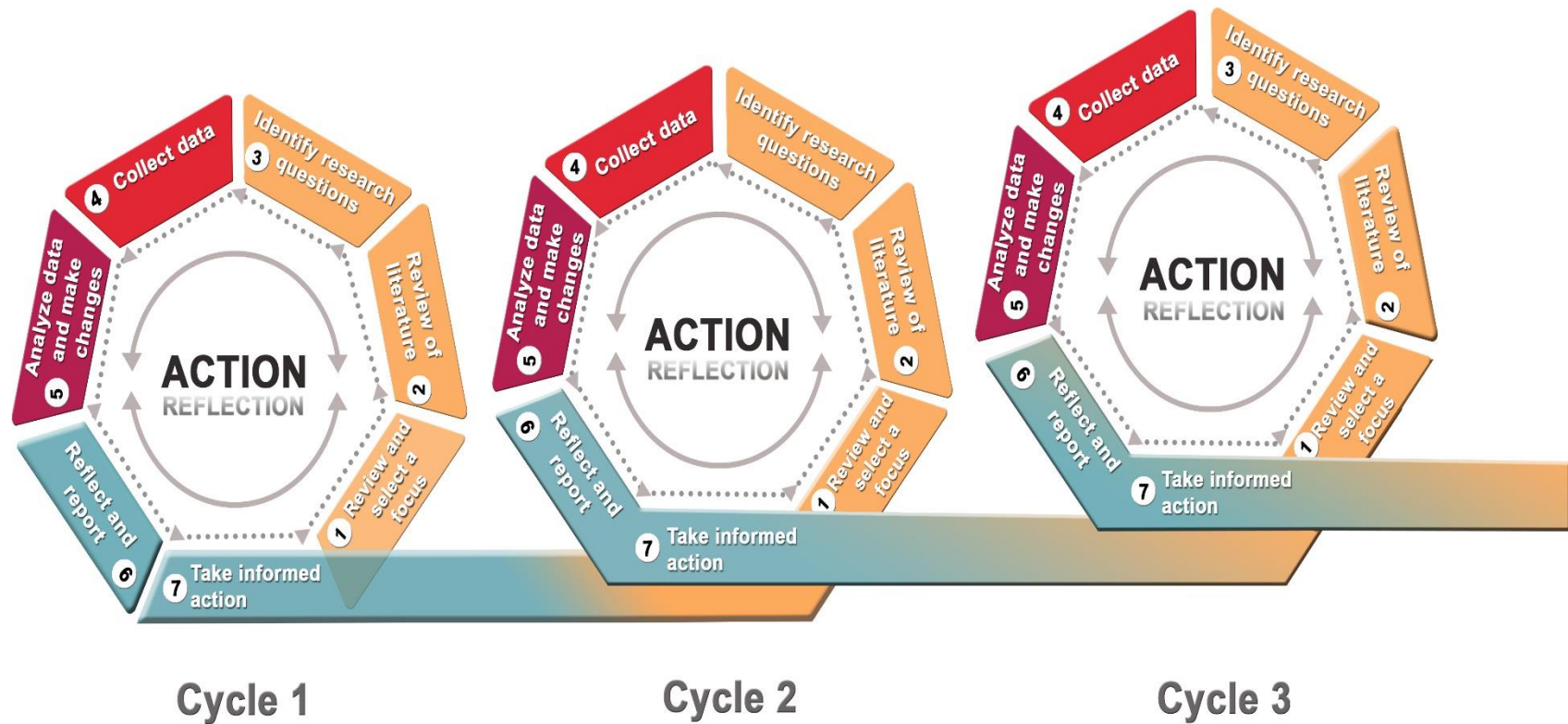
Action research can be in a variety of areas (Cohen, Manion, & Morrison, 2007):

- *teaching methods:* replacing or improving the previous methods
- *learning strategies*: adopting a new approach to learning in preference of the earlier style of teaching and learning
- *evaluative procedures:* improving one's method of continuous assessment
- *attitudes and values:* encouraging positive attitude or modifying students' value system
- *professional development of teachers:* improving teaching skills, developing new methods of learning, increasing powers of analysis, promoting self-reflection and heightening self-awareness
- *classroom management*: gradual introduction of techniques of behavior modification and classroom management
- *administration:* increasing efficiency of school administration

