Using Action Research to Improve Literacy Instruction in Classrooms Around the World

A Practical Guide to ACTION RESEARCH for Literacy Educators

Written by Glenda Nugent, Sakil Malik, and Sandra Hollingsworth

With support from the International Reading Association, Nokia Corporation, and Pearson Foundation

Contributor/Editor: Amy Pallangyo
A Practical Guide to ACTION RESEARCH for Literacy Educators

Written by Glenda Nugent, Sakil Malik, and Sandra Hollingsworth

With support from the International Reading Association, Nokia Corporation, and Pearson Foundation

Contributor/Editor: Amy Pallangyo
A Practical Guide to Action Research for Literacy Educators

Authors: Glenda Nugent, Sakil Malik, and Sandra Hollingsworth
Contributor/Editor: Amy Pallangyo
Copy Editor: John Micklos, Jr.
Design/Layout: Precision Arts
Cover Photo Credits (clockwise from top): Linda Ulqini, Sakil Malik, and Jennifer Bowser

Published with support from the International Reading Association, Nokia Corporation, and Pearson Foundation

Copyright ©2012 by the Global Operations Unit, International Reading Association, 444 N. Capitol St., Suite 640, Washington, DC 2001, USA.

All rights reserved.

We welcome educators throughout the world to freely use and disseminate, with proper attribution, the materials in this guidebook. This is a work in progress, and we welcome constructive ideas and literacy-related Action Research examples from classrooms around the world for subsequent revisions. All communications should be sent to Sakil Malik, Director of Global Affairs, International Reading Association, at smalik@reading.org or sakil.malik@gmail.com.

ISBN: 978-0-9882349-0-1
Dedication

To all teachers worldwide working to advance literacy in the classroom.
The timing for the publication of this guidebook could not be better. At this point in history, many donor agencies are, for the first time, focusing on learning outcomes in a manner that requires observation, measurement, evidence, and objective judgment, all with a view to improving what children actually can do. The focus on child literacy is also pertinent and timely, as not only USAID (amongst bilateral donors) but other large ones such as DFID (United Kingdom) and AusAID (Australia), are focusing on early-grades literacy (and numeracy in some cases), and, of course, so is the Global Partnership for Education.

The questions that this guidebook proposes teachers (and, really, all actors in an education system) should ask themselves, namely, are my students learning, are my methods of teaching effective, and what difference does my teaching make in developing the knowledge and skills of my students are the right ones. For too long the sector has been dominated by a sort of pessimism (or even a shifting of responsibility) that implies that, for reasons beyond the control of teachers (and even of whole Ministries), children are unlikely to be able to learn well. Without denying the fact that there are sociological and economic pressures on systems that constrain what teachers can help their children achieve, the guidebook nonetheless implicitly and unabashedly assumes there is a lot that teachers and sectoral leaders can indeed do by applying measurement and clear reasoning to their challenges, and acting to address them.

Luis Crouch

Team Coordinator, Global Good Practices Team

Global Partnership for Education
This manual has been developed to enhance the professional capacity of educators in the area of Action Research. It is based on training modules developed by the Professional Development Infrastructure (PDI) component of the USAID/ESRA Project in Pakistan (2003-2008) in cooperation with the International Reading Association (IRA). This module will serve as a starting point for enhancing the literacy instruction capacity of teachers around the world to improve the quality of education.

The USAID/ESRA Professional Development Infrastructure Component Team, under the leadership of Sakil Malik, Director of Global Operations of IRA, includes many individuals who have contributed to the contents of the manual, including Sandra Hollingsworth, Fatima Dar, and William Brozo, who developed training modules for use in Pakistan and Oman and also provided feedback on this compilation of information from the modules. Many thanks also to Gulshan Merchant and Zakia Sarwar, who led a team of technical experts which included Sadiqa Salahuddin, Kendra Sisserson, and Phyllis Hildebrandt in the development of additional training materials. We are also indebted to the teachers who were the participants for the Action Research Workshops in Pakistan and Oman.
# Table of Contents

INTRODUCTION .................................................................................................................................................................1

A BRIEF HISTORY OF ACTION RESEARCH ....................................................................................................................4
  What is Action Research?..............................................................................................................................................4
  Principles of Action Research.......................................................................................................................................6

WHY SHOULD I DO ACTION RESEARCH IN MY CLASSROOM? .......................................................................................9

WHO USES ACTION RESEARCH? ...................................................................................................................................12

THE ROLE OF ADMINISTRATORS IN ACTION RESEARCH ...............................................................................................15
  A Culture of Research..................................................................................................................................................16

THE ACTION RESEARCH PROCESS .......................................................................................................................................18
  The Action Research Cycle .................................................................................................................................................19

IDENTIFY A PROBLEM AND ASK A QUESTION ...............................................................................................................21
  How to Form a Research Question ..................................................................................................................................26
  Example: How to Form a Research Question ..................................................................................................................27

CREATE AN ACTION PLAN ...................................................................................................................................................28
  Seek Knowledge ..............................................................................................................................................................28
  Organizing Your Information ...........................................................................................................................................29
  Summarizing Your Information .......................................................................................................................................30
  Developing the Action Plan ...............................................................................................................................................30
  Checklist for the Action Plan ...........................................................................................................................................33

ENACT THE PLAN AND COLLECT DATA ...........................................................................................................................34
  Quantitative and Qualitative Data ......................................................................................................................................35
  Data Sources ....................................................................................................................................................................35
  Reliability and Validity of Data .........................................................................................................................................36
  The Triangulation Method ................................................................................................................................................37
  Example: Triangulating Data for Action Research on Literature Circles ........................................................................39
  Interview Techniques ........................................................................................................................................................39
  Observation Techniques ......................................................................................................................................................42
  Checklist for a Discussion Group ......................................................................................................................................43
# Table of Contents

Example: Observations Using 2-Columns Notes ................................................................. 43  
Data Collection Outline ..................................................................................................... 44  

**REPORT RESULTS AND GET FEEDBACK** ............................................................................. 45  
Analyze and Interpret Data: So What? ................................................................................. 45  
Reflective Practice ........................................................................................................... 45  
Getting a Second Look Through a Critical Friend .............................................................. 46  
Reporting ............................................................................................................................ 47  

**ACT ON THE EVIDENCE: MODIFY THE PLAN, TRY IT AGAIN, AND STUDY IT AGAIN** ......................... 49  

**PUTTING THE STEPS TOGETHER** ..................................................................................... 50  
A Sample Plan .................................................................................................................... 50  

**GETTING STARTED** ......................................................................................................... 52  

**APPENDIX A: Examples of Classroom Action Research Using Various Teaching Strategies** ..................... 54  
Addressing Differences in Learning Styles ....................................................................... 54  
Different Kinds of Feedback ............................................................................................... 54  
Freedom to Choose ........................................................................................................... 54  
Reducing Anxiety ............................................................................................................... 54  
Shy Students ...................................................................................................................... 55  
Motivating Learning .......................................................................................................... 55  
Using Contracts .................................................................................................................. 55  
Classroom Structure ......................................................................................................... 55  

**APPENDIX B: Tools and Resources** .................................................................................. 56  
Action Research Worksheet ................................................................................................. 56  
Conducting Classroom Research ....................................................................................... 57  
Action Research Plan Summary .......................................................................................... 58  
Feedback Checklist for Action Research ............................................................................ 60  
Teacher Self-Assessment ..................................................................................................... 61  

**APPENDIX C: Glossary** ..................................................................................................... 62  

**APPENDIX D: Endnotes** .................................................................................................. 65  

**APPENDIX E: Bibliography** ............................................................................................ 66  

**APPENDIX F: Websites** .................................................................................................. 69  

**ABOUT THE AUTHORS** .................................................................................................. 71
Good teachers and educational leaders do not rely only on traditional ways to solve problems, the advice of others, or even the recommendations of experts. Good teachers and educational leaders conduct their own investigations to identify and solve problems and analyze information about their classrooms and schools; in the process they also further develop their own professional competence. Action Research is one such powerful tool for professional development and high-quality teaching.

Good teachers ask themselves

Are my students learning?
Are my methods of teaching effective?
What difference does my teaching make in developing the knowledge and skills of my students?

Ongoing assessment of teaching practice is essential to ensure that instruction is effective. Examination of your teaching and its effectiveness helps you know how to proceed with subsequent teaching and learning. Action Research is one powerful method to help teachers know that their practices are having the desired results.

Increasingly diverse classroom settings require an increasing diversity of instruction targeted to the specific needs of the students in that classroom. By examining classroom instruction for effectiveness, validating what is effective, and eliminating what is not effective, Action Research enables educators to refine their instruction to meet diverse student needs. The goal of this handbook is to address the needs of educators new to the benefits and processes of Action Research by providing step-by-step guidelines for implementing Action Research projects for the purpose of examining and refining literacy practices to improve student performance.

The goal of Action Research is a positive change in everyday practice in one’s own classroom, school, or district. It is largely about encouraging teachers to be continuous learners and proactive ‘actors’ in their own classrooms. Action Research is also about incorporating reflection into the daily teaching routine – the willingness to critically examine one’s teaching in order to improve or enhance it so that teachers become empowered to make informed decisions about what to change and what not to change.

Action Research helps teachers:

- Link prior knowledge to new information.
- Learn from experience (even failures).
- Ask questions and systematically find answers. (Fueyo & Koorland, 1997)

Action Research is helpful in improving the professional experience of teachers, head teachers, and administrators. It gives every educator a chance to improve the practices in classroom and schools, which ultimately will improve the quality of teaching and learning. It leads towards positive quality improvement in the education system.

In support of the USAID strategy, “In stable, well performing countries with unmet needs in basic education, the priority focus will be on assuring
learning outcomes for primary grade children, especially in reading,” the focus of this Action Research guide will be on educators of children in the primary grades. USAID global education goals are:

- **Goal One:** Improved reading skills for 100 million children in primary grades by 2015;
- **Goal Two:** Improved ability of tertiary and workforce development programs to produce a workforce with relevant skills to support country development goals by 2015; and
- **Goal Three:** Increased equitable access to education in crisis and conflict environments for 15 million learners by 2015.

This correlates with the Global Partnership for Education’s strategic direction to ensure that more children enroll in school and receive a better education. The Global Partnership for Education’s objectives are as follows:

1. Increase support for fragile states.
2. Improve learning outcomes and quality education.

Action Research supports the results-oriented approach endorsed by the Global Partnership for Education by ensuring that all learners’ needs are recognized and met through ongoing differentiated instruction. Utilizing Action Research furthers the USAID global education goals by enabling educators to improve reading skills through improved instruction that focuses on the diverse needs of the students in any setting, including settings of crisis and conflict.

This handbook has been written to assist school personnel to understand what Action Research is, why we should conduct Action Research, who conducts Action Research, and the process of Action Research. It is hoped that this will develop knowledge and skills so that administrators, mentors, and teachers can conduct school-based Action Research projects that result in positive changes in their schools. Specific goals of this handbook are to help educators do the following:

- Define and explain Action Research.
- Demonstrate an understanding of how to use the recursive nature of Action Research to improve their teaching of instructional literacy.
- Provide examples of the Action Research process in action.
- Identify action-researchable issues in their own schools and classrooms.
- Plan and implement Action Research projects in their own schools and classrooms.
- Assess and share the results of their own Action Research with colleagues.
- Learn to improve instructional decision-making through a continuous reflection point of view.

Real-life examples of Action Research projects focused on literacy instruction in diverse classroom settings, including those in crisis and conflict, along with an easy to follow step-by-step process for implementation will be presented.
Introduction

Readers will understand the features and benefits of Action Research and benefit from case-study examples of successful Action Research projects in diverse educational settings.

The process for Action Research will be unpacked to help educators clearly understand Action Research and the skills needed to conduct it. In addition, as you examine the principles of Action Research at your own pace, interactive exercises will allow you to practice the basic processes for implementing Action Research.

Reflection

What is your job as a teacher?

When something goes wrong with your lessons, what do you do?

Write three things you already know about Action Research.
Action Research is not a new idea. It dates back to the work of Kurt Lewin, who developed the idea in the 1940s. Lewin promoted doing research in a natural setting in order to change the setting or actions in it. His process is reflected in today’s idea of Action Research as an ongoing cycle of planning, acting, observing, and reflecting on change (Lewin, 1948). Lewin coined the term “Action Research” to describe work that did not separate the investigation from the action needed to solve the problem (McFarland & Stansell, 1993).

Stephen Corey applied Lewin’s idea of Action Research to an educational setting. He believed that a close examination of one’s teaching practices would result in a positive change in the practices. “We are convinced that the disposition to study…the consequences of our own teaching is more likely to change and improve our practices than is reading about what someone else has discovered of his teaching.” (Corey, 1953, p. 70)

Unfortunately, support for and the practice of Action Research became less popular in the 1950s. Experimental research designs and the collection of quantitative data became common practice and Action Research was viewed as not real research, just common sense. In the 1970s, Action Research came back into wide use as educators began to see that many research projects did not have practical application to their own classrooms.

Action Research focuses on issues that are specific and personal to teachers in their own classrooms and schools, with the primary goal of development of the teacher and effective teaching practices. Action Research has become a valuable tool for job embedded professional development of teachers.

