HOW TO DO ACTION RESEARCH IN YOUR CLASSROOM

Lessons from the Teachers Network Leadership Institute

By Frances Rust and Christopher Clark

THE TEACHER'S VOICE IN POLICY MAKING

TNLI

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Introduction

ACTION RESEARCH is a rather simple set of ideas and techniques that can introduce you to the power of systematic reflection on your practice. Our basic assumption is that you have within you the power to meet all the challenges of the teaching profession. Furthermore, you can meet these challenges without wearing yourself down to a nub.

The secret of success in the profession of teaching is to continually grow and learn. Action research is a way for you to continue to grow and learn by making use of your own experiences. The only theories involved are the ideas that you already use to make sense of your experience. Action research literally starts where you are and will take you as far as you want to go.

The remainder of this text consists of a series of exercises that guide you through exploring topics and issues important to you and your students. The steps of action research are simple and straightforward. As you work your way through the action research process, you will have chances to practice ways of writing, reflecting, analyzing data, and discussing your work with other educators. The techniques that we are about to show you have been found to be helpful in getting off to a good start in action research. But, eventually, it will be up to you to discover which tools of action research work best for you. Feel free to experiment.

What is Action Research?

✔ **TAKING ACTION** to improve teaching and learning plus systematic study of the action and its consequences.

✔ **IT IS TYPICALLY DESIGNED AND CONDUCTED** by practitioners who analyze data from their workplace to improve their own practice.

As you are getting started, we think it might be helpful for you to know that you are joining a community of thousands of teachers who have made action research a part of their daily lives. Virtually all these inquiry-oriented teachers began with very modest action research projects. Because their initial studies were successful, they found it possible to continue this work asking better questions, getting deeper into understanding their teaching, and making connections with other reflective professionals.

More answers to the question: *What is Action Research?*

✔ **A TYPE OF APPLIED RESEARCH** in which the researcher is actively involved in the cause for which the research is conducted.

✔ **FITS WITHIN THE RICH TRADITION** of qualitative research that has emerged from the fields of anthropology, sociology, and ethnography.

MAKING THE COMMITMENT TO INQUIRY

* **A professional stance**
* **A way of learning about your classroom**:
  - **What is working**
  - **Who is learning**
* **A way of learning about yourself as a teacher**

The first step in the process of doing action research is to make a commitment. Getting off to a good start is important in anything new that you try. This is true of new skills, new friendships, a new class at school, a new job. Getting started in action research requires beginning well by taking time to think about your life in

classrooms. We are asking you to adopt a professional stance that is centered around inquiry—asking questions about things that others might take for granted. What is working in your classroom, in your teaching? Who is learning? Who is being left out? How does your curriculum provide opportunity to learn? When do you feel like you're "losing it"?

Questions such as these can be uncomfortable to ask. They may produce even more discomforting answers. But, unless and until teachers grapple with the hard questions, we will remain powerless to do very much to improve life in classrooms. So, in short, action research is a way of learning about yourself as a teacher, as a person, and as a guide to learning and development for your students.

We are asking you at the outset to commit to a process that will occasionally make you feel uncomfortable. We are also asking you to commit 10 minutes of every day to writing about your classroom. Don't skip a day. Don't make one day 20 minutes and the next day none. Think of this as muscle-building or developing a new skill.

DESIGNING A STUDY

The hardest part of designing an action research study is framing a good question. Avoid questions that can be answered with "yes" or "no." Avoid questions to which you already know the answer (action research is not very good at proving that "method A is superior to method B"). Action research helps you understand the consequences of your action.

So what makes for a good question?

We have found that good questions are free of educational jargon. They use simple everyday words that make the point clear to all. They do not prejudge the result.