BSS teachers are advised to take note that action research differs from everyday actions of teachers as:

- it is more systematic and collaborative in collecting evidence on which to base group reflection
- it involves <u>problem posing</u> not just <u>problem solving.</u> It is motivated by the quest to improve and understand teaching practices by changing them and learning how to improve from the effects of the changes made
- it is a research by practitioners themselves on their own work, to help them improve

BSS Action Research Process

Action research can be engaged in by a single teacher, by a group of colleagues who share an interest in a common problem, or by the entire faculty of a school. Whatever the scenario, action research process involves certain steps. Different theories divide the steps in different number of stages but all amount the same process. Lewin (1946) originally codified action process into four main stages: planning, acting, observing and reflecting. At BSS, we have further refined the four stages and in light of them seven steps have been identified for an action research process, which become an endless spiral for the inquiring teacher. The four stages and seven steps of this process are:

A. Stage I-Identification & Planning:
1. Review and select a focus
2. Review of literature
3. Identify research questions

B. Stage II-Action & Collection:
4. Collect data

C. Stage III-Interpretation & Modification:
5. Analyze data and make changes

D. Stage IV- Reflection & Planning
6. Reflect and report
7. Take informed action

Step 1—Review and Select a Focus

This step requires review of the current practice to identify and select an aspect to focus the research on. The first step in the process, is vitally important. It begins with the question: What element(s) of our practice or what aspect of student learning do we wish to investigate*?* (Sagor, 2000)

Teachers can begin with some baseline data- a pretest, previous grades, checklists, observations, or behaviors.

It is advisable to consult others (students, colleagues, experts) for their perspective and more in depth information on the selected area.

Step 2—Review of Literature

The second step involves identifying the values, beliefs, and theoretical perspectives the researchers hold relating to their focus. This stage involves preliminary discussions amongst the interested teachers and school heads. It will help identify several questions and limiting factors. In this stage, researchers/teachers need to understand dominant research methods and strategies used by other researchers and their effect. They need to make sense of the information collected to this point in light of that by gaining awareness of theories and assumptions. For example, if teachers are concerned about increasing responsible classroom behavior, it will be helpful for them to begin by clarifying which approach—using punishments and rewards, allowing students to experience the natural consequences of their behaviors, or some other strategy—they feel will work best in helping students acquire responsible classroom behavior habits. In order to develop this understanding, teachers/ researchers are required to read and develop an understanding of the existing literature and predominant theories. The review of research literature helps to find out what can be learned from comparable studies, their objectives, procedures and problems encountered.

It is a crucial step as at this point seeds of success or failure are planted because the success of the research are dependent upon clarity of objectives, purposes and assumptions (Cohen, Manion, & Morrison, 2007).

Step 3—Identify Research Questions

Once a focus area has been selected and the researcher's perspectives and beliefs about that focus have been clarified, the next step is to generate a set of personally meaningful research questions to guide the inquiry. This step involves a modification or redefinition of the initial statement of problem identified in step 1. The research question has to be small, specific, realistic and measurable. The research question will narrow down the range of possible practical solutions to one of the solutions to the problem. In this step, teachers/ researchers will set a success criteria by which they will be able to judge whether the solution has worked to solve the problem. During this step of the process, underlying assumptions are made explicit (e.g. in order to implement SBPD effectively, the attitudes, values, skills and objectives of the teachers must be changed).

Careful planning at this first stage will limit false starts and frustrations. There are several criteria to consider before investing the time and effort in "researching" a problem. The question should:

    i.   be a higher-order question—not a yes/no
   ii.   be stated in common language, avoiding jargon
  iii.   be concise
  iv.   be meaningful
   v.   not already have an answer

(Ferrance, 2000).

