

Disclaimer: The article below is taken from http://philseflsupport.com/why_ar.htm. I had adjusted the formatting and added the italics to emphasize the significance of the discussion.

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WHY DO ACTION RESEARCH?

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http://philseflsupport.com/why_ar.htm

What is action research?

One problem with action research is that the term means different things when used by different authors. For example, Hopkins (1985) treats action research and classroom research by teachers as synonymous; Wallace (1991) argues that the main criterion for action research is practicality; Brown (1994) and Robinson (1991) suggest that any action undertaken by teachers to collect data and evaluate their own teaching can be termed action research; and Somekh (1993) highlights the participatory insider nature of action research.

Despite the differences between these interpretations of action research, there does appear to be a common core which distinguishes action research from research in general. *Action research occurs within a specific classroom situation, is usually conducted by the teacher as classroom participant, and aims to develop the situation and the teacher-researcher rather than generate additions to the pool of human knowledge.*

Since action research does not aim to increase knowledge, issues of research reliability and validity can generally be downplayed in action research while practicality and immediate usefulness become more important. For this reason, action research often seems an attractive option for teachers new to research. It looks easy - action researchers do not have to worry about creating valid research designs, about statistics, or about concepts like triangulation and replicability. While these points are to some extent true, *conducting useful action research still requires serious devotion of time and effort, and a lot of thoughtful consideration. However, while not easy, action research should still be an attractive option for classroom teachers, albeit for different reasons.*

Why should teachers conduct research?

To improve and develop teaching, research into classrooms is needed. *As teachers, we need to know what is actually happening in our classrooms, what learners are thinking, why learners are reacting in the ways they do, what aspects of the classroom we should focus on to develop our teaching most effectively, how we should change in these aspects, and what the effects of such a change are. It is important to note that more than half of the items in this list concern describing and understanding the existing classroom situation rather than evaluating the implementation of a new approach.* If we do not truly understand our classroom situations first, our choices of new approaches to implement are likely to be based

on personal fancy and whimsy rather than on what is most likely to have beneficial effects in the situation.

Given this need for teachers to understand their own classroom situations, it comes as something of a surprise to realise that most research into classrooms is still conducted by researchers from outside the classroom situation. A quick trawl through a few recent journals shows that university researchers are the authors of nearly all of the articles, including those that investigate school classrooms. (I should be a little careful here as I work at a university but am advocating action research at all educational levels). The problem with classroom research being conducted by outside researchers is that classrooms are very complicated specific contexts replete with their own routines and expectations which are very difficult for outside observers to understand. Classroom research into surface behaviours, such as the number of questions a teacher asks in a lesson, can be effectively conducted by outside researchers, but getting a real understanding of the underlying meanings and purposes of these behaviours can only be done by insiders. Since most learners are not in a position to be able to conduct research, this means that the teacher is the person who should be doing most research into classrooms.

The problems with conducting research

Teachers wishing to conduct research into their own classrooms, however, are faced with a host of problems. Not least among these are lack of time, lack of expertise or skills in research, lack of support especially from within their own institution, and threats to their self-image as a teacher (Allwright, 1993; Burton and Mikan, 1993; Nunan, 1993).

The problem of lack of research expertise or skills has a knock-on effect causing further problems. *Research designed and conducted by teachers new to research is likely to have low reliability (e.g. the findings are not likely to be generalisable) and low validity (e.g. the research may not actually produce findings which address the targeted research topic). Because of these problems, the research is also likely to have low publishability - which may obstruct achievement of the teacher's real reason for conducting research, namely, to get published given the heavy stress placed on publishing research by the Ministry of Education and universities at present.*

Action research as a solution to the problems

All of these problems may make teachers think twice before getting involved in research. However, these problems apply to research in general rather than action research. In focusing on action research, we need to shift our perceptions of the nature and purposes of research, and this shift in our perceptions reduces the importance that can be given to the problems discussed above.