One of the first activities you can do is make a list of questions and topics that you have about your classroom or your teaching or both. Try starting with, "I wonder what would happen if . . . " (This could be part of your 10 minutes a day.) You can always reframe a statement as a question. Choose one question or topic on which

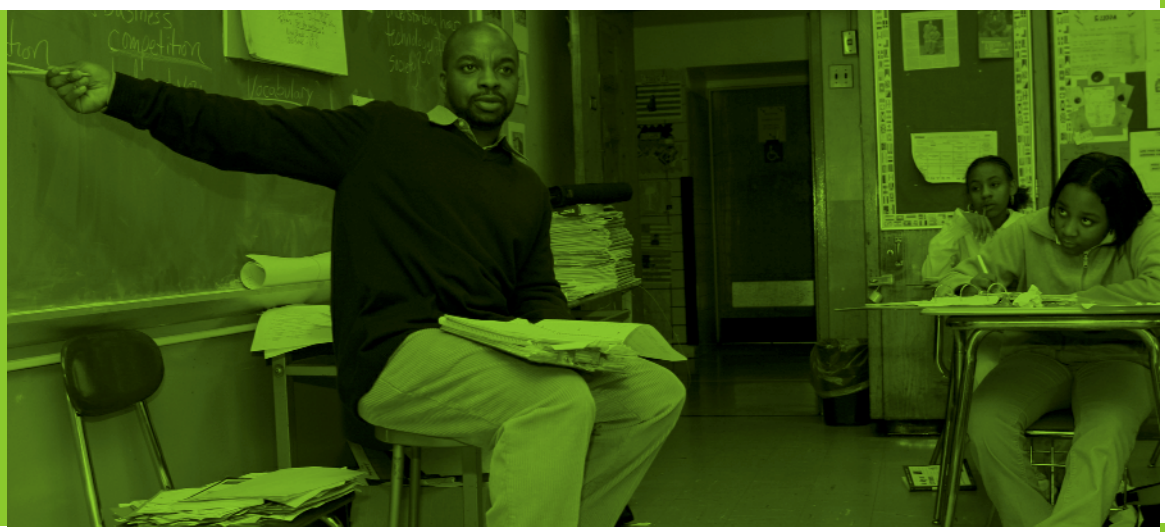
you can spend some time. Ask yourself why this question is interesting to you, how you might go about answering it, and what might be the benefit of answering it. If, after this conversation with yourself, you are still interested in the question, do a reality check by trying it out on a colleague.

Developing your question

* **Write a first draft**
* **Share it with a colleague**
* **Grow it a little—make it researchable**

Questions emerge in different forms. Most often, the first draft of the question is steeped in the reality of your classroom. We call these first draft questions. As an example, take the following question: "Why are some kids in my class so mean and nasty to each other?" Following the advice we've just given you, if this were your question, you would go off to a colleague or friend and try it out. In the process, you would begin to think about how on earth you're going to answer that question in a way that would help you to improve the situation. In other words, we don't want you to say to yourself, "Oh. It's their parents!" The answer for you has to include something that you can do, some action that you can take in your classroom. So, the question is likely to change to become more researchable. "How can I help the kids in my class develop a respectful classroom community?" would lead you toward action.

Check out **www.teachersnetwork.org/tnli/research** for other examples of researchable questions that have led to successful studies.



What is a typical timeline?

SEPTEMBER	Write about your wonderings, talk about them with colleagues, decide on a question to follow, an action to take.
OCTOBER	Write about the context of your question (why is it important to you?), start to collect data using one familiar and one new research tool.
NOVEMBER	Write about the data you have collected so far. Reshape your question if you need to. Start to read (and take notes) about your issue. Think about what you have learned so far and what further action(s) you need to take.
DECEMBER	Write a series of short profiles of what you have been reading about your topic. (These will be useful to you later on when you are analyzing your data.) Try another tool. Keep on collecting data.
JANUARY	Keep collecting data. Write about what you have learned so far. Ask yourself whether it resonates with what you have been reading about the topic.
FEBRUARY	Begin your analysis. Try different ways of representing your data succinctly. Think about how your data relates to your reading. You may want to try a new action or set of actions at this point. Monitor the impact!
MARCH	Keep analyzing your data. Begin writing about what you have learned. Be sure that you have data to support your claims.
APRIL	Develop a draft of your study.
MAY	Finish your work. Be sure to include what you have learned and how your practice has changed.
JUNE	Find a way to share your study with others and plan to do another study!