Action Research emphasizes the involvement of teachers in problems in their own classrooms and has as its primary goal the in-service training and development of the teacher rather than the acquisition of general knowledge in the field of education. (Borg, 1965, p. 313)

The classroom-based focus has brought about school reform and individual focus that gives teachers vested interest in the research and the change it can bring in their classrooms.

What is Action Research?

Action Research is known by many names, including participatory research, collaborative inquiry, emancipatory research, action learning, and contextual action research, but put simply, Action Research is “learning by doing”—a group of people identifying a problem, and doing something to resolve it, evaluating their efforts, and if not satisfied, trying again. Action Research is examining one’s own practices through collaborative inquiry, reflection, and dialogue.

If you think of research as a process of steps used to collect and analyze information in order to increase our understanding of a topic or issue, then you would think of Action (change) + Research (investigation) as investigating a problem or situation in order to make change happen. When something goes wrong with your lessons, what do you do? If you think about what you are doing and make a change, you are doing Action Research!
The primary attribute that separates Action Research from other types of research is its focus on having those involved in the issue actively become researchers. People learn best and more willingly apply what they have learned when examining an issue or problem themselves. The research takes place in real-world situations and aims to solve real problems.

What separates this type of research from general professional practices, consulting, or daily problem-solving is the emphasis on close examination of data collected from their own environment. The researcher studies the problem systematically and ensures any change that is made is informed by the evidence he or she has collected, and then shares the results of that research.

Although the term “Action Research” has many definitions and applications, in educational settings Action Research involves systematic inquiry by any school personnel in order to gather information about real, everyday issues in teaching and learning and use that information to improve student learning and achievement. “Action Research allows educators to learn about their own instructional practices as they monitor improved student learning.” (Rawlinson & Little, 2004)

The prevailing focus of teacher research is to expand the teacher’s role as inquirer about teaching and learning through systematic classroom research (Cooper, 1990). Teacher researchers are more interested in knowledge about a specific situation in their own classroom than about more general applications. In other words, Action Research is guided by the process and standards of scientific inquiry, but it is not intended to inform the larger research or educational community. Instead it is a process of acquiring information and seeking knowledge, which will serve one’s own actions.

Action Research is “trying out and reflecting on ideas in practice as a means of improvement and as a means of increasing knowledge” (Kemmis & McTaggart, 1982). The information gathered through Action Research is examined closely to determine whether some action can be undertaken to effect positive changes in the school, faculty, and students. Action Research inquiries look into whether a particular action is achieving its goals. If not, the action is modified and the cycle of research continues.

While there are many definitions of what Action Research IS, it is important to remember what Action Research is NOT:

1. It is not the usual things teachers do when they think about their teaching. Action Research is systematic and involves collecting evidence on which to base rigorous reflection.

2. It is not just problem-solving. Action Research involves problem-posing, not just problem-solving. It does not start from a view of problems as incurable ailments. It is motivated by a quest to understand the world by changing it and learning how to improve it from the effects of the changes made.

3. It is not research on other people. Action Research is research by particular people on their own work to help them improve what they do, including how they work with and for others. Action Research does not treat people as objects. It treats people as autonomous, responsible agents who participate actively in making their own histories by knowing what they are doing.
4. It is not the scientific method applied to teaching. Action Research is not just about hypothesis-testing or about using data to come to conclusions. It is concerned with changing situations, not just interpreting them. It brings the researcher into view. Action Research is a systematically evolving process of changing both the researcher and the situations in which he or she works. The natural and historical sciences do not have this aim.

(Adapted from Henry & Kemmis, 1985)

The key characteristics of Action Research are that it is practical, reflective, and recursive.

- Teacher researchers study practical issues that will have immediate benefits for teachers, schools, and school districts.
- It involves self-reflective research by the teacher researcher, who turns the lens on his or her own classroom, school, or practices.
- Action Research is recursive in that issues and concerns are explored in an ongoing way by the teacher researcher. The process spirals back and forth among reflection, data collection, and action.

Principles of Action Research

The popular assumption is that administrators, mentors, and teachers seek learning strategies and methods to improve the teaching and learning situation in their schools. It is presumed that educators who participate in Action Research:

- have the innate potential to take up/accept challenges that will take place when these new strategies are introduced;
- want to ensure their own continuous professional development through ongoing Action Research in their institutions and classrooms; and
- will understand the nature of Action Research, which is different from traditional “academic research.”

What sets Action Research apart from other types of research are the principles that guide the research. Winter (1989) outlines these six key principles that help us judge the validity of our Action Research by linking values, practice, and theory:

1. **Reflexive Critique**
   Reflecting on issues and processes helps us to become aware of our own ideas and biases. The principle of reflexive critique ensures that we reflect on issues and processes and make explicit the interpretations, biases, assumptions, and concerns that formed our judgments. Reflexive critique opens our ideas, feelings, thoughts, processes, and conclusions to public review and to self-reflection. By self-reflection and questioning, new arguments can be formed along with the possibility for new actions.

2. **Dialectical Critique**
   Dialectical critique is a discussion of different reflective interpretations of practice in order to understand the relationships between all the parts of our environment to see how everything fits together. The key elements to focus attention on are those that are unstable or in opposition to one another. Focusing on these is most likely to create changes.
3. **Collaborative Research**

Co-researchers work together to validate views. Everyone's view is taken into consideration in order to understand the situation better. This principle assumes that every person's ideas are significant, not just those of the Action Researcher. This makes it possible to get insights from the contradictions between the viewpoints of the co-researchers.

4. **Risk**

The change process can cause fears among the researchers. Sometimes it is not easy to hear open discussion of one's interpretations, ideas, and judgments. Action Researchers must be prepared to take a risk by opening their ideas and reflections to criticism and risk failure in order to learn.

5. **Plural Structure**

Reports should contain many (plural) voices reflecting diverse opinions, comments, and critiques which lead to different interpretations of the evidence (data) and recommendations for different possible actions. Using triangulation in both data-collection and in accounts of the research itself ensures a plural structure. Such a report encourages ongoing discussion among co-researchers, rather than a final conclusion.

6. **Theory, Practice, Transformation**

Theory and practice are not in opposition in Action Research. They are interdependent and complementary parts of the Action Research change process. They happen together and are both necessary for improvement. The goal of Action Research is to make the theory explicit in order to justify the actions. The application of the theory is then further analyzed in a continuous Action Research cycle that alternates between theory and practice for the process of improvement.

(Adapted from Winter, 1989)

**In summary:**

- In Action Research, educators examine and assess their work and consider ways of working differently.
- Action Research is problem-posing as well as problem solving.
- Action Research is not just about hypothesizing and collecting data. It aims at changing situations; not just interpreting them.
- Action Research focuses on teachers’ and administrators’ day-to-day concerns.
Reflection

*How do you define Action Research?*

*Do you have a situation you would like to change with Action Research? Explain.*
Why should I do Action Research in my classroom?

The idea of Action Research is that educational problems and issues are best identified and investigated where the action is: at the classroom and school level. By integrating research into these settings and engaging those who work at this level in research activities, findings can be applied immediately and problems solved more quickly (Guskey, 2000).

Good teachers are those who are also good students—lifelong learners who seek to improve their knowledge and practice throughout their careers. Research adds to our knowledge by addressing gaps and expanding what we know. Research improves practice by helping educators gain new ideas for their teaching, gain new insights into their approaches, and connect with other educators. Research allows people to weigh different perspectives on issues and make informed decisions. Action Research provides a means of focusing instruction on issues directly related to the classroom or school. It positions educators as learners who want to narrow the gap between their practice and their vision of quality education.

The research itself and implementing the resulting information provide a form of professional development directly related to and supportive of teachers’ and students’ educational needs. This has a great potential for creating long-lasting school change. These changes occur in everyday practice rather than a theoretical generalization to a broad audience. Each researcher finds out something new and applicable to his or her own classroom because the question he or she is asking is his or her unique question.

Action Research (AR) provides teachers with the opportunity to gain knowledge and skill in research methods and to become more aware of the options and possibilities for change. It gives them a rich source of data for improving their classrooms and schools. They have the opportunity to try new teaching practices and reflect on the changes in their classrooms and students. Teachers participating in Action Research become more critical and reflective about their own practice. (Oja & Pine, 1989, Street, 1986)

Lawrence Stenhouse, cited in Rudduck (1988) stated that, “It is the teacher who, in the end, will change the world of the school by understanding it.” Teachers who engage in Action Research are increasing their understanding of the teaching and learning process. What they are learning will have a great impact on what happens in classrooms, schools, and school districts. Action Research can shape the staff development programs and curricula of schools and support school improvement initiatives. All these things are impacted by the things teachers learn and the changes they make through the critical inquiry and rigorous examination of their own practices and their school programs that Action Research requires.

Teachers engaged in Action Research depend more on themselves as decision makers and gain more confidence in what they believe about curriculum and instruction (Strickland, 1989). Action Research
Action Research in My Classroom

gives teachers a voice in the field. It allows teachers to depend on themselves to know what is happening and what needs to happen in their own classrooms. Instead of teachers relying on administrators or teacher educators to tell them what to do, Action Researchers have command of their own knowledge and information to support decisions they make about their teaching practices.

Stenhouse has strongly supported this point of view:

*Good teachers are necessarily autonomous in professional judgment. They do not need to be told what to do. They are not professionally the dependents of researchers or superintendents, or innovators or supervisors. This does not mean that they do not welcome access to ideas created by other people at other places or in other times. Nor do they reject advice, consultancy, or support. But they do know that ideas and people are not of much real use until they are digested to the point where they are subject of teachers’ own judgment.*

*(Stenhouse, 1984)*

Gathering valid, relevant evidence allows the teacher to make informed rather than intuitive decisions about effective practice. The process validates teachers as professional decision makers by putting them in charge their teaching practices and professional development. It allows teachers to feel in control of their own situation while abiding by and implementing national or district mandates. Autonomous professionals must have the ability to engage in self-study of their teaching and testing their classroom practices to see if they work.

Finally, when teachers engage in Action Research, they gain specific insights into the individual needs of students—particularly students who struggle to learn in the classroom. Whether teachers are testing new strategies or studying the specific learning difficulties of a certain student, the Action Research process itself can uncover previously hidden pathways to support improved learning for individual children in the teacher’s classroom.

Action Research is based on the following assumptions:

- Teachers and administrators work best on problems they have identified for themselves;
- Teachers and administrators become more effective when encouraged to examine and assess their own work and then consider ways of working differently;
- Teachers and administrators help each other by working collaboratively;
- Working with colleagues helps teachers and administrators in their professional development.

*(Watts, 1985, p. 118)*

What do YOU as a professional gain from Action Research?

- better knowledge about how to help students learn in schools;
- a way to evaluate the effectiveness of innovative strategies;
- a more professional stance;
- more enjoyment in your work life;
- an ability to know whether what you are doing helps students or not;
- better communication among educational professionals in your school.
You can think of Action Research as a way for teachers to collect valid information about their own classrooms and use this information to make informed choices about teaching strategies and learning activities. Teachers can then share the information with students in order to gain their ideas and internal commitment to specified learning activities and procedures. Action Research is used in real situations, rather than in contrived, experimental studies since its primary focus is on solving real problems. It is used when circumstances require flexibility, the involvement of the people in the research, or when change must take place quickly or holistically.

(Adapted from O’Brien, R.; www.web.net/robrien/papers/arfinal.html)

Action Research revitalizes educators’ professional lives by making their work more interesting and rewarding as they examine their own teaching and make improvements THEY decide to make. 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. Action Research encourages educators to work collaboratively with their colleagues to reflect on their practices and improve instructional practices and promote student achievement.

Reflection

On what occasions might you work as a researcher?

To what extent can Action Research improve the quality of your work?
Who Uses Action Research?

Action Research is conducted by administrators, head teachers, and teachers who are fully aware of the day-to-day issues in their teaching environments and decide to undertake systematic inquiry into the identified issues. Educators who apply this approach are those who wish to improve understanding of their practice, support the learning of a student or students, or have been invited to do so by decision-makers aware of a problem requiring Action Research. Action Research projects may be conducted by one individual in one classroom, by a team of two or several educators, by an entire school, by an entire school district, or in collaboration with a university or other agency.

While Action Research is usually focused on specific issues in specific classrooms, there are benefits to collaboration during and after the process. Conducting Action Research in teams allows mutual support for the resolution of mutual issues. According to Greenwood and Levin (1998, p. 4), teams can work together to “define the problems to be examined, co-generate relevant knowledge about them, learn and execute social research techniques, take actions, and interpret the results of actions based on what they have learned.”

It is helpful to find colleagues and work with them because it breaks the “isolation barrier” often caused when a teacher is the only adult in the classroom. When teachers collaborate on an Action Research project, they know that they are not alone in finding answers to challenging situations. Action Research promotes professional conversations as teachers work together in pairs or teams to address mutual concerns. Working with colleagues broadens the horizons of understanding to find similar issues solved in a similar manner.

Action Research assists practitioners and other stakeholders in identifying the needs, assessing the development process, and evaluating the outcomes of the instructional changes they define, design, and implement. Collaboration spreads the work of Action Research among the stakeholders. It encourages dialogue about practice and brings multiple perspectives to the planning, conduct, and interpretation of Action Research. There is safety and strength in numbers. The collective expertise of the group can enrich the research process and the findings (Brozo, 2011).