Action research, as we have seen, aims to develop the teaching situation and the teacher-researcher rather than generate new knowledge. As such, reliability and generalisability are not really issues in action research. Action research aims to generate findings that are useful

within a specific context rather than findings applicable across many different situations. Similarly, the basis for judging validity in action research is different from that used in research in general. In general research, validity is measured by the extent to which the research actually investigates what it is supposed to investigate, and because of this, research design and data analysis procedures are crucial. In action research, on the other hand, validity can be measured by the extent to which the research produces findings which are useful in developing the classroom situation. This shift in perceptions concerning the nature and purposes of research means that action research, which may not be publishable when judged by the criteria of research in general, is publishable as action research (see Edge, 2001; Sitler and Tezel, 1999; Watson Todd, 1999 for recent examples of published action research). However, the number of publications focusing on action research is limited meaning that publishability is actually still low.

Publishing an article, however, should not be a teacher's top priority when deciding to conduct action research. More important is the likely effect that conducting the action research will have on the classroom situation and the teacher-researcher.

Action research for development

In conducting action research, teachers can become emancipated (Gore and Zeichner, 1995), in that they become in control of the whole process of research and investigation of their own teaching, rather than being the tool of an outside researcher. *Teachers, then, can become more autonomous, responsible and answerable through action research (Day, 1987), and so decisions concerning change can be taken by teachers themselves. One outcome of this is that action research is likely to be relevant and immediately useful in understanding and developing the specific classroom context in which it was conducted, and so of benefit to learners. Another outcome is that the research becomes both an input into and a stimulus for teacher reflection (indeed, teacher reflection is one of the key tools in conducting action research), and reflection is a necessary component of personal and professional development.* Conducting action research, then, is one key way for us to develop ourselves as teachers.

As teachers, it is our duty to develop both our teaching and ourselves. Action research can help us to fulfil these responsibilities. Because of this, conducting action research should not be seen as something extra that keen teachers can do which goes beyond their usual teaching responsibilities. Instead, *conducting action research should be seen as an integral part of our responsibilities as professionals dedicated to developing our teaching and ourselves.*

References

Allwright, D. (1993) Integrating 'research' and 'pedagogy': appropriate criteria and practical possibilities. In Edge, J. and Richards, K. (eds.) *Teachers Develop Teachers Research: Papers on Classroom Research and Teacher Development.* Oxford: Heinemann. pp. 125-135.

Brown, H. D. (1994) *Teaching by Principles: An Interactive Approach to Language Pedagogy.* Englewood Cliffs, NJ: Prentice Hall.

Burton, J. and Mickan, P. (1993) Teachers' classroom research: rhetoric and reality. In Edge, J. and Richards, K. (eds.) *Teachers Develop Teachers Research: Papers on Classroom Research and Teacher Development.* Oxford: Heinemann. pp. 113-121.

- Day, C.** (1987) Professional learning through collaborative in-service activity. In Smyth, J. (ed.) *Educating Teachers: Changing the nature of Pedagogical Knowledge*. London: The Falmer Press. pp. 207-222.
- Edge, J.** (ed.) (2001) *Action Research*. Alexandria, VA: TESOL.
- Hopkins, D.** (1985) *A Teacher's Guide to Classroom Research*. Milton Keynes: Open University Press.
- Nunan, D.** (1993) Action research in language education. In Edge, J. and Richards, K. (eds.) *Teachers Develop Teachers Research: Papers on Classroom Research and Teacher Development*. Oxford: Heinemann. pp. 39-50.
- Robinson, P.** (1991) *ESP Today: A Practitioner's Guide*. Hemel Hempstead, Herts.: Prentice Hall.
- Sitler, H. C. and Tezel, Z.** (1999) Two action research projects. In Gebhard, J. G. and Oprandy, R. (eds.) *Language Teaching Awareness: A Guide to Exploring Beliefs and Practices*. Cambridge: Cambridge University Press. pp. 195-210.
- Somekh, B.** (1993) Quality in education research - the contribution of classroom teachers. In Edge, J. and Richards, K. (eds.) *Teachers Develop Teachers Research: Papers on Classroom Research and Teacher Development*. Oxford: Heinemann. pp. 26-38.
- Wallace, M.** (1991) *Training Foreign Language Teachers: A Reflective Approach*. Cambridge: Cambridge University Press.
- Watson Todd, R.** (1999) Using algorithms in strategy training: a case study in action research in EAP. *Guidelines* vol. 21 no. 1 pp. 34-55.

Disclaimer: The article below is taken from <http://www.sitesupport.org/actionresearch/index.html>. I had adjusted the formatting and added the italics to emphasize the significance of the discussion.