It is important to ask a question over which the teacher has influence; it's within the teacher's locus of control as well as being worth the time and effort that will be spent on it. *Sometimes there is a discrete problem that is readily identifiable. Or, the problem to be studied may come from a feeling of discomfort or tension in the classroom. For example, a teacher may be using the latest fashionable teaching strategy, yet not really knowing or understanding what or how kids are learning* (Ferrance, 2000).

Step 4—Collect Data

Next step in the process is collecting the required the evidence. The initial question is not *'which methodology?' but 'what do I need to know and why?'* Only then do you ask *'what is the best way to collect information?'* and *'when I have this information, what shall I do with it?'* (Bell, 2005).

Professional educators always want their instructional decisions to be based on the best possible data. Teachers and action researchers can base their instructional decisions on best possible data. The best possible data is the data that is valid (meaning the information represents what the researchers say it does) and reliable (meaning the researchers are confident about the accuracy of their data). Lastly, before data are used to make teaching decisions, teachers must be confident that the lessons drawn from the data align with any unique characteristics of their classroom or school (Sagor, 2000).

Validity and reliability can be ensured by avoiding relying on single source of data. Triangulation (using multiple independent sources of data to answer the question) enhances validity and reliability. The thought of collecting data from multiple sources raises concerns and a most frequently asked question that, *"Where will I find the time and expertise to develop valid and reliable instruments for data collection?"* (Sagor, 2000)

The answer to the above question is around us as our BSS classrooms and schools area data-rich environments. Every single student produces work daily, is interacting productively with classmates or experiencing difficulties in social situations, and is completing assignments proficiently or poorly. Teachers not only see these events transpiring before their eyes, they generally record these events in their grade books. The key to managing triangulated data collection is, first, to be effective and efficient in collecting the material that is already swirling around the classroom, and, second, to identify other sources of data that might be effectively surfaced with tests, classroom discussions, or questionnaires.

There are 8 data gathering tools that BSS teachers can use:

1. *Field notes:* Keeping field notes is a way of reporting observations, reflections and reactions to classroom problems. They should be written as soon as possible after a lesson, but can be based on impressionistic jottings made during a lesson. The greater the time-lapse between the event and recording it, the more difficult it becomes to

reconstruct problems and responses accurately and retain conscious awareness of one's original thinking. Keeping a record in this way is not very time-consuming and provides surprisingly frank information that is built up over time (CPED, 2009). Four uses of field notes in classroom research are:

> ➢ They can focus on a particular issue or teaching behaviour over period of time.
> ➢ They can reflect general impressions of the classroom and its climate.
> ➢ They can provide an ongoing description of an individual child that is amendable to interpretation and use in case study.
> ➢ They can record our development as teachers.

2. ***Documentary evidence:*** Documents (memos, letters, notices, papers, examination papers, newspaper clippings, etc.) surrounding a curriculum or other educational concern can illuminate rationale and purpose in interesting ways. The use .of such material can provide background information and understanding of issues that would not otherwise be available. The main use of documents in action research is that they provide a context for understanding a particular curriculum or teaching method.

3. ***Recording and transcript:*** Audiotape recording is one of the most popular teacher research methods. Transcripts are excellent for those situations where teachers require a very specific and accurate record of a limited aspect of their teaching, or of a particular interaction, say between a specific teacher and a student or between two students. An increasing number of teachers are using audiotape as one further way of gathering data to support other forms of assessment; albeit on an incidental basis. Also, simply playing back tapes of one's teaching can be very illuminating and provide useful starting points for further investigation. Playing back tapes or making transcripts can be very time-consuming and expensive, however, unless the method is used judiciously. Always check with the students and other teachers or adults that they do not mind you recording the conversation or discussion (CPED, 2009). Three uses of the tape-recorder in classroom research are:

> ➢ as a general diagnostic tool for identifying aspects of one's teaching;
> ➢ for providing detailed evidence on specific aspects of teaching through the use of transcripts; and
> ➢ as an additional source of evidence for classroom assessment.

4. ***Questionnaires:*** Questionnaires that ask specific questions about aspects of the classroom, curriculum or teaching method are a quick and simple way of obtaining broad and rich information, from students. It is important, however, particularly in the primary grades, to be relatively unsophisticated in the structuring of the questions. Condense the usual 5 point scale to two or three responses, keep the questions simple, and use the basic 'what did you like best' 'what did you like least', 'what would you do differently' type of open-ended question. With younger students it is often more profitable to use a smiley face as the criterion response to questions. The main use of the questionnaire in classroom research is to obtain quantitative responses' to specific predetermined questions (CPED, 2009).

5. ***Interviews:*** Teacher-student interviews are very time-consuming, it may be more profitable to devote that time to general classroom meetings, and only talk individually with students (for research purposes) when a specific instance warrants it. On the other

hand, individual interviews are often very productive sources of information for a participant observer who wants to verify observations he or she has previously made. Group interviews with three or four students are the most productive. Far from inhibiting each other, the individuals 'spark' themselves into sensitive and perceptive discussion. It is a good idea to tape-record the individual interviews for future reference, particularly if the encounters are relatively short. Walker and Adelman (1975) make a number of points about effective interviewing:

- Be a sympathetic, interested and attentive listener, without taking an active conservative role; this is a way of conveying that you value and appreciate the student's opinion. .

- Be neutral with respect to subject matter. Do not express your own opinions either on the subjects being discussed by the children or on the children's ideas about these subjects, and be especially careful not to betray feelings of surprise or disapproval at what the student knows.

- Your own sense of ease is also important. If you feel hesitant or hurried, the students will sense this feeling and behave accordingly.

- The students may also be fearful that they will expose an attitude or idea that you don't think is correct. Reassure along the lines of 'Your opinions are important to me. All I want to know is what you think - this isn't a test and there is not any one answer to the questions I want to ask.'

- Specifically:
  - o phrase questions similarly each time,
  - o keep the outline of interview questions before you, and
  - o be prepared to reword a question if it is not understood or if the answer is vague and too general. Sometimes it is hard not to give an 'answer' to the question in the process of rewording it.

Three uses of the interview in classroom research are:

- ➢ to focus on a specific aspect of teaching or classroom life in detail;
- ➢ teacher-pupil classroom discussion can provide general diagnostic information; and
- ➢ to improve the classroom climate.

6. *Structural observation:* often all that an observer requires is fairly simple information that can be collected by either using a *tally system* or a *diagram;* this approach is called 'structured observation'. With a *tally system,* an observer puts down a tally or tick *every time* a particular event occurs, e.g. every time the teacher asks a question or gives praise. The aim of a *diagram* is to produce a record of what happens in the classroom. It records in diagrammatic form a series of classroom interactions. This approach lends itself to a factual or a descriptive record. It should be noted that all of these approaches can fit a wide range of concerns. They can focus on aspects of the teacher's work, pupil-teacher interaction, or the work of one or more pupils (CPED, 2009).

7. *Analysis of test results:* a certain amount about the effectiveness of learning and teaching can be learnt from the way students perform in tests. However these results should not be considered in isolation and should be used with caution. It is important

to recognise that test results are influenced by a wide variety of factors and that other indicators (e.g. student contribution in class or quality of project work) can be equally valid (CPED, 2009).

8. *Student diaries:* It is not a common practice in BSS schools for students to keep a daily log. However, this is a quick way of obtaining information, as teachers normally check student diaries. These provide an interesting contrast to the field notes kept by the teacher on the same topic and are an excellent way of obtaining honest feedback, particularly when the student retains the right to decide whether the teacher has access to the diary. The teacher can use the diaries as feedback on a particular teaching episode, or to gain an indication of the general class climate, or to assess the progress of an individual student. When students feel comfortable with the approach, they may feel free to write about other teachers and aspects of the school. Sometimes the ethical issues raised by this may be difficult to resolve, particularly when the use of student diaries is not commonplace in the school. Three uses of students' diaries in classroom research are:
   - ➢ they provide a pupil perspective on a teaching episode;
   - ➢ they provide data on the general climate of the classroom;
   - ➢ they provide information for triangulation.