Bringing a collaborative group together for Action Research promotes a problem-solving culture across classrooms, grade-levels, and schools as team members come together for a shared purpose. Collaborative Action Research focuses on inquiry in school communities with different faculty members functioning as co-researchers. The ultimate aim of collaborative Action Research is to develop a sophisticated understanding of the problems, issues, and practices of teachers in authentic settings, bridging the gap between theory and practice (Stringer, 1996).

Collaborative partners in Action Research are those people who are directly involved in the situation they are researching. The more members of the collaborative Action Research group who know about the research concern, the more they can help in clarifying the ideas and developing action plans.
Who Uses Action Research?

and strategies. Collaborative partners on an Action Research project may be teachers at a school working together or teachers working with administrators or university professors.

As few as two teachers or a group of several teachers and other faculty members may work together on a classroom or grade-level problem or concern that is common to all of them. The Action Research project may involve only one classroom or it may address a common problem or concern shared by a grade level or by several classrooms. The researchers may approach the issue in different ways, thus expanding the dialogue and reflection, resulting in different solutions for the problem.

School-wide research focuses on issues common to the entire school community. These identified issues are systemic in nature—they are identified by observing broad-spread patterns of instructional needs among students over time, and at all levels of the school.

For example, a school may be concerned about its students’ low achievement level on standardized literacy tests, finding time to assist struggling students, creating a school-wide literacy program, improving communication with parents, or creating a fair discipline policy. Every faculty member is involved in the research. Teams are formed to work together to identify the specific problem and formulate a research question, create and enact the plan, and gather data. They then discuss the shared results and formulate a new plan to continue the Action Research cycle. Successful school-wide Action Research is directly related to issues identified from school-wide data. The Action Research would logically become a part of the school improvement plan.

District-wide research can be very beneficial for the school and community, but it requires a lot of organization and more resources than individual or school-wide research. It requires a great deal of communication and commitment from all stakeholders. Effective district-wide Action Research can result in real systemic reform that benefits all teachers and students.

Working individually on a project has its advantages as well. The individual teacher doing Action Research is usually working on a problem specific to his or her own classroom instruction. Such teachers are probably dealing with classroom management, instructional practices, or specific student achievement needs. The teacher may have the support of his or her administrator or may be doing research as part of a university class and have the support of the professor. Individual Action Research is appropriate when researching classroom-specific concerns. For example:

- A teacher wants to know if a particular practice increases motivation for students.
- A teacher wants to explore the value of multi-ability grouping for low achievers.
- A teacher wants to determine if a new approach to discipline decreases behavior problems.
- A teacher wants to identify the cause for a specific learning problem for one or more students and how to address barriers to learning.

Individual Action Research allows for more control over the focus and the plan of the Action Research project. Individual Action Research can be accomplished on a small and efficient scale.
Considerations for whether a project is better suited to individual or collaborative research include:

- the research issue and scale
- the information needed
- the resources needed
- the work involved
- the time investment needed
- the people who might benefit from the action and findings (Brozo, 2011)

However, whether Action Research is conducted individually, with a small team, or as a school-wide or district-wide project, at the heart of collaborative Action Research is a commitment to educational improvement (McNiff, 2002). Whether the question is centered in your own classroom or concerns the entire school, it should be personally important to you and focus on improving your teaching and learning.

Reflection

Based on your current thinking about an Action Research project, do you think the project can be conducted by you alone or would you need collaborators? Why?
The role of administrators in Action Research

Action Research is a means of improving student achievement through more effective teaching and administration of schools (Kemmis, 1981).

It is important for everyone to know that educational reform is not the sole responsibility of teachers, but a shared process between administrators, teachers, students, and their parents. Administrators can provide a model of learning and Action Research for their faculty by becoming learners and researchers themselves and critically reviewing and attempting to improve their instructional leadership styles.

Administrators and teachers can find collaborative projects in their own schools and across schools. An administrator can assume a learner’s role by finding colleagues with similar interests and working on Action Research projects across their schools. For example, administrators can identify a problem which is common to their schools, then work together to plan and report changes. Working with an administrator peer will provide support for decision-making in which their faculty is not involved.

In addition, partnering for Action Research between teachers and administrators will support and enhance the role of the school administrator as an instructional leader, not just a building manager. By actively engaging with teachers in Action Research, the school administrator sends the message that instruction is the primary concern of...
the school, and that teachers who are seeking better instructional solutions are engaged in an accepted and honored role in the school. Administrators can use Action Research to effectively work with teachers to improve the quality of teaching and learning in the classrooms of their schools. Administrators’ Action Research can contribute to their own personal development, better professional practice, and improvements in their school.

Within their own schools, administrators also can motivate their teachers to take up Action Research projects, and they can act as their mentors. For teachers working on an Action Research project, the support and collaboration of the administrator is critical. If administrators are not doing the same kind of analyses to support teaching and learning in their schools, teachers’ Action Research will not be as effective.

A Culture of Research

Administrators play a key role in nurturing a culture of research in their schools. As researchers, administrators may help to develop a collaborative culture in the school, marked by cooperation, so the staff, as well as the administrator, controls the development and implementation of changes and new ideas. Collaborative practices enable teachers to receive and give ideas and assistance in the process of teaching and learning, and provide a sense of “ownership” of the changing roles and responsibilities.

To motivate participants and develop a sense of ownership, goal-setting in any school must be a highly participatory task. This gives teachers a chance to translate common concerns into specific goals. Determining common goals, so that teachers participate in the process of improving how schools work, empower teachers to decide goals for the future. This adds to the professional growth and learning of the teachers.

To develop a collaborative culture in their school, the administrator must encourage objective and honest critical evaluation of the strengths and weaknesses of school and staff performance in order to improve student achievement. To ensure objectivity and honest critical evaluation, it is important to involve the staff in outlining the vision. This develops a sense of ownership in the school staff, motivates them towards higher levels of commitment, and engages them in outlining values and purposes for their school.

A supportive learning environment is critical to the success of any Action Research project. The Florida Department of Education provides the following guidelines to assist administrators in promoting a learning environment supportive of Action Research:

- provide sufficient and consistent opportunities in the school day for collaborative Action Research (studying, analyzing student work, dialoging collaboratively, and analyzing student data to make instructional decisions);
- build a support system for teachers through a coach or a knowledgeable person of the Action Research process, student learning, and instructional practices;
- set high expectations for faculty and students;
- create a professional library housing professional literature, assessment tools, and other instructional resources for faculty;
- plan several sharing sessions for faculty to present their Action Research and findings throughout the year; and
The Role of Administrators

- encourage all faculty to participate, including the principal and assistant principals.

Downloaded from the Internet, March 2012: http://www.fldoe.org/ese/pdf/action-res.pdf

Improving Student Learning through Classroom Action Research: A Guide to Becoming an Action Researcher. Florida Department of Ed. pg. 2

To ensure continuous learning and improved performance, the learning environment must be based on trust and success, not fear and failure. To build trust and ensure successful outcomes, it is necessary to create a school culture which supports interdependence, negotiation, and security among staff. In order for this to happen, policies must be implemented that respect the contributions of each staff member and give appreciation generously to motivate teachers as well as provide examples of good teaching practices.

Teachers who become successful and continual Action Researchers must have a support system within their schools and districts. An Action Research support team might consist of resource teachers, district staff, or university professors who would be available to support teachers as they conduct Action Research projects. The team may provide support by helping teachers to access resources for research and reviewing action plans to ensure alignment with school improvement plans. The team can advise teachers as to whether their plan is doable considering the resources and policies of the school or district. The support team can facilitate collaborative dialogue about the Action Research project and provide tips for successful projects. Adapted from Florida Dept. of Ed. http://www.fldoe.org/ese/pdf/action-res.pdf, 2012

Reflection

How do you establish a culture of research in your school?

Do you think the administrators’ role is pivotal in creating a culture of action research in their institutions? Why?
Sandra Hollingsworth (1997) began her review of international Action Research projects with this statement:

*If there is one single pattern that emerges from these chapters, it is that the forms, purposes, methods and results of Action Research around the world differ widely.*

(Hollingsworth et al., 1997, p.312)

Stephen Kemmis developed a simple model of the cyclical nature of the Action Research process, a cycle that has four steps: plan, act, observe, and reflect. The central question is "How can I help my students improve the quality of their learning?" This can be broken down into these specific questions:

1. What is my concern in my practice?
2. What am I going to do about it?
3. What evidence will let me make a judgment about what I did?
4. How will I validate any claims about what I have done?

(Kemmis, 1981)

Gerald Susman (1983) developed a somewhat more elaborate model by distinguishing five phases to be conducted within each research cycle. Initially, a problem is identified and data are collected for a more detailed diagnosis. This is followed by posing several possible solutions, from which a single plan of action emerges and is implemented. Data on the results of the intervention are collected and analyzed, and the findings are interpreted to determine how successful the action has been. Then the problem is re-assessed and another Action Research cycle begins. This process continues until the problem is resolved.

(Adapted from O’Brien, R.; www.web.net/robrien/papers/arfinal.html)

The process described in this handbook is based on the ideas of these previous researchers. The process of Action Research begins with a concern or interest from one’s own professional context. This concern leads to gathering information and knowledge about the concern. Based on existing and new information and knowledge, a researchable plan is devised and implemented within one’s own professional context. Data on the implemented plan are then collected and analyzed. The findings of the Action Research are shared with colleagues, administrators, and other stakeholders. In an ongoing process, Action Researchers continue to observe, reflect, and plan.

Although different researchers may describe these steps of Action Research in slightly different ways, the steps explained in this handbook are:

- Identify a problem and pose a question.
- Create an action plan.
- Enact the plan.
- Study the plan in action (collect and analyze data).
- Report results and get feedback.
- Modify the plan.
- Try it again; study it again.
How long does an Action Research project take? Typically, it will take place over several weeks or months. The length of time needed to observe or demonstrate improvement will depend upon the target of your inquiry. Action Research is an ongoing process, rather than a program. You might complete one phase of your project in a few weeks, evaluate, and start the process over with your new information. These steps can be repeated continuously and applied to any learning situation or problem for continuous improvement in classroom instruction.

**Reflection**

*Describe the Action Research cycle in your own words.*

*Why is Action Research considered a cycle instead of a one-way process?*
You and Your Action Research Project, an introduction to Action Research that not only provides specific directions but also goes beyond to ask broader questions, describes four important points about Action Research:

- I am the central person in my research.
- I am asking a real question about a real issue, and I am hoping to move towards a possible solution.
- I am starting from where I am.
- I am trying to bring about some improvement (remember - any improvement is still improvement, no matter how small).

(McNiff, Lomax, & Whitehead, 1996, p. 37)

Notice the frequent use of the word "I" in that list of important points. That should help you see that Action Research is very personal and targeted to the needs of your classroom. Action inquiry happens "in the swamp" where we live our day-to-day successes, frustrations, disappointments, and occasional miracles. This list of central ideas should include an additional understanding that Action Research is something you do “with” and “for,” not "on," the students you teach.

The following chapters will describe each of the steps of Action Research in detail and help you develop a plan to research an issue that is important to you.

- Identify a problem and ask a question.
- Create an action plan.
- Enact the plan.
- Study the plan in action (collect data/evidence).
- Report results and get feedback.
- Modify the plan.
- Try it again; study it again.
Identify a Problem

Identify a problem and ask a question

You might now be asking yourself, “Where do I start?” You begin with this question, “What is my concern in my practice?” It should be a concern that affects your teaching and the learning of your students. It should be a concern that YOU can do something about. It should not depend on others. Notice that the word “concern” calls attention to personal values and you should select some aspect of your teaching that relates to what is important to you about your students’ learning. It would be very helpful to discuss your concern with colleagues in your school to let them help you focus your concern and to let their concerns help you find yours. If two or more people have similar concerns, so much the better! It suggests that you are on the right track with your concerns and that this may be a shared problem across the school or larger teaching community.

Action Research is an action-oriented reflective practice, which begins from a concern about some aspect of your practice. This leads to focusing on a particular question for investigating. Writing a formal plan for an Action Research project can help to formulate your thoughts. Sources for identifying Action Research concerns may be your own experiences in a professional context, such as interest in trying out a promising practice you have read or heard about. The question may arise from a difficulty you are having such as a need to improve student learning. You may need to seek clarity on an unclear situation, such as how to effectively use an instructional approach.

After you determine the concern, define and describe the problem or situation. Identify possible changes in your teaching that might help resolve it. The problem description should relate to specific teaching practices and be a researchable concept. Use the following guidelines to help you narrow your focus:

- Write down some statements of concern about your practice.
- Articulate examples of practice-based concerns that YOU might be able to do something about in a reasonable amount of time.
- Try to specify what it is about the concern that you wish to change. This could be identified as changes in the language used, changes in the activities, changes in social relationships, etc.
- Describe the problem. Why is it a personal concern to you?
- What instructional/organizational/supervision changes will you make?
- What can YOU do about the problem? To find out, talk to colleagues, read, ask students, etc.
- What CONTROL do you have to solve the problem?