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CTE-Action Research

<http://www.sitesupport.org/actionresearch/index.html>

About the author: Dr. Teresa T. Field has worked extensively with school university partnerships designed to improve teaching and learning for all in the school community. It was from this work that an interest in the role of critical reflection on teacher learning was formed. She has worked to infuse reflection throughout Johns Hopkins University's Master of Arts in Teaching program--including extensive work on portfolio assessment.

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This online module has been designed to assist you in completing a successful Action Research project in your own classroom. In addition to online resources and step-by-step instruction, you will have the opportunity to complete online activities and receive feedback and guidance from university faculty members. You can also view examples of Action Research projects from other students at your university. We look forward to hearing from you as you proceed through this module and your own classroom research.

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Introduction

Action Research is a useful tool. It *allows educators to systematically and empirically address topics and issues that affect teaching and learning in the classroom.* The Action Research process is natural for some teachers. They are always *exploring and testing new strategies by observing and collecting information related to the success of instructional and organizational strategies.* Others need to be conscience of Action Research techniques while developing classroom strategies and planning activities. *Will mystudents perform better if I use multiple modalities of instruction? Would involving parents in the homework cycle increase the likelihood that students complete their homework? Does homework completion and success translate into better test scores?* All of these are questions teachers pose every day. *Action Research provides a structured process for implementing data collection and analysis. It provides the information necessary for an educator to know whether or not their intervention had the anticipated results.*

Think about ... issues you see everyday in the classroom. About what topics/areas of study do you think to yourself, "I wonder if I tried _____ the students would be more _____?" This is the starting point for the Action Research process.

What is Action Research?

- *Action Research is a form of disciplined inquiry that impacts directly on a teacher's practice and empowers them to renew their classrooms and promote instructional improvement. (Glanz, 1991)*
- *Action Research is a form of self-reflective inquiry (Kemmis, 1983)*
- *Action Research is the systematic study of attempts to improve educational practice by groups of participants by means of their own practical actions and by means of their own reflection upon the effects of those actions. (Ebbutt, 1985)*
- *Action Research is a disciplined process of inquiry conducted by and for those taking the action. The primary reason for Action Research is to assist the "actor" in improving and/or refining his or her actions. (Sagor, 2000)*

The advancement of Action Research is credited to Kurt Lewin, who, in 1946, used it as a methodology for intervening in the post-war issues of the day. In 1953, Stephen Corey, a researcher from Columbia University's Teacher's College, published *Action Research to Improve School Practice*. More recently, critical theorists have used Action Research as a way to empower and emancipate participants-reinforcing the notion that teachers are in control of their own research, and are responsible for decisions that affect their students.

More recently Sirotnik (1987) and Joyce (1991) have identified Action Research as a process that develops a problem-solving ethos. *Sagor (2000) identifies three purposes for Action Research: building the reflective practitioner, making progress on school wide priorities, and building a professional culture in the educational arena.* Each of these outcomes helps create an environment of learning and progress toward educational goals, and as a result they have become the focus of many school-based activities.

As we seek to develop reflective practitioners who are teacher leaders and decision-makers in our teacher education programs, we include the Action Research process as a strategy for continued professional and personal development.

Why participate in Action Research?

Traditional classroom research generally does not assist individual teachers in improving their practice. However, teachers engaged in Action Research-looking closely at their classrooms, reflecting on their practice, developing their own questions, strategies and interventions-create an environment of renewal and improvement. This environment empowers participants and creates a positive school climate with teaching and learning at the core. Also, a link has been shown between classroom research and refined professional judgment. *Teachers who engage in Action Research tend to be more willing to self-assess and reflect on their practice and actions in order to improve their teaching. The process also allows teachers to model being reflective and proactive in addressing classroom issues and concerns.*

<http://ascd.org/readingroom/books/sagor92book.html#chap1>

Who should do Action Research?

Both preservice and inservice teachers should engage in Action Research. Individual teachers, teams of student teachers and supervising teachers, a grade level team or content area department can participate in Action Research. A school can work together to develop a focus question, explore research alternatives, and develop and implement an intervention and data analysis process. In a school-wide project, the synergy of the school community creates a climate of continuous renewal and learning.