All along the way consult **www.teachersnetwork.org/tnli**

We propose a timeline for an action research study that matches the calendar for a school year in the Northern Hemisphere. But do not feel that February in New York is too late to begin! Once you get going, the process takes on a life of its own, and some questions can be answered in a matter of days or weeks, leading to action and new questions.

The typical timeline described here includes all of the steps of the action research process. They are distributed evenly across the school year. Your task is to fit these steps into the reality and constraints of your school year.

We recommend that you shift out of data collection and into analysis and writing by April 1. Our experience is that once a teacher gets started on data collection, it can be so much fun that it crowds out the time that you need for making sense of the data and trying it out with colleagues. So, be tough with yourself and say, "enough!" (data collection, that is).

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MAKING SENSE OF EXPERIENCE

Data and Analysis

Okay, you have your question and a rough timeline. Now comes the fun. You're probably wondering, "What do I do next? How am I going to answer this question? I don't know anything about research, much less research tools!" But you do.

Think about two things:

* **What evidence do you need to convince yourself that you've answered your question?**
* **What tools do you use everyday that would provide that evidence?**

For example, let's go to our question about developing a respectful classroom community. Implicit in the first draft of that question was plenty of evidence that the kids in that classroom were having a terrible time with one another. Probably, the teacher had noted behaviors that for her were markers of a disrespectful tone. She probably knew who the most conspicuously difficult kids were. She probably even had notes to the principal and to parents. All of that data was probably gathered through what researchers call anecdotal records. And you undoubtedly collect similar information in the same way. So you already have a tool at your disposal. Others that teachers use everyday include:

Everyday tools of inquiry

1. CLASSROOM MAPS
2. ANECDOTAL RECORDS
3. TIME-SAMPLED OBSERVATIONS
4. SAMPLES OF STUDENT WORK
5. DRAWINGS & PHOTOGRAPHS
6. INTERVIEWS & CONVERSATIONS
7. SURVEYS
8. TEACHER RESEARCH JOURNALS

Just in case you are not familiar with these tools, we will try to give you a thumbnail description of each below. Feel free to skip the ones you feel you know well!

① CLASSROOM MAPS

* **Look critically at the setup and decoration of the classroom. Whose work is up on the walls? How is the seating arranged?**
* **Track movement flow—your own, a child's, a group.**
* **Track verbal flow—conversation between teachers and students and conversation among students.**

Don't forget to draw a map! Once you've done that, you can make multiple copies and use them to help you gather data to answer a variety of questions like those that we have listed above. We've seen teachers track movement and/or verbal flow by filling in a chart every 5 or 10 minutes. If you record movement or verbal flow on an overhead transparency—one for each day of recording—in the space of a few days or weeks, you will have an amazing record in which you can see patterns emerging just by laying one transparency over another.

② ANECDOTAL RECORDS AND ③ TIME-SAMPLED OBSERVATIONS

* **Always Date**
* **Regularly Jot Down Time**
* **On-site/Off-site**
* **Focus on Particulars**
* **Write Fast**
* **Write Down Actual Quotes**
* **Don't Censor**

We like to make notes in a spiral-bound or loose-leaf notebook—something that will lie flat. We write our notes on the right-hand page leaving the left-hand page blank. We've also worked with teachers who keep notes on sheets of sticky labels mounted on a clipboard. Later in the day or even a few days later, they paste them into a notebook on the right-hand page, of course. Later on, we come back to the notes and use the left-hand page as a place to reflect on the notes, making connections to other observations or to background reading that we've done, even developing theories about why some action is taking place.

④ SAMPLES OF STUDENT WORK AND ⑤ DRAWINGS AND PHOTOGRAPHS

Sometimes we will make a quick sketch of something—an activity, the way two kids were relating to one another. A sketch is like visual notes. It helps us to remember something and can be more descriptive than the words we could get down in the time it takes to make the sketch. The same is true of photographs. We love to take pictures of students at work, of activities in progress, even of stages of an activity.