Next, create an Action Research question by examining the problem statement for its relationship to specific teaching and learning practices. The question should be specific and result in an observable problem solving action. You should be able to link the question to specific teaching practices. An important question to ask yourself is whether or not the problem/question is something
over which you have influence. Also ask if the change that will come about as a result of your research is worth your time and effort.

(Hollingsworth, 2001-2005)

What makes a question suitable for Action Research is its relation to concerns about understanding and improving school practices. The following questions are related to actual experiences of teaching and are intended to improve classroom teaching and learning. These questions are borrowed from accounts of actual Action Research projects undertaken by teachers who had specific concerns about their teaching:

- How can I help my students learn from their own ideas?
- How can I help students relate what they already know to what they are learning in the classroom?
- How can I have students become more independent learners?
- Can small group work help my students to interact more with each other in class?
- Will anchor charts (wall displays) bring about more learning in my classroom?
- How can I come up with higher-level comprehension questions in my class?
- When and how do I use praise in my classroom?

(Kanu, Carson & Stansky, 1994)

In formulating the research question, describe the problem or situation on which the question is based. The question should address observations/concerns about your teaching and students’ learning. Why do you think something is happening? Although you may have several concerns, limit your Action Research to one question. That 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

(Ferrance, 2000)

Ensure that your question is a doable question. Most of the time, teachers start Action Research with questions that are either too big to accomplish or out of their control. Start with a question that is manageable and about something that is under your control to change.

Here are some examples of problems that have been addressed through Action Research:

- Students can’t read.
- Students don’t see the purpose of practice.
- Teachers don’t know how to tell if their students are learning.
- Students do not bear a shared responsibility for learning.
- Student attitudes toward reading are not good.
- Struggling readers need a system of formative evaluation.
- Students are not completing their homework.
- Students new to the language of instruction need to increase their knowledge of academic language.
Identify a Problem

In formulating the question, you must think about your concern and what outcome you would like to see. These sentence stems will support your thinking:

- In my school …
- I would like to improve…
- I am perplexed by…
- Some people are unhappy about…
- I’m really curious about…
- I want to learn more about…
- An idea I would like to try out is…..
- Something I think would really make a difference is….
- Something I would like to change is….
- Right now, some areas I am particularly interested in are…

Once you have determined a concern that you can address and make a legitimate change in your classroom, write down your concern/problem in the form of a research question. State what you’ll expect to see if the plan works as a research question.

For example:

- If I change my instruction like this __________________________ will students __________________________?

- If I change my teaching to do this__________ will students do__________________________?

- If I try this __________ then will children show/demonstrate improvements on the concern/problem?

In order for your action plan to resolve the problem, the question must be valid and doable. To ensure that the question meets these criteria, you may ask yourself clarifying questions such as these:

1. What are some areas of interest I want to improve?
   Example: I am concerned that my students have trouble comprehending expository text.

2. Why do I want to research this problem?
   Example: Students are unable to read their textbooks and comprehend the information independently.

3. What are some potential solutions?
   Example: Consult / hire a coach. Find an expert within the school to come to my class. Explicitly teach and model how to read expository text.

4. Which of these possible solutions can I investigate over an eight-week period?
   Example: Explicitly teach and model how to read expository text.

5. What kinds of evidence do I have or can I find as a baseline?
   Example: Research journals, observations, tests, worksheets, informal reading assessments

6. Formulate a research question.
   Example: Does reading comprehension on expository text improve as a result of providing explicit small group instruction for two 20-minute periods two times per week? (Brozo, 2011)
CONTROLLING OUTCOMES
Is my question do-able? Focused? Can I control the outcome?

Example:
1. Research question: “Why aren’t parents interested in their children’s education?”
2. What’s the real problem? Why would we want parents interested in their children’s education?
3. Problem: Students do not read independently outside of school.
4. a) Plan: Can I solve the problem the way the question is stated? Do I have the control to make it happen? NO.
   b) Design a plan to answer the real problem: Assign a more advanced student to help a struggling reading student after school.
5. Restate the research question: “If I assign a more advanced student to read with a struggling student who needs more practice in reading, will the struggling student improve his or her reading ability?”

(Hollingsworth, 2001-2005)

CONTROLLING TIME
Is my question do-able in a reasonable period of time?

1. What is your research question?
2. What problem about students’ learning does this question intend to solve?
3. Can you solve the problem the way you’ve stated the question? What would your action plan be? What control do you have to make the plan happen?
4. If NO, what’s another way to take action and solve the problem that you CAN control?
5. Restate it as a research question, for example:
   “If I …… (take this action)……….., then will students (demonstrate improvement on the problem)?”

(Hollingsworth, 2001-2005)
Identify a Problem

In summary, to begin your Action Research you must identify a valid problem, reflect on a possible solution, and ask a researchable question. The steps are:

1. Describe the problem or situation.

2. Make a plan to resolve the problem. *(Plan something YOU can do about the problem.)*

3. Turn your problem and plan into a research question.

4. State what you’ll expect to see if the plan works as a research question.

(Hollingsworth, 2001-2005)

Reflection

*Try forming a research question using the steps in the graphic organizer, “How to Form a Research Question” on the following page.*
# How to Form a Research Question

<table>
<thead>
<tr>
<th>1. Identify the problem.</th>
<th>Problem</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Talk it over with critical friends.)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2. Why is the problem happening?</th>
<th>List several possibilities:</th>
</tr>
</thead>
<tbody>
<tr>
<td>(The “why” determines the action plan.)</td>
<td>a.</td>
</tr>
<tr>
<td></td>
<td>b.</td>
</tr>
<tr>
<td></td>
<td>c.</td>
</tr>
<tr>
<td></td>
<td>d.</td>
</tr>
<tr>
<td></td>
<td>e.</td>
</tr>
</tbody>
</table>

Choose the one that represents your best guess and is one YOU can do something about in a reasonable period of time.

<table>
<thead>
<tr>
<th>3. Brainstorm possible actions.</th>
<th>List several possibilities:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>a.</td>
</tr>
<tr>
<td></td>
<td>b.</td>
</tr>
<tr>
<td></td>
<td>c.</td>
</tr>
<tr>
<td></td>
<td>d.</td>
</tr>
<tr>
<td></td>
<td>e.</td>
</tr>
</tbody>
</table>

Choose the one YOU can do something about in a reasonable period of time and you guess might work.

<table>
<thead>
<tr>
<th>4. Write your research question.</th>
<th>If I ________________(fill in action plan), what will happen to the _________________ (fill in the problem)?</th>
</tr>
</thead>
</table>

(Hollingsworth, Khan, Khoso, & Qureshi, 2005)
Example: How to Form a Research Question

1. **Identify the problem.**
   (Talk it over with critical friends.)
   - **Problem:** Students don’t actively engage in reading independently

2. **Why is the problem happening?**
   (The “why” determines the action plan.)
   - List several possibilities:
     a. Lack of knowledge
     b. Lack of resources
     c. Poor study habits
     d. Not motivated (rather play football)
     e. Lack of support in reading at home
   - Choose the one that represents your best guess and is one you can do something about in a reasonable period of time.

3. **Brainstorm possible actions.**
   - List several possibilities:
     a. Call the parents every day.
     b. Let students read on a computer or eReader.
     c. Set up a learning contract.
     d. Provide alternative reading materials.
   - Choose the one you can do something about in a reasonable period of time and you guess might work.

4. **Write your research question.**
   - If I make a contract that I will reward students for independent reading, will the amount of time they spend reading increase?

(Hollingsworth, Khan, Khoso, & Qureshi, 2005)
Create an Action Plan

Once you find a focus and develop your research question, the next question is "What am I going to do about it?" Ask yourself if there is some relatively simple change you could introduce to your students that would help you help them improve the quality of their learning. "Quality" is a wonderful word because it is so broad—and learning has so many different qualities—yet it also points in the direction of improvement of the substance of teacher action or student experience in the classroom.

Seek Knowledge

Think of a situation in which you would need to consult resources in order to know how to complete a task (e.g., changing the oil in a car, baking a torte, making origami, etc.).

Think of every possible resource that could be consulted in order to attain the information needed to complete the task. Similarly, you will need to consult many resources to formulate your action plan.

You will need to know more before you DO something. Seeking knowledge to support your research concern should be a deliberate, systematic process of gathering additional information about the concern. This knowledge will help you refine the action focus and form the Action Research plan. There are many sources for acquiring information to help you with your plan.

Investigate what others say about your concern and listen to suggestions they may have on alternative approaches. Talk with your students to get a sense of how they view the quality of their classroom experience and their learning success. Consult with fellow educators and, most importantly, examine the professional literature on teaching and learning. School and student records provide additional information such as records of achievement, attendance, and special services for students who are the focus of the Action Research. Consult colleagues about students who are the focus of the research. Consult colleagues and administrators for their input and ideas related to your concern. Do they think your research question is feasible? What support can they provide for your research? (Brozo, 2011)

How will you begin your search for information? Seek the informed opinions of experts in the field who have the knowledge to speak about your concern. This may include other peers/teachers, school or district coaches, university professors, and Ministry of Education or State Department of Education personnel. Contact with these experts can occur through email. Many of these experts may have personal websites that will provide information about your concern. Many other Internet sites also are available to provide information. To search, try teacher + action research + literacy (or other keyword) in your question.

A review of professional literature will provide information that will be helpful to you. Reading professional journals, books, yearbooks, and reports will enhance your understanding of Action Research and identify what others have done in the area about which you are concerned. Their experiences will lend rigor and scholarship to your Action Research.
Create an Action Plan

project. The extent to which you rely on these resources will vary with the scope of your project.

**Electronic Data**

There are many electronic sources that can provide articles or book chapters with information about your research topic. Such sources include ProQuest, ERIC, and EBSCO.

**Sources of Information for Action Research**

- School and Student Records
- Colleagues and Administrators
- Professional Development Providers
- Internet Sites of Professional Organizations (i.e., International Reading Association, National Council of Teachers of English)
- Professional Literature

**Organizing Your Information**

Once you have identified potential sources of information, you will want to organize the information. This will help you to determine if your project is worth your time and effort. It will be useful to create notes for each source that includes:

- Origin of the source (journal article)
- Focus or purpose (investigate the effectiveness of small-group instruction)
- Data collection procedures if relevant (classroom case studies of two primary teachers and their students)
- Results (small-group instruction helped to target needs of the students) (Brozo, 2011)

**EXAMPLE: Organizing Your Information**

**Origin:** Book, Tyner, B. “Beginning Reading Instruction and the Small-Group Differentiated Reading Model.” In *Small-Group Reading Instruction (pp. 1-16).* Newark, DE: International Reading Association, 2004.

**Focus/Purpose:** Determine whether small-group guided reading instruction is beneficial for early readers.

**Data Collection Procedures:** Review case studies, interview other teachers, and try with small group of students in my classroom.

**Results/Findings:** Students participating in small group instruction learned to read sooner than children in whole group instruction only.

To organize the information you have gathered, it may be helpful to develop a diagram showing the relationship among the sources and the connection to the proposed Action Research project.

**Example Diagram**

- Proposed Action Research Project: Guided Reading
- Tyner Book
- Professional Development Materials
- Expert Opinion Marcia S. Freeman
- Internet Site: International Reading Association, www.reading.org
- Internet Site: Reading Recovery Council of North America, www.readingrecovery.org
Summarizing Your Information

After you have gathered and organized information about your research question, it will be helpful to create an organized summary of your different research. For example:

Research Concern: Some beginning readers are having difficulty comprehending nonfiction text.

Information Sources:
- Professional development materials from a workshop on using expository text
- Internet sites
  - International Reading Association: www.reading.org
  - National Council of Teachers of English: www.ncte.org/
- Expert opinion: emailed Maureen McLaughlin for information and feedback.
- Professional literature

Book: Listen to This: Developing an Ear for Expository by Marcia S. Freeman, 1997

Book: Guided Comprehension in the Primary Grades by Maureen McLaughlin, 2010


A brief summary will support your action plan. This does not have to be lengthy, but should provide enough information to help you make your decision on whether your action plan is feasible. For example:

The professional development materials available provide numerous strategies for teaching primary students how to read nonfiction texts. Explicit and guided strategy instruction, numerous opportunities for engagement, and a variety of leveled texts are discussed by McLaughlin in her book, Guided Comprehension in the Primary Grades. The ReadWriteThink website, www.readwritethink.org, provides many lesson plans for teaching small-group reading with explicit instruction in how to read nonfiction texts. Further support for these strategies was provided by Marcia S. Freeman in email correspondence.

Once you have summarized your information, you may see that your original plan needs to be refined. To refine the focus of your research, state your original concern and then restate it based on the information you have found. For example:

Original Research Concern: Some beginning readers are having difficulty comprehending nonfiction text.

Refined Research Concern Based on Information Sources: Will providing explicit instruction in text structure help beginning readers comprehend nonfiction text?

Developing the Action Plan

After identifying a research concern, gathering additional information, and refining the focus of the research, the plan of action needs to be developed and implemented. The action plan involves specification of the participants, strategies, available resources, evaluation procedures, and timeline. Using your clarified question and research concern, your action plan should answer these questions:
- Where will the research take place?
Create an Action Plan

- Who will participate in the research?
- What will happen with the participants?
- How will the research be conducted, and what will be the specific sequence of actions?
- When will the research be conducted, and how might it unfold or change over time?