Beginning teachers should learn the process and practice it early in their career. Having a structure in place for exploring issues in the classroom can assist teachers in improving educational practices, as well as creating the best learning environment for students. Developing the Action Research habit empowers the teacher and allows them to become a teacher leader through reflection-in-action and the Action Research process.

What will Action Research accomplish?

Action Research will help you improve instruction in your classroom. It will allow you to look critically at what goes on in your room and the impact that very small changes can make in student (and teacher) success. Action Research can help you focus on specific issues and address them with a plan. As a result, you'll know why something has changed-without having to guess at the causal relationships of your actions on student achievement. Action Research exposes you to current research and best practices that truly address your professional goals-not just what someone else thinks you need to read. It empowers you to make instructional decisions in your own classroom. When Action Research remains focused on student achievement, you have the ability to improve your practice and impact the success of your students. Maybe even with groups you felt you weren't reaching previously.

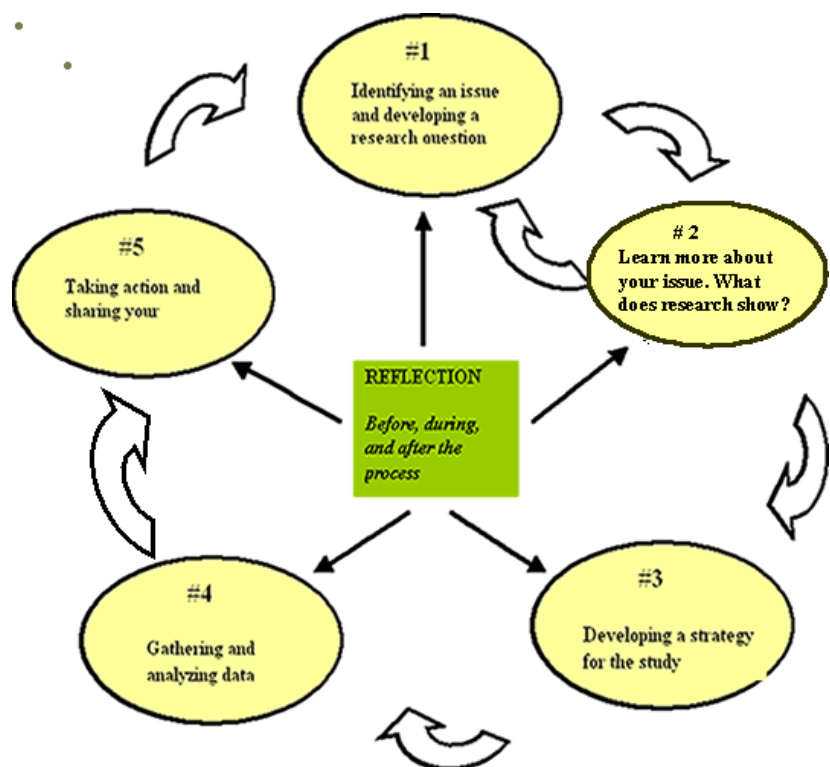
Overview

The Action Research Process employs five steps or components. See Model 1

Step 1 : Identifying issues and developing questions

Your research topic should reflect an issue of importance to you as a teacher. The study you choose to do can impact student learning, seek to develop new teacher habits, or address an important issue such as parent involvement.

Complete Activity 1 to begin to identify an Action Research topic



Activity 1: Identifying issues and developing questions

Complete the Starting Points worksheet below, which will assist you in developing a research topic. Starting Points Worksheet Complete these open-ended questions to help identify an area of interest for your Action Research Project.

I would like to improve

I am perplexed by

Some people are unhappy about

I am really curious about

I want to learn more about

Something I think would really make a difference is

Something I would like to do to change _____ is

Right now, some areas I'm particularly interested in are

Source: Action Research Facilitator's Handbook by Cathy Caro-Bruce. Oxford, Ohio: NSDC, 2000.

Turning these ideas into action research questions: Consider this as you begin to craft your research question.

A good Action Research question:

- Gets at explanations, reasons, relationships. "How does....?" "What happens when....?"
- Is manageable and can be completed.
- Is close to your own practice.
- Provides you an opportunity to stretch.
- Provides a deeper understanding of the topic and is meaningful to you.

Here are some sample research questions:

- How can I make students feel more comfortable working with diverse groupings of classmates?
- How can I more effectively facilitate independent writing in my kindergarten classroom?
- How does the Writing Workshop approach affect my students' writing and their feelings toward writing?

