8. Develop a statement of resources.
9. Develop data collection ideas.

**Write an Area-of-Focus Statement**

An area of focus identifies the purpose of your study. To start, write a statement that completes the following sentence: "The purpose of this study is to..." For example:

- The purpose of this study is to describe the effects of an integrated problem-solving mathematics curriculum on student transfer of problem-solving skills and the retention of basic math facts and functions.
- The purpose of this study is to describe the impact of bringing audience members into an interactive relationship with teen theater productions on participants’ abilities to identify issues and incorporate solutions to similar problems in their own lives.
- The purpose of this study is to describe the effects of student-led conferences on parent and student satisfaction with the conferencing process.

**Define the Variables**

As part of the area-of-focus statement construction process, write definitions of what you will focus on in the study. These definitions should accurately represent what the factors, contexts, and variables mean to you. A variable is a characteristic of your study that is subject to change. That is, it might be the way you are going to change how you teach, the curriculum you use, and student outcomes. Definitions may also emerge from the literature, but it is important that you own whatever you are defining and communicate that ownership with others. In the preceding examples, the researchers would define what they mean by transfer of solutions to life’s situations, an integrated problem-solving curriculum, transfer of problem-solving skills, the retention of math facts and functions, interactive participation in teen theater, student-led conferences, and parent and student satisfaction with the conferencing processes. If you are clear about what you are examining, it will be easy to determine how you will know it when you see it! That is, your data collection ideas will flow more freely and there will be no confusion when you communicate with your action research collaborators about your purpose.

**Develop Research Questions**

Develop questions that breathe life into the area-of-focus statement and help provide a focus for your data collection plan. These questions will also help you validate that you have a workable way to proceed with your investigation. For example:

- What is the effect of teen theater audience participation strategies on audience comprehension of issues?
- How does the “Violence Improv” affect the audience’s understanding of the issues of violence and harassment?
- What is the effect of incorporating math manipulatives into problem-solving activities on student performance on open-ended problem-solving tests?
Deciding on an Area of Focus

• In what ways do students transfer problem-solving skills to other areas of mathematics?
• How do students incorporate problem-solving skills into other curriculum areas?
• How do students transfer problem-solving skills to their life outside of school?

Describe the Intervention or Innovation

Describe what you are going to do to improve the situation you have described; for example, “I will implement a standards-based, integrated problem-solving mathematics curriculum,” “I will include audience improvisation as part of the teen theater performances I direct,” and “I will incorporate student participation in student-parent-teacher conferences.” Remember, this is simply a statement about what you will do in your classroom or school to address the teaching/learning issue you have identified.

Describe the Membership of the Action Research Group

Describe the membership of your action research group and discuss why its members are important. Will you be working with a site council team? A parent group? If so, what will be the roles and responsibilities of the group’s participants? For example:

I will be working with seven other high school math teachers who are all members of the math department. Although we all have different teaching responsibilities within the department, as a group we have decided on problem solving as an area of focus for the department. Each of us will be responsible for implementing curriculum and teaching strategies that reflect the new emphasis on problem solving and for collecting the kinds of data that we decide will help us monitor the effects of our teaching. The department chair will be responsible for keeping the principal informed about our work and securing any necessary resources we need to complete the research. The chair will also write a description of our work to be included in the school newsletter (sent home to all parents), thus informing children and parents of our focus for the year.

Describe Negotiations That Need to Be Undertaken

Describe any negotiations that you will have to undertake with others before implementing your plan. Do you need permission from an administrator? Parents? Students? Colleagues? All this assumes that you control the focus of the study and that you undertake the process of negotiation to head off any potential obstacles to implementation of the action plan. It is very frustrating to get immersed in the action research process only to have the project quashed by uncooperative colleagues or administrators.

Develop a Timeline

In developing a timeline, you will need to decide who will be doing what and when. Although not part of a timeline in the strictest sense, you can also use this stage to anticipate where and how your inquiry will take place. For example:

• Phase 1 (August–October). Identify area of focus, review related literature, develop research questions, reconnaissance.
Deciding on an Area of Focus

- Phase 3 (January–May). Modify curriculum and instruction as necessary. Continue ongoing data collection. Schedule two team meetings to discuss early analysis of data.
- Phase 4 (May–June). Review statewide assessment test data and complete analysis of all data. Develop presentation for faculty. Schedule team meeting to discuss and plan action based on the findings of the study. Assign tasks to be completed prior to year 2 of the study.

Develop a Statement of Resources

Briefly describe what resources you will need to enact your plan. This is akin to listing materials in a lesson plan. There is nothing worse than starting to teach and finding that you don’t have all the manipulatives you need to achieve your objectives. For example, to participate in the study of math problem-solving skills, the team determines that it will need teacher release time for planning the project, reviewing related literature, and completing other tasks; funds to purchase classroom sets of manipulatives; and a small budget for copying and printing curriculum materials. After all, there is no sense in developing a study that investigates the impact of a new math problem-solving curriculum if you don’t have the financial resources to purchase the curriculum.