Think carefully and be specific as you ask yourself each question. For example:

- Where will the research take place?
  Specify the context for the Action Research: district, school, classroom, and grade level.

- Who will participate in the research?
  Identify specifically the individuals who are the focus of the Action Research. Will it be students from one classroom or multiple classrooms? Will it be all students from these classrooms or specific students (lowest-achieving students in one class, unmotivated students identified by the teacher)?

- What will happen with the participants?
  Specify what participants will experience as part of the research. For example, “First-grade students will be taught explicit reading strategies for comprehending nonfiction text.”

- How will the research be conducted?
  Specify what needs to be accomplished in order for the research to be conducted with the participants. For example, “First-grade students will be taught explicitly how to use nonfiction texts in their small groups at their specific reading levels for 20 minutes each day.”

- When will the research be conducted?
  Establish a timeline or schedule for conducting all phases of the Action Research. The timeline should specify the start and end dates for each activity and how frequently the activity will occur. For example, “The research will begin the second nine weeks of school and end after nine weeks. The small group instruction will occur each day for the students involved.”

In developing your action plan, you need to anticipate obstacles and how you will react to them. Ask yourself these questions:

- What could interfere with your plan?
- What will you do to avoid these obstacles?
- Identify possible changes in your teaching which might help resolve issues.
- What instructional/organizational/supervisory changes will you make?
- What can you do about the problem? (To find out, talk to colleagues, read, ask students, etc.)
- What CONTROL do you have to solve the problem? How do you know that your action plan can resolve the problem/get the best results?

You are almost ready to implement your plan, but first, consider these points:

- Does the research question seem focused enough to be doable?
- Does it focus on what the researcher can actually control?
- Does the plan incorporate a way to overcome obstacles?
Create an Action Plan

- Will the method of study answer the research question?
- Is the timeline realistic?
- What are the reasons for the present situation?
- Identify who would be most directly affected by any action taken.
- Identify who could help and who could be involved. (Note that ideally Action Research means active involvement of those who are affected in the process of action and reflection.)
- Identify the resources (time and materials) that you have available to devote to the project.

Use notes from your research to help you develop a calendar to keep your project on track. Some of the things you will want to schedule are:

- creation of materials to be implemented
- implementation schedule
- creation of data collection instruments
- data collection points
- data analysis points
- reflection/plan modification points
- summary/results write up

(Peckover, 2012)

Now, you are ready to create an action plan in which you will try a different teaching procedure.

a) Write down your concern/problem in the form of a research question.
b) Identify the specific steps.
e) What obstacles might arise as you implement your plan?
d) Indicate a timeline for the first cycle.

Reflect on your daily schedule

How can you allocate time daily to work on your Action Research project?

Based on your idea for your Action Research project, what aspect of the plan do you think will create the biggest challenges? Why?

What can you do to overcome these challenges?
Example: Create an Action Plan

Instructional Problem: Students do not spend enough time reading independently.

Possible Change: Set aside some time each day for reading practice with high-interest books.

Research Question: "If I change my instruction to provide successful reading practice, will students be more confident in trying to read independently?"

Anticipate Obstacles: What could interfere with your plan? What will you do to avoid the obstacles?

Checklist for the Action Plan

Q1: ____ Is the research question focused enough to be “do-able”? Is it something that can be actually controlled by a researcher, a team of researchers, or the administrator? If not, can it be made simpler, with specific, measurable outcomes which are possible under your teaching/learning contexts?

Q2: ____ Does the plan seem to address the identified problem in a practical way? If not, what practical steps can be taken?

Q3: ____ Are anticipated obstacles identified and addressed? Are the ways to overcome these obstacles practical and do-able? If not, what can be done?

Q4: ____ Are data gathering procedures sufficient to give evidence of whether the plan works or not?

Q5: ____ Is the time line realistic? If not, make suggestions.

Q6: ____ Are there any other concerns?

(Hollingsworth, 2001-2005)
Now it is time to try out your plan, but first you need to think about how you will assess whether or not your new approach, your action plan, will resolve the problem or concern. What do you expect to see? The first question to ask yourself is, “How do I find out if I made a difference?” The next question is, "What evidence will let me make a judgment about what I did?"

This evidence could be created by students or developed by you, or it could be some improvement in their written work or in the classroom environment. This is where action inquiry starts to pay off because it makes us look at our teaching through something other than the relatively soft and friendly eyes of our own memories. Data can be defined as bits and pieces of information found in the environment that are collected in systematic ways to provide an evidential base from which to make interpretations and statements intended to advance knowledge and understanding concerning a research question or problem.

( Lankshear and Knobel, 2004)

To determine reliable answers to research questions, researchers must make careful decisions about what kind and how much data to collect. What counts as appropriate data will depend on the research question and the nature of the Action Research. Data collection is a process of documenting the results of your action plan by collecting evidence about the plan.

You need to think about data collection strategies and see that they are in place before you enact your plan. Determine the types of data that need to be collected to lead to meaningful, accurate, and appropriate conclusions regarding your research question. Take advantage of data you usually collect in your normal instruction process. What do you do in your daily routine that will provide relevant information about your Action Research project? Action Researchers should think critically about how life in the classroom or school can be captured naturally as data and ask themselves these questions:

- What kinds of data do I need to collect in order to answer the research question?
- What kinds of data collection strategies will be used to collect the data I need?
- How do the various data sources collected help in answering my research question?

Think about and describe the methods you will use to collect evidence. Observe and record what happens as the result of the first action step. Collaboration, talking with other teachers or asking them to observe you and your classroom and give feedback, will offer an additional perspective on your research. Design specific tasks for students that will show changes in their work. Interview selected students. Choose some students who are doing well and some who are not to interview in a group or alone. Use audiotape or videotape to record the interviews so that you can review them and analyze the information provided by the interviews.

( Brozo, 2011)
Quantitative and Qualitative Data

The different sources of data will include both quantitative and qualitative data. Quantitative data refers to data that can be measured in numbers, such as length, height, cost, ages, etc. In classroom Action Research, quantitative data might include test scores, student ages, number of discipline referrals, or student attendance rates. Qualitative data, on the other hand, deals with descriptions. Qualitative data can be observed, but not measured numerically.

For example, if you were describing your class, the description would be different if you were using quantitative data than it would if you were using qualitative data.

**Quantitative = Quantity:** 25 students; 15 boys and 10 girls, 60% on Honor Roll; 75% have perfect attendance

**Qualitative = Quality:** friendly, bright, well-behaved, positive school spirit, studious, motivated to read independently

Data Sources

Compiling multiple sources of information provides a better understanding of what is happening in the classroom. There are many sources for data collection available to the teacher researcher, including written recollections in the forms of diary entries or a reflective journal. These powerful sources of evidence provide a means of recording thoughts, reactions, feelings, and reflections as you implement your action plan.

Photographs can also provide a record of the implementation. While photographs don’t record all the actions, they provide a source of reflection upon the event. Student work is another rich source for data collection.

Some sources for data collection for Action Research include the following:

**Data Sources for Action Research**

<table>
<thead>
<tr>
<th>Artifacts</th>
<th>Observations</th>
<th>Inquiry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher made tests</td>
<td>Field notes</td>
<td>Interviews with students, parents, teachers</td>
</tr>
<tr>
<td>Standardized tests</td>
<td>Anecdotal records</td>
<td>Focus groups</td>
</tr>
<tr>
<td>Written assignments</td>
<td>Checklists</td>
<td>Surveys/questionnaires</td>
</tr>
<tr>
<td>Projects</td>
<td>Video recordings</td>
<td>Attitude scales</td>
</tr>
<tr>
<td>Student records</td>
<td>Audio recordings</td>
<td>Self assessments</td>
</tr>
<tr>
<td>Lesson plans</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meeting notes and agendas</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student portfolios</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Records, attendance, report cards, test reports</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Adapted from Brozo, 2011)
Interviews and focus groups may take place with students, teachers, administrators, or parents. You may keep observation records or checklists of resources, interactions, skills, or classroom practices. Anecdotal records, or informal notes on student behavior and interaction, will be helpful as will be reflective journals written by the teacher, students, or administrator. Making audio or video recordings of lessons, meetings, interviews, and planning sessions will ensure accuracy and make for easier documentation when you are ready to report your findings. A self-assessment by students and by the teacher(s) can add valuable information to your findings.

**Reliability and Validity of Data**

Reliability refers to the consistency or stability of the data. This is more important with quantitative Action Research, especially if standardized data gathering tools are used. Consistency offers the possibility of replicating the research and generalizing the findings; however, since Action Research is generally case specific, generalizing the findings is not necessarily the goal. Validity is the quality, which decides if what you are researching is of value. Validity refers to the accuracy and meaningfulness of what is collected as evidence in research. Ways to increase the validity of evidence include triangulating data, member checking, and collaboration.

(Brozo, 2011)

When deciding on what data to collect and use, select that which is most appropriate for the problem or concern you have identified to research. Consider whether or not the data are easy to obtain and use. Determine if the data are reliable and valid. Then decide how you will organize the data you have.

**Reflection**

Examine the Data Sources chart on the previous page. Think about your ideas for Action Research in your school or classroom.

What are some other sources of data you think may inform your Action Research question? Add them to the chart.
Enact the Plan and Collect Data

collected so that you can analyze it easily. Organize the data in a way that enables you to identify trends, behaviors, and themes.

The Triangulation Method
Action Researchers face a quality issue during the data collection. It takes a great deal of time and energy to become experts in research methodology and instrument development. How can teacher researchers be sure that their data collection methods are valid?

Realistically, there is no perfect solution, but the triangulation technique may help us to improve the quality of our findings. Simply, triangulation is the process of collecting multiple types of data to increase confidence in the findings. Triangulation helps to ensure balanced data collection and compensates for any weakness or inaccuracy in any one of the data sources. Both quantitative and qualitative data can be triangulated to increase the validity of the research findings.

Triangulation is a process of verification [checking for truth] that increases validity by incorporating three different viewpoints and kinds of information. Data triangulation involves collecting information from different participants and sources, and from different stages in the project. (Banister, Burman, Parker, Taylor & Tindall, 1994). It also means cross-checking the consistency of specific and factual data items from various sources via multiple methods at different times (Guba & Lincoln 1989).

Triangulation is broadly defined by Denzin (1978) as "the combination of methodologies in the study of the same phenomenon." Action Researchers improve the accuracy of their judgments by collecting different kinds of data about their projects. The effectiveness of triangulation assumes the weaknesses in each single method of data collection will be compensated by the strengths of another.

More specifically, triangulation is defined as using at least three independent windows to observe any phenomenon, which helps to ensure quality. Triangulation provides the following benefits:

- It compensates for the imperfection of data-gathering tools.
- When multiple techniques give the same results, it can increase confidence in results.
- When multiple resources fail to give same results, it can raise follow-up questions.

Collecting Data to Study the Plan: Documenting What You’ll Expect to See

<table>
<thead>
<tr>
<th>Observations</th>
<th>Products</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Interviews</strong></td>
<td></td>
</tr>
</tbody>
</table>

1. To see __________ I will observe __________ at these times: _________________________ and _________________________. I’ll record my observations in a ___________________________________.

2. To see _______________________, I will collect _________________ at these times: _______________ and _________________.

3. To find out _______________________, I will interview these students ______________ at these times: ______________________ and ______________________. I’ll put notes about what they said in my reflective journal.
Sandra Hollingsworth demonstrates how to triangulate declarative knowledge, procedural knowledge, and conditional knowledge as a way to validate data for Action Research. You may think of declarative knowledge as what you have learned. Procedural knowledge is using what you have learned, and conditional knowledge as knowing when to use what you have learned.

Triangulating these three types of knowledge improves the validity and trustworthiness of your qualitative data. The following diagram, developed by Sandra Hollingsworth (Hollingsworth S. and Dar F., 2004), illustrates the relationship among these three types of knowledge.

### Triangulation Model

**Declarative, Procedural and Conditional Knowledge**

(Improves Trustworthiness of Qualitative Data)

**Know/Remember**

(Declarative Knowledge: I can recite what I’ve learned.)

Standardized Tests (norm-referenced and criterion)

Surveys, Questionnaires, Written Responses, Oral Retellings

**Perform/Act**

(Procedural Knowledge: I can use what I’ve learned.)

Performance Observations and Rubrics

Developmental Checklists

Self-monitoring Checklists

Anecdotal Records

**Discuss/Explain**

(Conditional Knowledge: I know when to use what I’ve learned rather than something else.)

Interviews (alone/group)

Tapes (video/audio)

Anecdotal Records of Interactions

Teacher/Student Conferences

(Hollingsworth, 2001-2005)
Another view of triangulation of data is presented by William Brozo:

**Triangulation**

What do I see?
Observation

What does student work tell me?
Assessments, Tests

What do my students tell me?
Interviewing, Journaling

This example shows the triangulation of data for an Action Research project on Literature Circles.

**Example: Triangulating Data for Action Research on Literature Circles**

Observation notes of one group of five students participating in a literature circle with a novel

End-of-novel comprehension test to document achievement related to literature circle participation

Interviews with the five students and analysis of their reading journals

(Adapted from Brozo, 2011)
**Member checking** is the process of validating observations and interpretations from those who are being observed or interviewed. This can happen at the time the data are collected or later when the Action Researcher has organized data and formed interpretations. For example:

- When you said this, did you mean __________?
- When I saw you __________, were you trying to ________________________________?