- What classroom strategies are effective in developing student self-evaluation of their learning?

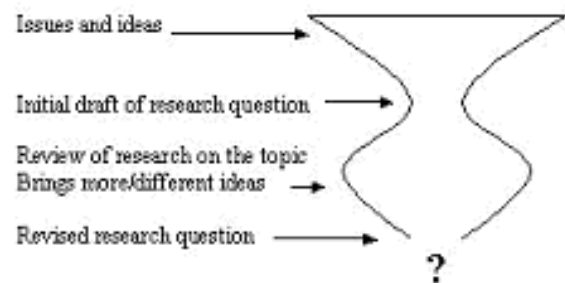
Step 2 - Learning more about your issue

Once you have decided on a topic, you'll need to read more about it—looking in particular at other studies that might guide your research strategy. For your project, you should consider at least three sources of research (text or online). You'll probably read more than three! As you search for articles that increase your knowledge of the topic you'll find more and more articles that will help you refine your research question and identify new strategies and interventions.

Ultimately, you might even rework your initial research question as you learn more about the topic and think about what intervention you hope to use in your classroom and what kind of data you'll need to gather.

See Model 2 - Process for developing a research question below.

Check out the Resources area for research to guide your project. Some general research sites have already been posted online and your instructor can help by posting more specific resources to help with your study.



Step 3 - Developing a strategy for your study

Once you have a question and you've read the relevant research related to your topic, you will need to decide how you want to approach the study. For example: If you want to know if increasing parent contact increases homework completion, then you will need to think through each part of your question. What do you mean by parent contact? Phone calls home, emails, interactions with them as they come to drop off or pick up their child, parent/teacher conferences? Whatever you decide becomes your intervention or strategy. It is the "what" or "how" of your study.

Once a topic is identified and a research question developed, you must begin the task of determining what you are going to DO in your classroom to affect a change. What intervention are you going to use? And, what are the best ways to observe the impact you hope to make?

Think about... Ask yourself the following question as you begin to develop a comprehensive plan for implementing your study:

Developing a strategy/intervention:

- What do you want to do?
- How will you measure the data?
- What baseline and post-intervention data will you collect?
- How often will you collect data?
- How will you know that it worked/didn't work?
- Have you spoken with your principal/department chair/team leader about this project?

Before you Implement-

- Do you have all the necessary permissions (if needed—this depends on the study (Please speak with your principal or team leader for guidance)?
- How will you remember to do the intervention?
- Are there visual cues you can post?
- How can you monitor consistency?
- Have you developed all of the instruments necessary to gather the data?
- Are you storing your data in a safe place?

Step 3 - Developing a strategy for your study

Complete the first four columns of the Action Research Project Planner below as you think through your design. Share a copy with a colleague for feedback and email a copy to your instructor or Project Coordinator.

Action Research Project Planner

Research Topic	Research Question	Research Strategy	Data Collection	Analysis
<i>What am I interested in?</i>	<i>What specifically do I want to find out?</i>	<i>How will I come to know this? What changes will I implement in my classroom?</i>	<i>What kinds of things do I need to collect before I begin? How will I collect the data? How often? How long?</i>	<i>What did I find out? Did it work the way I thought it would? What now?</i>

Issues/Concerns/Questions:

Assistance/Resources I'll need to be successful:

Step 4 - Gathering and analyzing data

Once you've identified your **intervention** strategy, you will need to think about what overt, observable behaviors you can measure to determine if your intervention has an impact. In the previous example, you might have selected sending home explicit parent instructions for assisting with homework as one of your strategies and phone calls home when students did not complete their homework as another strategy or intervention.

Before you begin your intervention, you will need to gather **baseline** data. Knowing how your students responded or performed before the beginning of your study gives you a starting point for comparing study results. You need to know your student homework completion rate **before** you enact your strategy so you will know if there has been a change as a result of the intervention. The baseline and post-intervention data must be gathered in the same fashion for your study to be **valid and reliable**.