We generally encourage teachers to put both sketches and photographs in the same notebook that they use to record anecdotal records and time samples. Our reasoning is that like anecdotal records and time samples, these will later need a descriptive piece beside them, and they will also invite reflection and theory-building.

Student work is just that—an artifact, a sample of an individual's, small group's, or entire class' work collected over time. Depending on your question, both types of classroom artifacts can be very helpful data. Samples of student work can demonstrate individual or whole group progress. They can show you how students are making sense of concepts and how they are using them.

⑥ INTERVIEWS AND CONVERSATIONS

- **Always note date, time, place, and name of the person(s) being interviewed.**
- **Think ahead about your goal for this conversation or interview. What do you want to learn?**
- **Decide ahead about audiotaping and check your equipment.**
- **Don't ask questions that give you "yes"/ "no" answers.**
- **Be a good listener.**

Interviews and conversations are great research tools. Formal interviews are those that you script for yourself prior to the interview—you ask the same questions of everyone to whom you talk and you ask these questions in the same order. Informal interviews are those that you quite literally enter into on the spur of the moment. Whichever you use (and you might use both), you will need to plan ahead.

To prepare, especially for an informal interview or conversation, you need to really think about what you would want to learn about. Let's go back to our example of the way kids interact with one another in the classroom. Say to yourself, "What if I bump into X? What does s/he know that would help me to better understand my group of kids?" It might be that you want to talk with the school's social worker, or

a teacher who had one of your students in a prior year. Whatever the connection, plan for it. If your focus is your students and their opinions or understandings, the same spirit of thoughtfulness is necessary.

As you enter into a conversation or interview, remember, you want to get conversation going but in a focused way. So, maybe start with "I'd love to hear about _____" (You fill in the blank. Here are some options around the questions we've been pursuing on classroom community:

TO A TEACHER

"I'd love to hear about one time when you felt that my group of kids really jelled with one another."

TO A STUDENT

"I'd love to hear about your favorite time of day in the classroom or the hardest time of day for you."

If you approach the interview as an opportunity to put the other in the driver's seat, you are likely to get a very rich response—something you wouldn't get if you made the agenda your own.

⑦ SURVEYS

- **Good for large groups or a whole class when you want comparative data.**
- **Types of questions you ask are important.**
- **Time it takes to complete is important.**

Surveys are great for getting information from a whole class or a large group. But be careful about the types of questions you ask and how many questions you ask. If you don't want to have to develop ways of coding your data, don't ask open-ended questions that invite thoughtful, often unanticipated answers.

A sociogram is an analytical tool used to help you portray the social networks in your classroom. They are particularly useful if you're trying to figure out how to change the interactive dynamic of the class. But they are also useful if you're just trying to figure out how to group kids for instruction. To develop the data for a sociogram, you ask every child in your class the same three questions, for example, **(1)** If I were to form reading groups of four kids, who would you like to have in your group? **(2)** If I were to have four kids stay for lunch with me, who would you like to have in your group? **(3)** If you were a new student in the class, which three kids would you suggest I ask to help you learn the ropes? Questions can be asked orally but you need to record students' answers so you have data to draw on as you begin to map their responses.

We could say much more about sociograms but think you'll learn more by looking at some good examples of sociograms in use by teachers. See Rachel Zindler's study of a special ed inclusion class in New York City or Sarah Picard's study of reading groups at **www.teachersnetwork.org/tnli/research**. You will also find lots of examples of surveys that teachers have developed at this web site.

⑧ TEACHER RESEARCH JOURNAL

✱ The critical tool in your inquiry

We feel that every teacher researcher should keep a research journal. Your research journal is like the best diary that ever was! It could have everything—the 10 minutes a day of writing that you are doing about your question, your notes from your anecdotal records, your reflections on those notes, your notes from background reading that you have done on your topic. It could, on the other hand, just be the place you record your thoughts about your research. Whatever, try to set it up so it really is a friendly place for you to write and so that it becomes precious to you. Do not leave it lying around in your classroom. This is where you think on paper. You want to keep it as a special place that you come to for special work on something that is of great importance to you.