**Collaboration** allows the researcher ongoing validation of the data throughout the Action Research process. Questions asked to validate the data may include:

Are we still focusing on our original concern?

Does the data collection method provide the information we need to answer our question?

- Did you see what I saw?
- I think this means ______. What do you think?

(Brozo, 2011)

**EXAMPLE: Two-Column Notes Observation**

<table>
<thead>
<tr>
<th>Time</th>
<th>What you saw: Observations</th>
<th>What you thought: Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:30-9:45</td>
<td>Students are too shy to give each other feedback about their writing.</td>
<td>I may need to role play what it looks like to give feedback.</td>
</tr>
<tr>
<td>10:45-11:15</td>
<td>Their writing seems to be improving because of the feedback</td>
<td>Grouping to improve writing works only if I show them directly how to do it.</td>
</tr>
</tbody>
</table>

**Partner Classroom Observation Guide**

In pairs, one of you watches what the teacher does as the second partner watches students.

Take notes watching **teacher or student** on what is happening in the lesson.

What was strong in the lesson?

What would you suggest to help the teacher?

(Hollingsworth S. and Dar F., 2004)

**Interview Techniques**

Interviews help in gaining a clear understanding of people’s thoughts, actions and views. Glesne (1992, p. 64) has said that in qualitative inquiry, an interview gives one opportunity to learn about those things that cannot be seen.

Information can be obtained from students either individually or in small groups through an interview. As with questionnaires, it is important to write interview questions ahead of time and keep them straightforward and directed toward the question for which answers are sought. During the interview process itself, it is important to reassure students that they will not be punished for being candid, to employ good listening skills, and to emphasize how important their ideas are to you. The disadvantages of using interviews are that they are time-consuming. The time factor can be reduced if students are interviewed in small groups. It is also frequently difficult to get students to express their true feelings and options candidly.

Hollingsworth (2001-2005) suggests the following interview pointers to help you get the most information from your interviews:

<table>
<thead>
<tr>
<th>Time</th>
<th>What you saw: Observations</th>
<th>What you thought: Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:30-9:45</td>
<td>Students are too shy to give each other feedback about their writing.</td>
<td>I may need to role play what it looks like to give feedback.</td>
</tr>
<tr>
<td>10:45-11:15</td>
<td>Their writing seems to be improving because of the feedback</td>
<td>Grouping to improve writing works only if I show them directly how to do it.</td>
</tr>
</tbody>
</table>
Individual Interviews

1. Start informally, with a little informal conversation.
2. Know your questions so you can “talk them,” not read them.
3. Ask “why” questions to get greater depth and detail.
4. Ask “should” questions to get values and beliefs.
5. Ask “What do you think about….” questions to get at candid responses.
6. Recall questions aid in remembering events and information.
7. Comparative questions may yield new insight.
8. Experience/behavior questions elicit what the interviewee can do or has done.
9. Demographic questions help to find out how the interviewee describes herself/himself.
10. Open-ended questions are more likely to give genuine information.

(Hollingsworth, 2001-2005)

An alternative to individual interviews is Focus Group Interviews. A Focus Group explores a topic through group discussion. The group is comprised of 6-10 participants selected as representative of a class. The facilitator promotes discussion that will bring out information not tapped through a questionnaire or individual interviews. Use the guidelines on the following page to conduct a successful focus group session:

Reflection

What are five different ways of collecting quantitative and qualitative data for Action Research?

Given the questions you have identified for a possible Action Research project, create a data collection plan for action research.
**Focus Group Interviews**

1. Pull together Focus Group Students; bring a tape or digital recorder.
2. Bring a set of open-ended questions / topics for the discussion.
3. Remind students that questions are to be discussed by the group, not by individuals.
4. Set time limits.

Gather data for your research by interviewing the students about:
- Their likes and dislikes of the new teaching method.
- Whether the teaching method has helped them learn more content.
- Whether the teaching method has made them more interested in the subject/school.
- Whether the teaching method has made a difference in how they work with their peers.
- Collect copies of student work before and after implementing the action plan to serve as evidence of their learning.

**Observation Techniques**

Observation is a way to closely look at teachers’ and students’ behavior. The procedures and recording devices for observation can vary according to the type of question being asked. Sometimes, better information is acquired if a specific observation instrument is designed and used. There are essentially four ways to collect information through observation:

- Ask a colleague (who understands the instruments and can use them effectively) to observe classroom interactions and collect needed information.
- Make an audio recording of a lesson. When verbal behavior of students and teacher is the subject of inquiry, audiotapes work fine.
- Make a video recording of a lesson. For subtler non-verbal behaviors, video recording is better.
- Use 2-column notes. What did you observe? What does it mean?

Audio or video recording is a good source for data collection because it provides evidence that can be preserved and reviewed. To record information from your observation, whether observed or recorded, these two devices are useful:

**Rating Scale** shows qualitative description of a limited number of aspects of a thing, or of traits of a person.

**Checklist** is a prepared list of items. The presence or absence of items is indicated by checking yes or no, or inserting the appropriate work or number may indicate the items, type, or number. This simple device systemizes the recording of observations and helps to assure that the important aspects of the object or act observed are recorded. An example of a checklist for a discussion group is provided on the following page.
Enact the Plan and Collect Data

Checklist for a Discussion Group

Indicators show participation and interaction.

Student: _____________________________  Date: _____________________________

Y = Yes  N = No

1. Participated in discussion
   _________  _________

2. Worked cooperatively
   _________  _________

3. Completed activity
   _________  _________

4. Was accepted by peers
   _________  _________

5. Seemed to feel good about himself
   _________  _________

6. Work improved
   _________  _________

(Hollingsworth, 2001-2005)

Example: Observations Using 2-Column Notes

<table>
<thead>
<tr>
<th>Time</th>
<th>What you saw.</th>
<th>What you thought.</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:30-10:45</td>
<td>Students are really engaged in lesson.</td>
<td>The technique of cooperative group work seems to work well.</td>
</tr>
<tr>
<td>10:45-11:15</td>
<td>One group of students is making noise. They couldn’t complete their work.</td>
<td>There are students in this group who are easily distracted. I will make a change in this group to include two students who usually stay on task.</td>
</tr>
</tbody>
</table>

(Hollingsworth, 2001-2005)
Data Collection Outline

Take 2-column notes on what’s happening and what you thought about it.

<table>
<thead>
<tr>
<th>Time</th>
<th>Observations (What you saw)</th>
<th>Reflections/Analysis (What you thought)</th>
</tr>
</thead>
</table>

(Hollingsworth, 2001-2005)
Analyze and Interpret Data: So What?
After collecting data, take a close look, analyze the information, and share results. Examine the data to find themes and patterns of behavior and performance that answer your research question. Check with students and peers to see if they agree the data say the same thing. You will find that you can easily form your opinion about some quantifiable data. Other data, such as surveys, questionnaires, checklists, and test results, can be recorded in table or graph form. Once all your data are collected, the key to making a significant change in practice is analyzing and reflecting on the evidence you have collected.

Reflective Practice
The difference between simply teaching and becoming a great teacher is reflective practice. The Action Research report is your opportunity to reflect on your research data and results. Action Research is “trying out and reflecting on ideas in practice as a means of improvement and as a means of increasing knowledge.” (Kemmis & McTaggart, 1982)

Studying one’s own professional work is no straightforward matter and adopting the reflective mode is not simply a cerebral activity. As we study our teaching, we are studying the images we hold of ourselves as teachers. Where these self images are challenged, questioned and perhaps threatened in the learning process we may experience feelings of instability, anxiety, negativity, even depression. (Dadds 1993: 287)

Reflective practice is not always easy. What if the project did not have the results you expected? As Dadds said, you may experience feelings of anxiety and depression. Whatever the outcome, reflection is critical. Key to effective reflection is that you are reflecting on your own practice. Reflection may be ongoing or a reaction to a specific event or unexpected occurrence.

In the case of Action Research, you are reflecting on a question that arises from your problem or concern. The immediate aim of reflective practice is self or professional development. Reflective practice is enhanced when the reflection is shared and discussed with colleagues who support you and share your concern. The end point of reflection may not be resolution of an issue, but attainment of a better understanding of it.

Good Teaching as Reflective Practice
When generating data, the Action Researcher has to monitor his/her own actions. Intentions, motives, and subsequent reflections should be clear (McNiff 2002). Following are examples of questions that will help you clarify your reflections on your practices:

- Do I encourage my students to participate in class discussions?
- Does the physical setting of the classroom encourage or inhibit student learning?
- Do I use a variety of teaching techniques while planning my lesson?
- What do I do in the classroom to accommodate learner differences?
- How do I handle classroom management issues in my classroom?
- What is reflective practice?
- What is a situation in which you used reflective practice in the classroom?
- How is reflective practice related to good teaching and Action Research?

The questions you use to reflect on your Action Research project and prepare your report will relate to the Action Research question you formulated and to the data you collected. Think of something specific to reflect upon, such as student participation, motivation, or increasing student achievement.

Things to consider when analyzing your data are:

- How will you assess whether or not your new approach will resolve the problem?
- What do you expect to see?
- What were student responses to your new approach?
- Watch and talk with other teachers (Peer Coaching).

- Read through the data to find themes and patterns of behavior and performance that answer your research questions.
- Check with students and peers to see if they agree with the data interpretation.
- What will the revision of the original story about the problem or situation tell?
- Who will you tell it to and how? What surprised you? What are alternative interpretations? (Hollingsworth, 2001-2005)

**Getting a Second Look Through a Critical Friend**

If you investigate the work of any teacher researcher who has sustained his or her work over time, you quickly see another person, or many other people, standing in the shadows. Virtually all teacher research depends on a partner or a group who shares the researchers’ passions and provides reassurance when a project bogs down (Hubbard and Power, 1999).

The term “critical friend” comes from the work of the Annenberg Institute for School Reform at Brown University. The critical friends process focuses on developing collegial relationships, encouraging reflective practice, and rethinking leadership. Critical in the context of Action Research means important, key, or necessary.

Working with a critical friend facilitates reflection through peer observations, refining a teaching process, or consulting about an issue or problem. Critical friends share issues confidentially and seek suggestions for positively overcoming or managing them. Critical friends work together to overcome obstacles and barriers that might limit effective action.
Adapted from Internet:

Grundy (1995) promotes involving a critical friend in Action Research. The critical friend is involved not only during questioning, assumptions, and interpretations, but also in supporting and collaborating. It needs to be emphasized that a “critical friend” is needed, not an “enemy.” Mutual respect and a desire to support each other are essential for both peers. The critical friend is one whom we trust and whose work is also open to scrutiny. This point reminds us of the collaborative nature of Action Research.

It is useful to have an objective observer assist in the observation. This critical friend can provide an unbiased look at your classroom situation and uncover information you may have missed. He or she helps you reflect on your evidence and focus on your plan without giving you answers. When you work with a critical friend, you need to clarify how you will work together, because a critical friend relationship requires real commitment.

A helpful critical friend will pose questions, not “one-up” you by telling of his or her own similar experiences. Despite the name, a critical friend does not criticize to the point of forcing you to defend your actions. A critical friend is not there to offer solutions to your problems, but to listen to your solutions. He or she should ask you for concrete examples and then for the reasons and motives for your actions. A critical friend will help you broaden your thinking by asking if there are other factors you have not considered.

**Reporting**

Remember, the most important stage of your Action Research is sharing it with others to get validation of your views and also a different perspective on your interpretations of your Action Research. How will you share your story with others?

Prepare a written report, no matter how short, that summarizes your concern, your action, your evidence, and your interpretation of the evidence. Describe how you implemented your plan. Organize the report in a way that will explain what happened, what surprised you, and what this means for future lessons.

Then meet with other teachers to invite them to comment on your report, to offer suggestions for going further, and to offer additional interpretations of your evidence. This is perhaps the most challenging step, but you can see how this kind of peer review in schools could improve your Action Research efforts.

Writing conclusions and implications of the research helps you to think through your Action Research. What did it mean for you and your teaching practices? What is your evidence telling you about your instruction? What are you going to do about it? What are the next steps?

With whom will you share your results? Potential audiences may include your colleagues, administrators, parents, attendees at conferences, or even readers of a journal. Who wants to hear the results of your research? Make your presentation fit your audience.
As you prepare your report, you will also be refining your focus. Winter (1989) suggests some writing strategies that will help you prepare for your reporting:

- brainstorming ideas;
- looking for patterns and recurring ideas;
- keeping a reflective log;
- writing a letter about your concern;
- writing a story reflecting on the situation.