Validity relates to the truthfulness of the data. It means that the data actually measure the specific phenomenon that you are claiming to study. Is what you are measuring or collecting data about a true representation of student achievement? Do the number of books checked out of the library really mean students are reading more? Does attendance at PTA meetings truly represent parent involvement? **Reliability** relates to your claim that the data you have collected is accurate. Your findings are less credible or reliable if the number of participants is small or the number of times data was collected is limited. Just because a group of teachers at one training session identified training as important to them does not mean that all teachers believe that-after all, this group had already made a statement about training just by being at the session! While both of these issues are less pertinent in Action Research than in other educational research forums, they should still be considered when you are developing your data collection strategy.

Next you will need to decide on a timeline for implementing your strategy, to see if there is an observable change in behavior. You will also need to determine exactly what you will do so you can identify what you will measure and how you will measure it. In our example, a phone log of parent contacts adds data to the pre and post intervention homework completion rate.

But if in the study you design you are going to implement a new teaching strategy to see if students are more attentive as a result, you will need to identify what you mean by attentive. Does "attentiveness" mean that they are quiet (but potentially) daydreaming, or that they are completing their classroom assignment. Whichever one (or more) of these indicators you chose, you must decide what overt behavior you will gather data on. I'd suggest classwork completion (that's an easy one) and one other behavior (probably "on task" behaviors).

If you are going to gather information about whether students are on task, consider how you will gather that information. You might have a blank seating chart (it really doesn't matter who is on task for this study) and every 5 minutes (or 3 minutes) I'd make a "sweep" of my classroom and note what everyone was doing at that specific point. Then 5 minutes (or 3 minutes) later I'd do another sweep. If you are lucky enough to have a colleague or team leader who would gather the data for you, then you can take advantage of their completing the seating chart by marking who is off task and they can note exactly what you are doing at that point. (You might then find out that x% of your students are doing y when you are giving directions, for example.)

You might decide that instead of doing a pre/post intervention activity, you will try a new strategy with first period and keep the other classes using the traditional strategy. In this

case, you'd be comparing data between your two classes, not within the same class. For example, if you want to know if doing an advance organizer prior to introducing a unit and then to support your daily motivation, increases student achievement, then you can implement the intervention with first period and gather the homework/quiz/test scores of first period and one other of your classes. (Hopefully one with similar demographics.)

Step 5 - Taking action and sharing your results

Once your project has been completed, return to your questions. Were they answered? Were the results what you expected? Who do you want to share your findings with? Can your results inform others in your school?

If the results are not what you expected, was it due to errors in data collection or other unforeseen situations (for example, the student your study focused on moved or another new strategy was implemented school-wide during your study) What would you do differently next time? Remember, Action Research can be an ongoing process. The answers you get from this project will spawn more questions. What will your next study topic be?

Think about... Once your study is complete, you must look at the data from an objective viewpoint. Do the data support your question? Is the change "significant"—at least from your point of view? **As You Analyze and Report Results** Did you get the results you expected from your study? How will you state your findings? How will you represent your data—in a chart? graphic? What are your next steps?

Step 6 - Personal Reflection

After the project has been completed, please take a few moments to consider the process. The Action Research process is empowering, allowing teachers to not only identify and explore an issue close to their practice, but also to change the way they teach.

Think about... the learning process you experienced as a result of completing this study. Consider the following questions as you develop a brief reflection to share with your instructor or Project Coordinator. Reflect upon your experience and the usefulness of the process for improving teaching and learning.

- What was the most interesting component?
- What was the most challenging aspect of the project?
- Will you do it again?
- If so, why? If not, why not?
- Did this experience affect your feeling of professionalism?
- What did you learn about yourself in the process of completing this project?

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Action Research In Schools

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Action research is a form of self-reflective systematic inquiry by practitioners on their own practice. The goals of action research are the improvement of practice, a better understanding of that practice, and an improvement in the situation in which the practice is carried out. The research and the report involves an analysis of collaborative and spectator forms of research, identifying problems to investigate, the selection of appropriate research methods, collecting and analyzing data, and drawing conclusions from the research.

Reflections on Teaching could focus on the following areas:

- Assessment and monitoring
- Case studies, role playing and simulations
- Classroom practice and student engagement
- Curriculum and content
- E-Learning
- Learning approaches ([PBL](#), resource-based learning, etc.)
- Lecturer Diaries
- Research and Teaching

Suggestions for Writing the Action Research Report*

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There are five structural elements for an action research report. Although these elements will be described in a particular order, they need not be that way in your report. In fact, they do not even need to be separated from one another.

