Chapter 2: Overview of the Action Research Process

Chapter 1 outlined the four basic stages of action research, but in Chapter 2, Mertler (2011) expanded the stages to nine specific steps of an action research study. An example with the nine steps is provided by Mertler. The nine steps and where in the text they are explained in detail are listed below.

1. Identifying and limiting the topic (Chapter 3)
2. Gathering information (Chapter 3)
3. Reviewing the related literature (Chapter 3)
4. Developing a research plan (Chapter 4)
5. Implementing the plan and collecting data (Chapter 5)
6. Analyzing the data (Chapter 6)
7. Developing an action plan (Chapter 7)
8. Sharing and communicating the results (Chapter 8)
9. Reflecting on the process (Chapter 8)

Even though action research has stages and steps, the process of carrying out these is not linear. It has a clear beginning but not a clear end; action research tends to be cyclical. For your project, you will carry out one cycle, but hopefully you will continue to informally plan-act-develop-reflect or observe-do-observe-adjust over and over as you continue to grow and improve as a teacher.

Stage 1: Planning Stage = Steps 1-4 (what you will be doing in this class)
Done prior to implementation of the project.

Step 1: Identifying and Limiting the Topic
Identify your topic.
Decide exactly what to study.
Something manageable that can be completed in one or more of your classes during the 3rd nine weeks.
Something for which you can collect relevant and meaningful data.
Something that will improve practice...teaching and learning.
Something that doesn’t cost a fortune.

Step 2: Gathering Information
Gather preliminary information that will inform your topic (a.k.a. reconnaissance).
Talk to people. Bounce your ideas off other teachers and professionals.
Skim the literature, relevant journals and magazines, books, curriculum materials, etc.
Reflect upon your beliefs, your teaching, your school, your discipline, and your students.
Step 3: Reviewing the Related Literature
Related literature is "any existing source of information that can shed light on the topic selected for investigation" (Mertler, 2011, p. 40).
These sources could be research journals, books, Web pages, teacher resources, district or state data or documents, government reports, CDs, DVDs, and even discussions with colleagues. Almost anything can be related literature if it is related to your topic, but some literature sources are "better" than others.

The literature should be used to support and inform what you plan to do. The literature can tell you what others have done, what needs to be done, how others have conducted studies (i.e., methods, instruments), what works and what does not work, what others think, and provide guidance and ideas. It can provide a framework and rationale for the study, and it can also provide an example of the style and organization of research writing.

Step 4: Developing a Research Plan
You must develop a systematic, organized plan to conduct your action research study. The research plan is also known as the research methodology. You need to identify your problem, purpose, and question (P-P-Q). You may also need to consider a hypothesis (or hypotheses), variables that can be observed and measured, who will be in the study, getting permission for those people to participate, the setting of the study, your role in the study, instruments (e.g., tests, surveys, interview protocols, etc.) and their validity and reliability, research ethics, data collection procedures, and anything else that might happen during your study and should be considered prior to implementing the plan.

Stage 2: Acting Stage = Steps 5-6
Implement the plan, collect and analyze the data.

Step 5: Implementing the Plan and Collecting Data
Implementing your plan and collecting the data are step 5. You must select instruments and decide on data collection techniques.

- You might use observations which would include field notes.
- You might use interviews and need an interview protocol.
- You might use a survey that is mailed, e-mailed, or handed out.
- You might use existing documents or records (attendance records, lesson plans, etc.)
- You might use tests, rating scales, checklists, rubrics, and other formal assessments.

It is important to collect data using multiple measures. This allows you to triangulate (or polyangulate) the data to establish their accuracy and quality. For example,
interview responses might support classroom observations and test scores, lending strength to your conclusions.

**Step 6: Analyzing the Data**
In action research studies, data analysis is ongoing, not just after data have been collected. As you collect your data, you look for patterns, categories, and themes. This is especially important in your researcher journal. You should be reflecting and documenting your thoughts and observations all the time. Faculty will be available to help you with the analysis of your data, and you can put to use some of those things you learned in the probability and statistics class.

**Stage 3: Developing Stage = Step 7**
Revisions, changes, or improvements arise and future actions (i.e., action plan) are developed.

**Step 7: Developing an Action Plan**
The ultimate goal of action research is the action plan. You get to develop a plan of action or strategy for the future based on the results and what you learned from the study.

**Stage 4: Reflecting Stage = Steps 8-9**
Summarize the results of the study, create a strategy to share the results, reflect on the entire process.

**Step 8: Sharing and Communicating the Results**
The results of your hard work should be shared with others in the educational community—fellow teachers, administrators, your school, students, parents, colleagues at conferences. Consider giving a presentation at NDEA and/or NDCTM conferences. Also consider presenting your results to your school and its stakeholders at an in-service, meeting, or informal get-together.

**Step 9: Reflecting on the Process**
You must systematically reflect upon your practice and review what's been done, determine its effectiveness, and make decisions about what you will change in your future practice. You should not only reflect at the end of the action research study, but throughout the process. For example: Before you teach a lesson, you most likely reflect upon the planning of the lesson and its delivery prior to teaching it. Then you reflect again while teaching the lesson and immediately after teaching it. You probably reflect upon the lesson while grading papers, writing a test, grading that test, and prior to teaching the lesson again. The same is true of action research; reflection continually happens.
Example in the Text
The example on pp. 45-48 covers each step of the action research process. Read it to give more meaning to the above steps.

Reference