(Winter, 1989)

What did you find out? Try to be as descriptive as possible here. Tell a story. Determine who you will tell it to and how. Take some pictures. There are many questions to ask yourself as you prepare your report:

- Did anyone work with you cooperatively in your project? If so, who and how?
- While you were implementing your action plan, what challenges/constraints did you face and how did you overcome them?
- What were your expectations/ objectives for your Action Research project?
- Were they achieved? Explain.
- Did your research question change during the project? Explain.
- Did you complete your action plan according to the timeline, or did you have to modify it? Explain.
- What did you see yourself doing when you actually gave the assignments?
- What did the students do?
- What were the results on the assignment like?
- What did you find out related to your original question?
- While you were implementing your action plan, what challenges/constraints did you face and how did you overcome them?
- What possibilities did you discover that you didn't realize before?
- What surprised you?
- What does the data look like?
- What does the data say about what is happening in your classroom?
- How am I organizing, summarizing, and communicating the data?
- What are some alternative interpretations?
- How does the question look now?
- What changes have you noted in your teaching at the end of your Action Research project?
- What did you learn about your students and their learning during your research project? How could you tell?
- How will this change my teaching in the future?
- What did you learn about yourself during your research project?
- What conclusions can I draw from the data?
- What picture of the problem or change is present?
- Would you like to continue Action Research in your classroom/school? Why or why not?
- How will I revisit the issue to get more information?

(Hollingsworth, 2001-2005)

Writing about your research helps you to think about your evidence and ideas. You can express your reflections and consider your future practices in your classroom. Reflecting, reporting, and sharing will help you to clarify the issue and decide what your next step is going to be.
Act on the evidence: modify the plan, try it again, and study it again

A cycle of action and reflection is the heart of Action Research. Once you have collected the data and analyzed it, you will need to act on the information. Did your plan achieve the desired results? Do you need to modify the plan to make another change and study that change? If so, be sure to alter only one variable because if too many changes are made at once, it will be hard to know which action is responsible for your results. When you modify the plan, you will continue to collect and analyze data.

It is important to remember that Action Research proceeds through moments of action and reflection. It doesn’t end (as problem solving does) with a single planning and acting cycle but continues on a spiral of action and reflection. The second and subsequent Action Research cycles will be based on the reflection of the previous cycle(s). What questions were raised by the data? How can you plan for additional improvements? Because Action Research is collaborative in nature, consider how you would continue to involve others in this Action Research process. How will you plan for the second Action Research cycle? What will you actually do? How will you observe the results of your action and collect evidence?

Reflection

Why is Action Research cyclical (What are the advantages)?

Would Action Research work if it weren’t cyclical in nature? Why or why not?

Are some elements more cyclical than others? If so, explain which ones and why.
Now that you have examined the process of Action Research, it is time to put the steps together. Remember, although different researchers may describe the process slightly differently, these are the essential steps outlined in this handbook:

- Identify a problem and ask a question.
- Create an action plan.
- Enact the plan.
- Study the plan in action (collect and analyze data).
- Report results and get feedback.
- Modify the plan; and
- Try it again; study it again.

To review the steps, first, identify a problem and ask a question. What is your question? If there are multiple questions, which is the most important one for your investigation? Which one is doable and will impact the teaching and learning in your classroom?

Next, establish an action plan. Include how you will collect data. How will you use that data to investigate your question? Who will participate in your plan? How long will the plan take? When that has been determined, you are ready to enact your plan.

When the plan is enacted, collect and study your data. Think about how you will organize the information. Analyze your data to see how your research question was answered. What strategies or solutions were discovered in the data? How can you implement these strategies to become part of your teaching routine?

The fifth step is reporting your results: How will you share the results with others? Will you share your information in a formal or informal way? It is important to write down your report in order to reflect on what has happened and clarify your thoughts. There are many ways to share your report, including a written article or an oral or multimedia presentation. Examples of Action Research project reports are can be found within the chapters of this handbook as well as in the appendices.

Action Research is cyclical, so the next step is planning the next steps. Where do you go from here? Did this Action Research project bring up a new research question? Do you want to confirm the changes? Modify the plan, try it again, and study it again.

A Sample Plan

**Step 1: Identify the problem and ask a research question about why it is occurring.**

*Improve literacy teaching practice to improve student success.*

**Step 2: Create an Action Plan.**

*Seek knowledge about how to raise student performance in reading. Read journal articles and professional books; talk to teaching support staff and professional developers.*

**Step 3: Enact the Plan**

*Implement a new instructional approach using systematic instruction. Compare student engagement with another class not using this method.*
Putting the Steps Together

Step 4: Study the Plan in Action

Collect multiple sources of data. Use pre/post surveys of student’s attitudes, student interviews, and reading comprehension.

Step 5: Report Results, Surprises and Get Feedback

Analyze data and report the results. Document change in student attitudes, determine reasons for students’ attitudes from interviews, and compare new reading comprehension scores to scores before the plan was enacted. Share the results. Create a written presentation or a media presentation with tables and charts to present to colleagues, lead teachers, coaches, or administrators.

Step 6: Modify the Plan

Revise and refine your plan. Based on your findings from your Action Research project, what can you do to raise student interest in reading independently?

Step 7: Continue the Cycle with a Revised Problem

Action Research is recursive and reflective in nature. Good teaching can always become better. The steps in the Action Research cycle are intended to be repeated.
Now that you have examined the benefits and process of Action Research, you have the tools to begin your own Action Research project. Some questions to consider before undertaking your Action Research project are proposed by Kanu, Carson, and Stransky:

- What is the underlying rationale for attempting to create the change that the Action Research group is working on?
- What do you see as possibilities and the impossibilities for improvement in this area? (In answering this question, keep in mind the institutional constraints and strengths. Consider items such as staff, money, time, interest, and priority of the question for all concerned.)
- With whom will you work on this issue? (peers/colleagues, staff, students, parents, supporting staff, etc.) This question needs much consideration, as sometimes Action Research projects run into difficulties because they expand beyond the actual plan and include people who were not a part in the original development of the project. This situation may lead to difficulties and misunderstandings.
- To what degree do the other team members understand and share your perception of the issue being researched?
- With whom might the Action Research group have to negotiate at various stages throughout the project and how will this be accomplished?
- How will the Action Research project be documented?
- Who will own/control the Action Research project? Will it truly be collaborative or dominated by leader(s) whose influence will be greater than other members of the group?
- In such situations, would the roles and responsibilities need to be worked out?
- How will the Action Research group arrive at major decisions? Will you utilize a consensus model, a majority rules model, or be influenced by the most powerful?
- What are the ethical issues that may face the group? (e.g., issues dealing with confidentiality and teachers’ code of ethics)? How will these ethical issues be addressed?
- How will the results of the research be disseminated and shared with other colleagues/institutions?

Adapted from (Kanu, Carson & Stransky, 1994)

Here are ten strategies to start your Action Research:

1. Start small. Create a small team to collaborate on one already-identified issue.
2. Do not assign specific areas of research for Action Research projects. Teacher-researchers will be more committed if they're working on a problem with which they identify strongly.
3. Be prepared to offer support for change. If you ultimately do not plan to change your institution or classroom, don’t engage in or request that others engage in Action Research.
Getting Started

4. Include a student in research groups when possible. They have unique insights you may not think to consider.

5. Incorporate a mixed-methodology. Try to find two or three ways of collecting data on your issue or problem (focus groups, surveys, observations, individual interviews, etc.).

6. Plan long-term. Be sure there’s a process in place to continue the evaluation – recommendation – practice-reflection – reevaluation cycle. Remember that Action Research is formative, not summative in nature.

7. Diversify Action Research teams. This will provide individual teacher-researchers an opportunity to grow and model cross-cultural collaboration for the rest of the school community.

8. Allocate time to Action Research. If diversity and equity are a priority, you must give teacher-researchers time to plan and conduct their research and share their findings. This may mean temporarily relieving them of other duties.

9. Focus Action Research projects tightly. Instead of assessing the whole curriculum, a team might assess the literacy curriculum. Instead of assessing school culture, they might assess the one dimension of school culture.

10. It is crucial to start Action Research with an honest contextual understanding regarding diversity and equity at your school.

   (Brozo, 2011)

It is common practice in life that we often reflect on our practice and change it in light of what we learn. Action Research assists practitioners and other stakeholders in identifying the needs, assessing the development process, and evaluating the outcomes of the changes they define, design, and implement. Action Research and reflection allows teachers to grow in their understanding and implementation of best practices. Action Research provides continual, job-embedded professional development that leads to improved teaching and learning.

Action Research projects influence thinking skills, sense of efficacy, willingness to share and communicate, and attitudes toward the process of change. Through Action Research, teachers learn about themselves, their students, their colleagues, and can determine ways to continually improve.

   (Ferrance, 2000)
Appendix A

Examples of Classroom Action Research Using Various Teaching Strategies

Here is a review of multiple teaching strategies that shows how Action Research can be used to monitor student learning using multiple strategies in various situations.

Addressing Differences in Learning Styles

Problem: A teacher noticed that when reviewing for a test, some students responded rapidly, while others remained quiet. She hypothesized that some students needed longer to think about the questions.

Research Question and Action Plan: If I change my practice to do two rounds of question reviews, a speed round in which questions and answers were presented in a rapid-fire format, and a second round called “time-to-consider” where students had to wait one full minute before responding, will more students participate in the review?

Data Collection: The teacher checked the number of times each student volunteered to respond.

Results: The students who had previously remained quiet began to volunteer.

Different Kinds of Feedback

Problem: A teacher noticed that students were not trying to improve their work.

Research Question and Action Plan: If I change the kind of feedback I usually give students from negative to positive and direct them to different ways they could revise their work, would they make more effort to improve?

Data Collection: The teacher compared results of tests and assignments before and after the plan was enacted.

Results: Most students improved their work.

Freedom to Choose

Problem: A teacher complained that students were not showing interest in reading.

Research Question and Action Plan: If I permit students to choose what they’d like to read, would their interest improve?

Data Collection: Students kept reading logs and journals as evidence.

Results: Students began to choose to read more when provided a choice of materials of high interest at their reading levels.

Reducing Anxiety

Problem: Some students were exhibiting anxiety and mistrust while going through lessons.

Research Question and Action Plan: If I change my teaching to put a lesson outline and plan on the board before I begin the lesson, would it lessen students’ anxiety?

Data Collection: The students kept journals reflecting on their feelings. These journals reflected a growing sense of calm.

Results: It worked with some students, but others may need a different intervention.
Appendix A

**Shy Students**

**Problem:** The teacher noticed that some students were very shy and did not want to participate in class lessons.

**Research Question:** If I change the structure of discussion methods, will these students participate more?

**Action Plan:** The teacher decided to put the students in small groups to discuss the lesson content before the large group discussion. She also downplayed competition, and welcomed speculation and questions about confusions as well as “right answers.”

**Data Collection:** The teacher kept notes on students’ participation. She also interviewed the students.

**Results:** The shy students began to participate more.

**Motivating Learning**

**Problem:** A teacher noticed that students were not very motivated to engage in the study of history.

**Research Question and Action Plan:** Would using personal anecdotes or current real world examples about the concepts they were studying (such as conflicts and conflict resolution) make the lesson more valuable to students?

**Data Collection:** He had students keep journals about what they were learning from traditional lessons and the more connected lessons.

**Results:** Learning improved.

**Using Contracts**

**Problem:** One student is not completing reading assigned for homework.

**Research Problem and Action Plan:** Would using a contract with the student raise the rate of homework completion? On days that she completed her assignments, she could play games during free time.

**Data Collection:** The teacher kept records of how much homework was turned in before and after the contract.

**Results:** The amount of homework completed by that student increased.

**Classroom Structure**

**Problem:** The teacher had difficulty getting students engaged in classroom discussion.

**Research Question and Plan:** Would changing the seating arrangement encourage more students to participate in discussions? He moved students out of single row, front-facing arrangement into a large circle with the teacher as part of the circle for discussion. To get discussions going, he had to use 8 to 10 stimulus questions. He hypothesized that, with greater participation, fewer questions would be needed.

**Data Collection:** The teacher kept notes on the students’ participation and the number of questions.

**Results:** When he reviewed his data, he found he only needed to use three of the stimulus questions to start the 20-minute discussion period. He kept that arrangement for discussions.

(Hollingsworth, 2001-2005)
Appendix B: Tools and Resources

Action Research Worksheet

Name __________________________________________________________          Date _______________

1. Describe your problem, situation, or observation.
   a. What it is? How did it come about?
   b. What can YOU do about it? What changes you can make in your teaching?
   c. If your plan works, what kind of changes are you likely to see?
   d. What obstacles might arise as you implement your plan?

2. Turn your problem and your plan into a research question.
   a. If I change my teaching like this ________________ how will students ________________ ?

3. Outline your specific plan.
   a. List the specific steps and actions in your plan to resolve the research question.

4. Outline the method of study. (What triangulated data will you collect to get more insight into your question or see if the intervention works?
   a. written products
   b. performance observations
   c. oral interviews

5. When will you do it? Make a timeline. (Work backwards from the deadline.)

6. Summarize how you’ll analyze and report the result of the Action Research project.
   a. What did you find? What humps, surprises, or paradoxes did you notice? What might you do differently next time?
   b. How will you report what you’ve learned? (e.g., written report, presentation, etc.)

(Hollingsworth, 2001-2005)
Conducting Classroom Research

I. Classroom Problem/Question
   Why is it important to you? To others? Will you REALLY work on it?

   Your Possible Instructional Change: The PLAN
   Consider ideas from readings, colleagues, etc. Be specific.

II. Method of Studying Your New Instructional Plan
   Collect data; triangulate evidence
   
   Analyze and interpret data
   Look for themes, surprises, and stories.

III. Summary
   Explain how the problem changed, didn’t change—or maybe became worse—because of
   changes in your instruction.