Develop Data Collection Ideas

Give a preliminary statement of the kinds of data that you think will provide evidence for your reflections on the general idea you are investigating. For example, brainstorm about the kind of intuitive, naturally occurring data that you find in your classroom or school, such as test scores, attendance records, portfolios, and anecdotal records. As you learn more about other types of data that can be collected, this list will grow. In the early stages, however, you should think about what you already have easy access to and then be prepared to supplement it with interviews, surveys, questionnaires, video and audio recordings, maps, photos, and observations as the area of focus dictates.

These activities can be undertaken whether you are working individually, in a small group, or as part of a schoolwide action research effort. The resolution of these issues early in the action research process will ensure that you do not waste valuable time backtracking (or even apologizing) once you are well down the action research path. The process of developing an action plan is summarized in the Research in Action Checklist 3.

<table>
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<td>_____ Write an area-of-focus statement.</td>
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Deciding on an Area of Focus

Put the Action Plan into Action

Kemmis (1988) provides the following conclusion to the process of developing a plan:

> Your plan orients you for action, of course; but it is also a reference point for reflection later on, and it is something which you can modify and develop in later plans. Since you have done so much hard thinking to put your plan together, don’t skimp when it comes to drafting and redrafting it before you go into action. It represents the fruits of one round of reconnaissance and thinking ahead—it provides you with a benchmark for later reflection and replanning. (p. 77)

With the plan complete, it’s time to determine what information (data) you can collect that will increase your understanding about your own practice and its impact on your students. You are now ready to decide how you will monitor the effects of the innovation or intervention you are going to implement and to develop your data collection techniques.

Summary

Clarifying a General Idea and an Area of Focus

1. In the beginning of the action research process, you need to clarify the general idea that will be the area of focus of your study.
2. The general idea is a statement that links an idea to an action and refers to a situation one wishes to change or improve on.
3. Taking time in the beginning of the action research process to identify what you feel passionate about is critical.
4. The area of focus should involve teaching and learning and should focus on your own practice.
5. The area of focus is something within your locus of control.
6. The area of focus is something you feel passionate about.
7. The area of focus is something you would like to change or improve.

Reconnaissance

8. Reconnaissance is taking time to reflect on your own beliefs and to understand the nature and context of your general idea. Doing reconnaissance takes three forms: self-reflection, description, and explanation.
9. Try to explore your own understanding of:
   a. The theories that impact your practice.
   b. The educational values you hold.
   c. How your work in schools fits into the larger context of schooling and society.
   d. The historical contexts of your school and schooling and how things got to be the way they are.
   e. The historical contexts of how you arrived at your beliefs about teaching and learning.
10. Try to describe as fully as possible the situation you want to change or improve by focusing on the who, what, when, where, and how questions.
Deciding on an Area of Focus

11. Try to explain the situation you intend to investigate by hypothesizing how and why the critical factors that you have identified affect the situation.

Review of Related Literature

12. The review of related literature involves systematically identifying, locating, and analyzing documents pertaining to the research topic.
13. The major purpose of reviewing the literature is to identify information that already exists about your topic.
14. The literature review can point out research strategies, procedures, and instruments that have and have not been found to be productive in investigating your topic.
15. A smaller, well-organized review is preferred to a review containing many studies that are less related to the problem.
16. Heavily researched areas usually provide enough references directly related to a topic to eliminate the need for reporting less related or secondary studies. Little-researched topics usually require review of any study related in some meaningful way so that the researcher may develop a logical framework and rationale for the study.

Action Research and the Review of Related Literature

17. Action researchers disagree about the role of the literature review in the research process. Some researchers have argued that reviewing the literature curtails inductive analysis—using induction to determine the direction of the research—and should be avoided at the early stages of the research process.
18. Others suggest that the review of related literature is important early in the action research process because it helps action researchers identify underlying assumptions behind their research questions and helps the researcher refine research questions and embed them in guiding hypotheses that provide possible directions to follow.

Identifying Keywords

19. Most sources have alphabetical subject indexes to help you locate information on your topic. A list of keywords should guide your literature search.

Identifying Your Sources

20. A good way to start a review of related literature is with a narrow search of pertinent educational encyclopedias, handbooks, and annual reviews found in libraries. These resources provide broad overviews of issues in various subject areas.
21. An article or report written by the person who conducted the study is a primary source; a brief description of a study written by someone other than the original researcher is a secondary source. Primary sources are preferred in reviews.

Searching for Books on Your Topic in the Library

22. Most libraries use an online catalog system as well as collective catalogs to access materials from other libraries. You should familiarize yourself with your library, the library website, and the resources available within and beyond your library.