The context

The first element of the action research report is a description of the context within which the action research took place. Depending on the project that you do, the locus of the context can be your classroom, your school, or your school district. It is possible that the context of the project includes aspects of more than one of these. It is important to remember that the physical description of the setting is important, but that there are other aspects that are important depending on the project. For example, if your project focuses on working with

parents or students, a description of these populations should be included. If the project relates to an entire district, salient features of the geographical and political area, as well as important features of the schools are part of the relevant context.

Statement and Origin of your Research Focus

The statement of your research focus should answer one or more of the following questions:

- What did you investigate?
- What have you accomplished or attempted to accomplish in this study?
- What have been your goals?

This element of the report should also address the way in which your starting point developed. That is

- How did the idea originate?
- How and why did it change through the year?
- What impact did your research notebook group have on the development of your starting point?

In addition, this section should include what you learned from reading the research literature that informed your study.

Methods

This element of the report focuses on the way in which you investigated your practice situation.

- Describe what you did and why.
- What sort of data did you collect?
- How did you collect the data?
- What successes or difficulties did you have in carrying out this action research?

The Findings

The fourth element of the report states what it was that you accomplished and/or found out. Remember that all action research projects involve actions so therefore there are effects of those actions. And, every action research project results in the teacher coming to a new understanding of his or her own educational situation. Therefore each report should contain some description of what it was that you learned. Make sure to include any events, circumstances or data that contradict what you had hoped to do or find out.

Implications

Although this element is labeled *implications*, it is not necessary that each project have far reaching effects. These implications could be a statement of how participation in this research has affected the ways in which you look at your teaching, your students, or your school. In other words, do you see the educational world differently now, and how will that affect what it is that you will do next?

Finally, include a paragraph describing the next step of this research. Is it complete? Is there another scenario you wish to research? Explain how you would continue action research following up on this study or developing a new idea. Consider possible supports (without an action research course) and impediments to your efforts.

Overall, this structure is not dissimilar to what you may be familiar with -- the standard research report. There is a general introduction that places the research within the field, a statement of the problem or hypothesis, the method used, findings of the research, and finally, implications. But it can be significantly different because you may feel free to write in

the first person and to use a narrative style -- to tell a validated story. You may also feel free to write in the formal style of scientific research. The choice is yours.

* Based on suggestions made by Peter Posch.

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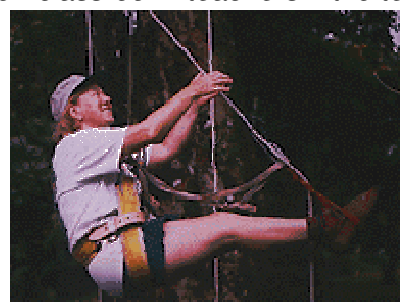
TEACHER RESEARCH

by **Sharon Parsons**
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Introduction

Traditional educational research has limited usefulness for classroom teachers. It often requires the carrying out of specific research projects to the exclusion of their teaching. When educators talk about teacher research, or teaching as research they envision teachers extending their role to include critical reflection upon their teaching. Some examples of teaching as research include educators who wish to undertake research in their classrooms or schools for the purpose of improving teaching, to test educational theory, or to evaluate and implement an educational plan. Teacher researchers have adopted the label "action research " to describe their particular approach to classroom research.



Kurt Lewin (1946) has been credited with the development of the idea of action research. The evolution of an action research agenda within education has been influenced by people such as Kemmis (1983), Ebbutt (1985), Elliott (1991), Hopkins (1985) and others. Hopkins (1985:pp 58-60) offers good advice on teacher research when he advocates the development of teacher's professional expertise and judgment. He provides a basis for the selection of classroom research by teachers:

- the teacher's primary role is to teach and any research project must not interfere with or disrupt this commitment;
- the method of data collection should not be too demanding on the teacher's time;
- the methodology used must be reliable enough to allow teachers to formulate hypotheses confidently and develop strategies applicable to the classroom situation;
- the teacher should be committed to the research problem under study;
- teachers must follow ethical procedures when carrying out research; and
- classroom research where possible should adopt a perspective where all members of a school community build and share a common vision.