Okay — we've finished with the list of typical tools that are readily available to teachers. You can certainly add things like audiotaping or videotaping or even new ways to monitor interactions with kids via computers and the Internet, but unless you're working with these media daily, just getting them ready to use can be a major production. So, we haven't gone into them. However, we do have examples to recommend of teachers using them. As we've said before, see **www.teachersnetwork.org.** Matt Wayne's video, "Fishbowl," can give you a good idea of ways to engage a class in action research. Matt also has a study in the TNLI research section of the Teachers Network website that shows how he used audiotapes to monitor students' progress as readers. Re: using the Internet in your classroom, the Teachers Network website has terrific curriculum units and lesson plans that engage kids interactively (see the Teachnet section of the website).

Now—on to organizing your data.

Organizing Your Data

You should plan to use at least three different tools (don't, for example, use only questionnaires and surveys—they're basically the same thing). This is done for the purpose of triangulation. It helps you to be sure that the results you think you are getting are real and will stand up to scrutiny.

The data collection tools that you use will determine how you organize your data. We love charts and graphs and tables. These graphic forms of data organization can quickly show patterns, time sequences, relationships, and missing pieces. The process of creating a chart, table, or graph forces you to move from tiny details to a bigger picture; from hunch to substantiated claim.

Here are some suggestions about how to get started. Try spreading out your data on the living room floor. Look at all that you have collected. Begin simply by sorting according to the tools that you used. Ask yourself what each tool is telling you about your question. Begin with the earliest samples. Describe them. (How would you sum up what you're seeing to someone on the other end of the phone?) Move on to later samples. What has changed? This essentially describes the universe of evidence that you have gathered using that particular tool. Now do the same with the other tools you have used.

Check out **www.teachersnetwork.org/tnli/research** for examples of data representation formats.

Analyzing Your Data

Analysis is the heart of making sense of your experience with action research. Analysis is fun and messy. It always begins with your data.

Data never speak for themselves. Please remember this. Data never speak for themselves. Your mind is the most important analytical tool that you have. Analysis is a process of telling a convincing story about the sense that your data led you to make. As well, you must persuade a skeptical audience that the story that you tell and the sense that you make are supported by evidence.

There are two major sources of support for your evidence:

1. **The first is the data** you have collected and the patterns that you see.

2. **The second is equally important.** It is what others have learned about this topic. If you haven't already read other research and theory on your topic, now is the time to do it. This is critical to situating your work. If, for example, you find that the action you took has results that are very similar to those of other researchers, then you know your analysis is in the ballpark. Essentially, you can borrow from the authority of others that have come before you to strengthen the claims that you will make for the action that you took. If, however, your results contradict prior research, then you are well on the way to forming a provocative new question about why your study yielded such different results. You have something interesting to talk about with colleagues and with other researchers. Either way, what you learn locally can become part of a larger conversation among educators and researchers.

As you develop your analysis of data, here are the steps that you should follow:

REPORTING ON THE RESULTS OF YOUR ACTION

- *Describe the action(s) that you took.*
- *Reflect on the evidence you have collected.*
- *Count. Look for patterns.*
- *Share the evidence with colleagues.*
- *Examine what different explanations could explain the data (draw on prior research).*
- *Revisit assumptions about the children and the learning situation.*
- *Formulate a trial explanation.*
- *Develop an argument with evidence and claims.*

Okay, now you're at the point of going public.

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IMPROVING YOUR PRACTICE

You're about to DO something different in your classroom! So, one last check:

RETHINK THE NEED, THE CHANGE, AND THE RESULTS

- *Does the evidence support your claims?*
- *Do your colleagues find your argument credible?*
- *How does the argument fit into ongoing debates and conversations?*
- *What is unique about your setting or context?*
- *Will others find your argument useful?*

A single action research study can be helpful in improving local practice of teaching. Action research conducted in a network of inquiring teachers can reach far beyond single classrooms. Teachers who are members of the Teachers Network Leadership Institute (**www.teachersnetwork.org/tnli**) have been conducting action research studies for a decade. Their work has been assembled into publications directed at influencing education policymakers at local, state, and national levels. We invite you to add to this archive. E-mail it to us at **info@teachersnetwork.org**. You can also go to our website to see how other teachers have made powerful sense of their experiences.