   (Hollingsworth, 2001-2005)
Appendix B: Tools and Resources

Action Research Plan Summary

1. **Describe the problem or situation.**
   Ask questions about your practice and what YOU can do about them. (What control do you have over the problem? What changes in your teaching can you make to help solve the problem?)

2. **Make a plan to resolve the problem in steps.**
   Step 1. __________________________________________________________________
   Step 2. __________________________________________________________________
   Step 3. __________________________________________________________________
   Step 4. __________________________________________________________________
   Step 5. __________________________________________________________________

3. **Anticipate obstacles you might face in completing your plan and consider how you can overcome them.**
   State what you'll expect to see if the plan works as a research question.
   “If I _____________________________ how will students _________________________?”

4. **What data will you collect to study the plan in action?**
   a. **Two column observation sheets?** What will you observe and when?
   b. **Checklists?** What will they include and when will you use them?
   c. **Students’ work?** Work? What kind and when?
   d. **Interviews?** What will you ask and when?
   e. **Your own journal?** What will you write and when?
5. What is your timeline for enacting your action plan and conducting your data collection?

<table>
<thead>
<tr>
<th>Time</th>
<th>What you will do?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td></td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
</tr>
<tr>
<td>Step 3</td>
<td></td>
</tr>
<tr>
<td>Step 4</td>
<td></td>
</tr>
<tr>
<td>Step 5</td>
<td></td>
</tr>
</tbody>
</table>

(Hollingsworth, 2011-2005)
Feedback Checklist for Action Research

1. Does the research question seem focused enough to be “do-able”? Is it something the researcher can actually control? If not, how can it be modified to make it more simple and controllable?

2. Does the plan seem to address the problem in a reasonable way? If not, make suggestions.

3. Are anticipated obstacles addressed? Have you considered ways to overcome them?

4. Are the data gathering procedures sufficient to give evidence of whether the plan works or not?

5. Is the timeline realistic? If not, make suggestions.

6. What else would you suggest?

(Hollingsworth, 2001-2005)
Appendix B: Tools and Resources

Teacher Self-Assessment

1. I have tried Action Research in my classroom this many times:
   - 1
   - 2
   - 3
   - 4
   Other: _______________________

2. I used Action Research to help me solve a classroom problem I was having.
   - strongly agree
   - agree
   - disagree
   - strongly disagree

3. I used Action Research to see if trying a new method in my classroom would help improve students’ learning.
   - strongly agree
   - agree
   - disagree
   - strongly disagree

4. My teaching is better than it was before because of my Action Research.
   - strongly agree
   - agree
   - disagree
   - strongly disagree

5. Students are learning more than they did before because of Action Research.
   - strongly agree
   - agree
   - disagree
   - strongly disagree

6. I feel more confident as a teacher because I know how to use Action Research to find out if students are learning from my lessons.
   - strongly agree
   - agree
   - disagree
   - strongly disagree

7. I am willing to do Action Research on a regular basis now because (check all that apply):
   - it improves my teaching
   - it improves my confidence
   - students learn more

8. I plan to use Action Research in the future.
   - strongly agree
   - agree
   - disagree
   - strongly disagree

9. Do you have other comments?

(Hollingsworth, 2001-2005)
Appendix C: Glossary

**Action Research:** systematic examination (by teachers) of their own practice in order to improve their effectiveness; involves identifying a question or problem and then collecting and analyzing relevant data.

**accountability:** qualitative and quantitative measurement of student achievement of goals; measurable proof that teachers are teaching students effectively.

**action plan:** carefully listing all the things that you need to do to accomplish a goal.

**application:** the use of an idea, method, law, etc., in a particular situation or for a particular purpose; the ability to be used for practical purposes.

**autonomous:** able to act without the control of others; independent.

**challenges:** demanding or stimulating situations or issues.

**cognitive:** learning in the areas of reasoning, comprehension, and judgment.

**collaboration:** a relationship between individuals or organizations in which the participants work together to accomplish goals.

**collaborative Action Research:** systematic examination of their own practice by a team of teachers in order to improve their effectiveness; collaborative Action Research could also occur between a school and another organization such as a university or business.

**curriculum:** a written plan of what students will be taught; detailed directions for teaching content—may be all courses offered or all courses in a particular content area.

**data collection:** a quantity of data collected together for the purpose of analysis.

**data-based decision making:** making instructional decisions based the analysis of student information (attendance, grades, test scores, portfolios, surveys, interviews) to make decisions about instruction.

**differentiated instruction:** instruction designed to meet each student where he or she is currently performing and helping the student to progress; differentiation may be by level of difficulty, by topic to meet students’ interests, and by students’ preferred learning styles.

**evaluation:** a method of determining if students learned what they were taught; usually conducted at the end of a lesson or course.

**feedback:** providing information about the results of a certain procedure; response; critique, critical analysis.

**goal setting:** establishing specific, measurable, and time-targeted objectives; a major component of professional development and school improvement.

**informed choice:** a decision by an educator, student, or parent about a program or practice based on choice, which requires the decision to be voluntary.
investigate: probe, examine, inspect; conduct detailed inquiry and questioning.

knowledge: the facts and data of a subject.

lead teachers: teachers who have greater leadership responsibilities than other teachers, but who continue to work with students as their teachers.

learning styles: different ways students learn; differences may include cognitive (the way a person thinks about learning), sensory (seeing, hearing, touching), and other characteristics, such as preferring to work alone or with a group.

mentor: one who offers ongoing support to another person and has knowledge and experience to share with the person being mentored; for example, an experienced teacher might assist or mentor a new colleague.

methodology: the way(s) in which information is shared with or taught to students.

outcomes: results of instruction; goals, objectives, standards; what students are supposed to know and be able to do.

peer support: mutual support of colleagues for each other.

problem: something that causes difficulty or uncertainty; the issue to be researched.

professional: a person who has or shows expertise in a particular field.

professional development: experience that helps teachers and administrators build knowledge and skills; also known as staff development.

qualitative research: research that uses methods including systematic observation and interviews; might include observation of classes, teacher meetings and conversation, as well as conducting surveys to try to identify how instructional decisions are made. Qualitative research is often combined with quantitative research for a more complete understanding of results.

quantitative research: research conducted in a scientific manner using statistical procedures. Quantitative research is often combined with qualitative research for a more complete understanding of results.

reliability: an estimate of how closely the results of a test would match if the test were given to the same students under the same conditions.

realistic timeline: a chronological sequence of events that is do-able within the time allotted.

recommendation: a course of action that is advisable.

reconnaissance: act of gathering information; survey, collection of data; preliminary inspection or survey to gain general information useful for future planning.

reflection: continued consideration, meditation, contemplation; the going back over of different acts and ideas.

research question: a question that is specific and results in an observable problem solving action; it is critical to Action Research as it guides the inquiry.

school climate: refers to the schools’ effect on students and is the values, culture, and organization of a school that cause it to function in a particular way.

school culture: refers to the effect of values, culture, and organization on teachers and staff members of a school and how it impacts the way they function together.
school restructuring: a strategy based on the premise that the organization of schools must be changed in order to stem widespread academic failure and to meet higher standards demanded by society.

selection: (v) the act of choosing or selecting; (n) an assortment of things from which a choice can be made.

team teaching: two or more teachers working together to teach the same group of students.

triangulation: a process of verification [checking for truth] that increases validity by incorporating three different viewpoints and kinds of information. Data triangulation is collecting information from different participants and sources, and from different stages in the project.

written records: a written document preserving knowledge of facts or events; anything (such as a document or a phonograph record or a photograph) providing permanent evidence of or information about past events.

validity: how well a test measures what it is intended to measure.
Appendix D: Endnotes

In order of citation

Borg, 1965, p. 313

Watts, 1985, p. 118

Greenwood & Levin, 1998, p. 4

Downloaded from the Internet, March 2010:

Improving Student Learning through Classroom Action Research: A Guide to Becoming an Action Researcher, Florida Department of Ed. pg. 2

Hollingsworth et al., 1997, p. 312

McNiff, Lomax, & Whitehead, 1996, p. 37

Denzin (1978, p. 291)

Glesne (1992, p. 64)

Dadds (1993, p. 287)
Appendix E: Bibliography


Appendix E: Bibliography


Appendix E: Bibliography


There are many websites that provide information about Action Research and examples of Action Research projects. A selected sample follows.

http://www.web.net/robrien/papers/arfinal.html

This article gives an overview of the processes and principles of Action Research and when it is appropriate to use it. The role of the action researcher is briefly mentioned, and some ethical considerations discussed. It provides three case studies involving information technology.

http://www.slideshare.net/Gregwad/action-research?type=powerpoint
This PowerPoint presentation is one of many on Slideshare describing Action Research and Action Research projects.

http://elementary-education.wikispaces.com/Action+Research
Several Action Researchers have posted their projects to this site.

Research in Education (RESINED)

http://www.edu.plymouth.ac.uk/resined/action research/arhome.htm
This site is a collection of online materials to assist educators with research in education. It describes Action Research and many other elements of research.


The Action Research Guidebook, Richard Sagor

http://instep.net.nz/learning_cases
Learning Cases, Education Ministry of New Zealand
Six case studies provide examples of teachers inquiring into their practice and encourage users to examine their own knowledge, beliefs, and practice in relation to what they see in each case. Users will get the most out of the cases by working through them with colleagues and other educators.

http://ema.sagepub.com/content/38/2/229.abstract
Sage Journals: “One School’s Approach to Overcoming Resistance and Improving Appraisal: Organizational Learning in Action,” New Zealand Action Research and Review Centre
This article reports on the Action Research (AR) approach adopted by one New Zealand (NZ) primary school to review and improve its appraisal system. A particular emphasis in this article is on the outcomes of the evaluation phase of the AR where the school lead team and an independent evaluator conducted a review of the effectiveness of the improvements via survey, a focus group interview and documentary analysis.
Appendix F: Websites

http://cadres.pepperdine.edu/ccar/define.html

*Understanding Action Research*, Margaret Reil

This is a short overview of Action Research for new Action Researchers which is revised yearly. It serves as an initial orientation to Action Research for students in the online Masters of Arts in Learning Technologies program at Pepperdine University.

http://www.squidoo.com/actionresearch

*Defining Action Research*, Roger Peckover

The information on Action Research was created for teachers in the M.Ed. program at St. Mary’s University and provides an easy to follow guide for Action Research. The author presents Action Research as a messy, often nonlinear journey down the path to meaningful change. The ideas are presented as a toolbox of ideas complimenting what educators are already doing.

http://www.alliance.brown.edu/dnd/ar.shtml

Development and Dissemination Schools Initiative, Brown University

This site provides a concise overview of Action Research as well as links to many articles on Action Research.
**Glenda Nugent** has been recognized locally, statewide, and nationally for her innovative classroom teaching methods and dedication to literacy education. She has 18 years of classroom teaching experience plus 10 years as an administrator of literacy and early childhood programs. Her experience includes serving as the Arkansas Department of Education’s Program Manager for Reading and also as the Reading First Professional Development Coordinator. During her tenure, the state was a leader in standards-based literacy reform. As Director of Elementary Literacy and Early Childhood for the Little Rock, Arkansas School District, she led district-wide literacy reforms that resulted in significant gains on state achievement tests by focusing on early literacy, differentiation, and intervention. Nugent has served as President of the Arkansas Reading Association and as chair of the International Reading Association’s International Coordinating Committee for North America. She is currently the president of IRA’s LEADER Special Interest Group and also serves on the Missouri State Council-IRA Board. She has been an IRA literacy volunteer in Pakistan.

**Sakil, Mohammad Yousuf Malik** serves as Director of the Global Operations Unit for the International Reading Association. He assumed that role in June 2008 after spending 5 years as Senior Program Officer. In his current position, he manages literacy activities in 8 regions encompassing 93 countries. He has secured grants totaling millions of dollars from leading government entities and Fortune 500 companies—USAID, Nokia Corporation, and Pearson Corporation, to name a few—to support a wide range of literacy projects. Many of these projects focus on increasing the self-sufficiency and standard of living of indigenous people through improving their literacy skills. To that end, he has led more than 150 international consultants and staff in implementing professional development for thousands of teachers across the world. He holds dual master’s degrees in educational leadership and policy and economics, as well as a bachelor’s degree in commerce and an international diploma in peace and conflict studies. He is also a Certified International Project Manager and a Certified Manager of Major Programs.

**Sandra Hollingsworth** is Senior Associate for Literacy Instruction, Creative Associates, International, Washington, DC. A recent professor at the University of California, Berkeley, and San José State University, Hollingsworth is a published historian and former K-12 classroom teacher. She currently studies and promotes literacy instruction in developing countries in South Asia, the Middle East, Central Asia, and Haiti, as well as many African countries. With ministries of education, NGOs, and local educators, Hollingsworth has collaboratively developed literacy programs in local and national languages suitable for teachers with minimal preparation in literacy. The programs enable students of all ages to learn to read in a few months. Action Research is one of the key elements of the program to provide feedback to teachers in order to modify their instruction. Hollingsworth’s academic work has resulted in over 120 publications in peer-reviewed journals and by major book companies. Her book *Personal, Community and School Literacies: Challenging a Single Standard*, published by Teachers College Press, speaks to the complexities of maintaining home languages while transitioning to national languages.