Often the hardest part in classroom research is deciding on a focus. *Teacher research does not require a precise hypothesis. In fact you do not have to begin with a problem. Hopkins (1985:pg 63) suggests that " All you need is a general idea that something should be improved. Your general idea may stem from a promising new idea or the recognition that*

existing practice falls short of aspiration." Once the focus of the research has been decided, planning for data collection, followed by actual data collection and analysis occurs.

How to Get Started on a Project

Borrowing heavily from Hollingsworth (1994) and Hopkins (1985) I offer the following practical suggestions for the teacher research process:

1. Decide on a focus

- Start with autobiographical data by locating your best professional self. Some questions you might ask - What are your broad interests in teaching and learning? What are your specific interests? What are manageable questions? Choose something you feel passionate about.
- Justify that the project is your best solution to the problem.

2. Develop a plan to gain insights

- Develop a time-line to gather evidence or data to examine what you are trying to accomplish/resolve/do in light of "what you do not know yet".
- Decide what evidence you want to collect. Evidence includes such things as questionnaires/surveys, observations (video or written notes), collaborations (i.e. video or audio tape of meetings, peer coaching) interviews, tests and records, student work, video and audio tape transcripts, personal journal, library readings, etc.

3. Analyze the data by looking for patterns, or themes across the evidence

- keep logs and journals, periodically read over the evidence, code data from themes and patterns, draw or chart patterns, try to summarize what you have learned as you go, by noting images, metaphors, and any new questions.
- check out your understandings by triangulating evidence (same theme, code, pattern appears in more than two types of data), and by talking to peers, students, friends.

4. Report on what you have learned

- to your colleagues, to parents, at conferences, in journals.
- summarize what you learned -- in an essay, narrative, poster, video, poetry.
- tell how the problem changed, didn't change, or became worse because of changes in your practice.

A key component of Action Research is sharing what you have learned. A number of techniques ranging from videos to formal presentations have already been suggested, but consider the following as potential audiences as well:

1. Colleagues at a staff development day
2. Parents and students
3. Email discussion groups (see On-line Resources)
4. Publications from professional organizations
5. Journals such as "Teacher Research: The Journal of Classroom Inquiry" - a journal by teachers, for teachers. [Brenda Power](#)

Once teacher research is shared it allows for further action on the part of the teacher, or the broader educational community to continue. The educational community has become increasingly supportive of teacher research. At a recent meeting on science education in California that I attended Bob Polkinghorn, the Director of the Statewide Subject Matter Projects in California called for the documentation of evidence of change in practice at the classroom level by teachers. If you have not undertaken teacher research in your classroom now is the time to try!

Ownership Concerns

When two or more teachers are working together perhaps in partnership with a university researcher, the issues of ownership of data gathered in a school context, publication authorship, meeting presentation responsibilities, and obtaining approval for case studies are best discussed early on. A clear understanding of who has the final say about what happens in the classroom should be established. Teachers need to be supported as researchers, but their experiences, their students and district documents may also need protecting. For instance, it may be difficult to hear "outside" collaborators talk or write about you and/or your classroom, particularly if they retain authorship of the paper. Even more complications arise if royalties are involved.

Examples of Action Research

The science standards have become a focus of reform for many science teachers. Teachers who want to bring about such systemic reform in science teaching are now engaging in research into their own practice and sharing the outcomes with others. Two illustrations of on-going teacher research projects where teachers are engaged in exploring ways to increase inquiry based science instruction in the classroom come from CSP-SENA (California Science Project - Science Education Network Academy):

- [Merle Boxill](#) (Chemistry) and Sandy Waston (Biology) at Andrew Hill High School, San Jose are exploring how to introduce open-ended inquiry science into their teaching.
- [Norma Rodriguez](#) at San Antonio Elementary School, San Jose is exploring ways to increase inquiry based science instruction at her school site for all students (not just her own class).
- [Carolyn Csongradi](#) at Burlingame High School, Burlingame has explored how to involve more writing and female participation in her chemistry classes

Such grass roots efforts are what are needed to bring about systemic reform in science education.

On-line Resources

1. The number of educators involved in Action Research/Teacher Research [Email Discussion Groups](#) is growing rapidly. A site you might want to visit to get an overview of the kind of activity associated with teacher research is located [here](#).
2. [One on-going teacher research group](#)
3. [California Science Education Groups](#) involved/interested in Action Research: