THEMES IN EDUCATION



ACTION RESEARCH

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Steps in Action Research

Within all the definitions of action research, there are four basic themes: empowerment of participants, collaboration through participation, acquisition of knowledge, and social change. In conducting action research, we structure routines for continuous confrontation with data on the health of a school community. These routines are loosely guided by movement through five phases of inquiry:

- 1. Identification of problem area
- 3. Interpretation of data
- 2. Collection and organization of data
- 4. Action based on data
- 5. Reflection



Figure 2. Action Research Cycle

IDENTIFY A PROBLEM AREA

Teachers often have several questions they wish to investigate; however, it is important to limit the question to one that is meaningful and doable in the confines of their daily work. 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

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

An important guideline in choosing a question is to ask if it is something over which the teacher has influence. Is it something of interest and worth the time and effort that will be spent? 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.

GATHER DATA

The collection of data is an important step in deciding what action needs to be taken. Multiple sources of data are used to better understand the scope of happenings in the classroom or school. There are many vehicles for collection of data:

| interviews | journals |
|-------------------|---|
| portfolios | individual files |
| diaries | logs of meetings |
| field notes | videotapes |
| audio tapes | case studies |
| photos | surveys |
| memos | records – tests, report cards, |
| questionnaires | attendance |
| focus groups | self-assessment |
| anecdotal records | samples of student work, projects, performances |
| checklists | |

Select the data that are most appropriate for the issue being researched. Are the data easy to collect? Are there sources readily available for use? How structured and systematic will the collection be? Use at least three sources (triangulation) of data for the basis of actions. Organize the data in a way that makes it useful to identify trends and themes. Data can be arranged by gender, classroom, grade level, school, etc.

INTERPRET DATA

Analyze and identify major themes. Depending upon the question, teachers may wish to use 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.

ACT ON EVIDENCE

Using the information from the data collection and review of current literature, design a plan of action that will allow you to make a change and to study that change. It is important that only one variable be altered. As with any experiment, if several changes are made at once, it will be difficult to determine which action is responsible for the outcome. While the new technique is being implemented, continue to document and collect data on performance.

EVALUATE RESULTS

Assess the effects of the intervention to determine if improvement has occurred. If there is improvement, do the data clearly provide the supporting evidence? If no, what changes can be made to the actions to elicit better results?

NEXT STEPS

As a result of the action research project, identify additional questions raised by the data and plan for additional improvements, revisions, and next steps.

Benefits of Action Research

Action research can be a worthwhile pursuit for educators for a number of reasons. Foremost among these is simply the desire to know more. Good teachers are, after all, themselves students, and often look for ways to expand upon their existing knowledge.

Focus on school issue, problem, or area of collective interest

Research done with the teacher's students, in a setting with which the teacher is familiar, helps to confer relevance and validity to a disciplined study. Often, academic research is seen as disconnected from the daily lives of educators. While this might not always be true, it can be very helpful for teachers to pick up threads suggested in academic circles, and weave them in to their own classroom. It is also comforting for parents, or education administrators outside of the school, to know that a teacher is not just blindly following what the latest study seems to suggest, but is transforming the knowledge into something meaningful.