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BEGINNING AGAIN—NEW & BETTER QUESTIONS

Remember the Harry Chapin song, "All My Life's a Circle"? Catchy song. It applies to action research as well. Once you have completed your first study, you will, we hope, start another—just to see how good your decisive action is! It is our experience as teachers and as MetLife Fellows in the Teachers Network Leadership Institute that thoughtful teachers are always questioning practice and learning as much as they can from one another, from their students, and from other researchers. We want to welcome you to the network of teacher researchers who are changing classroom practice and education policy one study at a time!

MANY THANKS to Professors Frances Rust, Department of Teaching and Learning, New York University Steinhardt School of Education, and Christopher Clark, Director of the School of Education, University of Delaware, for writing this booklet. It is based on their many years of helping MetLife Fellows in the Teachers Network Leadership Institute conduct action research in their classrooms. Dr. Rust serves as our national TNLI advisor. Dr. Clark has given generously of his time over the years, supporting the New York City MetLife Fellows in preparing their action research studies and was instrumental in launching TNLI Delaware.

FOR MORE INFORMATION about the Teachers Network Leadership Institute, please contact Ellen Meyers, TNLI Director, at **emeyers@teachersnetwork.org** or Peter Paul, TNLI Coordinator, at **ppaul@teachersnetwork.org**.

About TEACHERS NETWORK LEADERSHIP INSTITUTE

Teachers Network Leadership Institute (TNLI)—an initiative comprising 12 affiliates nationwide and hundreds of teacher leaders—was established in 1996 by Teachers Network to connect education policy with actual classroom practice to improve student achievement. TNLI MetLife Fellows—teachers with full-time classroom teaching responsibilities—conduct action research studies in their classrooms and schools, develop policy recommendations based on their findings, and document and disseminate their work locally and nationally. To get the word out, fellows join influential task forces, give presentations to school districts and school boards, and participate in major conferences. Throughout the country, TNLI MetLife Fellows also serve as vital members of local, state, and national education task forces and advisory councils.

TNLI affiliates include: Chicago (IL); Fairfax County (VA); Mason (VA); Los Angeles (CA); Miami (FL); Milwaukee (WI); New York City (NY); Sacramento (CA); Santa Barbara County (CA); San Francisco (CA); the State of Delaware; and the State of Wyoming.

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teachers network

TNLI is a major initiative of Teachers Network. Teachers Network is a non-profit organization—by teachers, for teachers—with a 25-year track record of success, dedicated to improving student learning in public schools nationally and internationally. Teachers Network is unique in its focus on professional development as the key to improving student achievement. Using the power of an award-winning web site, videos, and print resources, Teachers Network leverages the creativity and expertise of a national and international community of outstanding educators. Through its leadership, Teachers Network empowers teachers to transform public schools into creative learning communities. For more information about Teachers Network, see **www.teachersnetwork.org**.

We recommend ***Taking Action with Teacher Research***, Heinemann Press (2003) edited by TNLI Director Ellen Meyers and TNLI Advisor Frances Rust. It describes action research studies conducted by MetLife Fellows Jane Fung, Lara Goldstone, Janet Price, Carol Tureski, Natasha Warikoo, and Matt Wayne and how we use the action research process to bring the teacher's voice into education policy-making. Royalties from the book support TNLI.

More information about TNLI publications and our work is available on the TNLI area of Teachers Network's #1 award-winning web site at: **www.teachersnetwork.org/tnli**.

DESIGN *Heidi Fener* PHOTOS OF METLIFE FELLOWS *Kristine Larsen*

The secret of success in the teaching profession is to continually grow and learn. Action research is a way to continue to grow and learn by making use of your own experiences.

HOW TO USE ACTION RESEARCH IN YOUR CLASSROOM was developed from our years of supporting teachers in the Teachers Network Leadership Institute to conduct action research — in order to make powerful connections among policy, practice, and student achievement.

This document has been funded by a grant from **MetLife Foundation**.