Step 5—Analyze Data and Make Changes

Data analysis triggers anxiety as it brings to mind use of complex statistical calculations, however, this is not the case for the action researcher. A number of relatively user-friendly procedures can help identify the trends and patterns in action research data. During this part of the process, teacher researchers will methodically sort, sift, rank, and examine their data to answer two generic questions enabling them to acquire better understanding of the area under investigation (Sagor, 2000):

- ▪ *What is the story told by these data?*
- ▪ *Why did the story play itself out this way?*

Data obtained from questionnaires, interview schedules, checklists, etc. need to be recorded, analysed and interpreted. A separate pieces of information mean nothing unless they have been categorized and interpreted. *The researchers need to avoid placing too much reliance on preconceived ideas, not least the possibility that the line of questioning may direct respondents to reply in certain ways* (Bell, 2005).

At this step analyze and identify major themes using classroom data, individual data, or subgroup data. Some of the data are quantifiable and can be analyzed without the use of statistics or technical assistance. Other data, such as opinions, attitudes, or checklists, may be summarized in table form. *Data that are not quantifiable can be reviewed holistically and important elements or themes can be noted* (Ferrance, 2000).

The next course of action requires making changes. Researchers/teachers are advised to design a plan of action that will allow them to make a change in light of the analysis and to study that change. It is important that only one variable be altered because if several changes are made at once, it will be difficult to determine which action is responsible for the changed outcome. As the new strategy is being implemented, researchers/ teachers will continue to document and collect data on performance.

Step 6—Reflect and Report

The act of reporting on the action research has proven to be extremely powerful for both the researchers and their colleague (Norton, 2009). The reporting of action research most often occurs in informal settings that are far less intimidating than the venues where scholarly research has traditionally been shared. Faculty meetings, seminars, and teacher conferences are among the most common venues for sharing action research with peers (Sagor, 2000). The important aspect to keep in mind is to report in a simple, easy to understand manner. Confidentiality and anonymity of students and participants must be maintained at all cost. That said, the key aspect of reporting the findings is to ensure reflection is part of the final report. Reflection is an integral part of the action research process and occurs at every step; be it reflection-in-action, reflection-on-action, or critical reflection. Reflection helps ensure that 'theory-laden' views of the researcher do not hold precedent over the views of the participants (Cohen, Manion, & Morrison, 2007). Reflective critique enables to acknowledge the errors, shortcomings, and limitations faced in the whole process. This ensures the quality of the research and its findings. BSS teachers are encouraged to maintain reflection logs which will enable them to reassess each strategy used at each step of the process therefore at the end ensuring that the final report is based on self-conscious awareness of the effects that participants and researcher are having on the process; how their values, attitudes, perceptions, opinions, actions and feelings are impacting the situation or phenomena under investigation (Cohen, Manion, & Morrison, 2007).

Step 7—Taking Informed Action

Teachers are familiar with planning the way forward as it is also part of their lesson plans. As a result of the action research project, teachers identify additional questions raised by the data and plan for additional improvements, revisions, and next steps. Last step of the action research process is the action planning step. In this step, findings and outcomes of the project are reviewed, recommendations are made and results of the project are shared with the key stakeholders. This starts the second round of the action research cycle as the way forward feeds into the step one of the second round of the cycle.

What makes action planning particularly satisfying for the teacher researcher is that with each piece of data uncovered (about teaching or student learning) the educator will feel greater confidence in the wisdom of the next steps. Although all teaching can be classified as trial and error, action researchers find that the research process liberates them from continuously repeating their past mistakes. More important, with each refinement of practice, action researchers gain valid and reliable data on their developing virtuosity (Cohen, Manion, & Morrison, 2007).

Ethical Considerations

There are certain ethical considerations to be maintained at all steps of the process especially when collecting and handling data. Teachers/researchers are to follow the ethical guidelines provided in the "BSS Guidelines for Research". This document has been shared with all the schools and is available on BEAMS

For further clarifications/concerns/queries contact General Manager Research & Development, BSS Head Office: researchinfo@bh.edu.pk

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