

Feature Article

The Pennsylvania Action Research Network (PAARN): A Synopsis of Findings from Five Years of Practitioner Action Research in Pennsylvania

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Introduction

In the summer of 1995 the Bureau of Adult Basic and Literacy Education (ABLE) of the Pennsylvania Department of Education (PDE) chose to incorporate a bold new initiative for the professional development of adult education practitioners in Pennsylvania by creating the Pennsylvania Action Research Network (PAARN).¹ This initiative sought to add the important dimension of “learning from practice” to Pennsylvania’s already noteworthy traditional professional staff development in adult education through adding a practitioner-based model of action research. Leadership at both ABLE and PAARN hoped action research training would help adult basic education (ABE), GED, and English as a second language (ESL) practitioners develop better problem-posing/problem-solving skills, as well as enable them better to discover and validate the most promising strategies and techniques to improve daily practice. The PAARN initiative was rooted in a growing awareness that traditional school-oriented workshops and courses (perhaps the most extensively used form of

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professional development in ABE) were not meeting all of the professional development needs expressed by practitioners. PAARN attempted to respond to the problems and limitations of workshops by using action research as a professional development strategy. Over the past five years PAARN instructors have trained more than a hundred practitioners from many literacy agencies throughout Pennsylvania in the core techniques of action research. Impact evaluations (discussed later in this paper) have shown that such training has helped practitioners better to define practice problems, plan interventions, find baselines, determine criteria for success, design data collection techniques, oversee the implementation and evaluation of projects, and discuss issues with fellow practitioners

Action Research According to the PAARN Model

Action research provides a set of problem-solving tools to help adult literacy practitioners deal with problems in their own practice setting. The action research process provides a systematic method of understanding, analyzing, interpreting, and resolving problems in the practice setting. In its simplest form action research involves carefully analyzing a problem, determining the most promising intervention, trying the “action intervention,” and, after observing and reflecting on the outcomes, typically trying yet another variation of the intervention. The nature of the process usually creates a cycle of research and problem solving.

Although action research may seem to be merely “trial and error,” the actual process incorporates systematic procedures that combine analysis, observation, data collection, and reflection and creates records that can be analyzed objectively and applied elsewhere.

Action research follows a ten-step procedure of problem posing and problem solving that involves four distinct processes: planning, acting, observing, and reflecting.² These four processes in turn create a “cycle of research efforts” and often can lead to multiplied cycles of problem posing and problem solving. The ten steps discussed in the PAARN training include the following:

Planning Steps:

1. How to get a handle on the real problem or issue.
2. How to decide upon an intervention to address the problem or issue.

3. How to create a baseline so you know current reality about the problem.
4. How to determine a trial period and schedule for intervention.
5. How to establish criteria for success to evaluate outcomes.
6. How to choose tools to document intervention and gather data for evaluation of outcomes.
7. How to organize the project to be sure all is ready to intervene.

Acting Step

8. How to implement the intervention and collect the data.

Evaluating Step

9. How to evaluate the outcomes.

Reflecting Step

10. How to reflect on results and implications and to design a new cycle if needed.

Step One in the process involves trying to identify accurately the problem in the practice setting. This crucial step often involves “brainstorming” with other practitioners to understand better the actual situation. Between individual reflection and group interaction the practitioner tries to answer a number of core questions: “What actually is the problem?” “Do I understand why the problem exists?” “How do others see it?” “What have others said in the research?” “Are there prior studies on this very issue?” “Is this the problem I want to spend time on, and will others agree to help me?” The problem must be one that the practitioner can pursue personally.

Step Two in the process involves deciding upon the appropriate intervention to use in addressing the problem or issue in the practice setting. Although practitioners often have a preliminary idea about a possible intervention, the combination of interaction with colleagues and personal reflection usually identifies a number of other possible interventions. After examining the alternatives and deciding upon the proper intervention to try, the practitioner then establishes the details about the intervention. This process of defining the intervention involves specifying how the intervention will make a change in the problem, determining when and how to begin the project, deciding how to inform or involve those in the project, determining whose approvals will be needed, and determining how to get the participants’ consent.

Step Three involves creating a baseline to define the current reality of the problem or issue. In order to know whether an intervention has caused the problem to actually get “better,” the practitioner-researcher need to know where they started. “Better” involves a comparison, or a value judgment—better as compared to what? The practitioner-researcher gather actual, current statistics or information regarding the problem to allow for better analysis of outcomes.

Step Four involves the determination of the proper trial period for the intervention and the scheduling of the intervention. Every action research project must be addressed within a specified time parameter; interventions can’t run indefinitely or the researcher will not be able to evaluate the outcomes. The practitioner-researcher decides how long to run the experiment based upon what he/she perceives to be a fair trial period to evaluate the intervention. At a predetermined ending point the intervention stops and reflection begins on what has been accomplished.

Step Five involves establishing the criteria for success to evaluate outcomes. To evaluate adequately an action research project, practitioners must determine the proper criteria for success *before* starting the intervention. In other words, the practitioner must decide what degree of change will be acceptable to decide if the intervention is a success. The researcher seeks to answer a number of core questions: “In what specific ways will the new approach be compared to the old approach?” “On what basis will the results be weighed at project’s end?” “What change will be acceptable for success?”

Step Six involves choosing the proper tools to document the intervention and gather the data needed at the end for evaluation. A major step in any action research project is deciding how the intervention and resulting changes can best be observed and documented. In addition to specific data gathering tools, most action researchers keep a reflective journal from the beginning of the intervention. The tendency is to forget what was thought last week or observed yesterday in relationship to the action research project, and a reflective journal helps to compensate for such memory lapses. When deciding upon which tools to use, PAARN stresses the importance of “triangulation,” or using multiple methods to gather data. Such multiple sources of data allow better evaluation of results and will cause the results of action research to be more meaningful to both the practitioner and the field, as well as hold greater validity for practice.

Step Seven involves administration and organization, doing what is necessary to be sure all the elements are in place prior to intervening in

the problem. Such administrative issues could include deciding how to explain the project to the participants and being sure informed consent forms are ready and signed. The action researcher also needs to decide how to handle potential participants who do not want to participate. PAARN also stresses the importance of enlisting a colleague and a supervisor with whom to discuss this plan along the way and assess it at the conclusion.

Step Eight involves implementing the intervention and collecting the data. This step is actually the beginning of the “action” of action research. This step requires good prior planning (the previous steps under the planning phase) and, done well, should be the most interesting phase of the research. Why? Because it feels so satisfying at least to try to do something better--to satisfy the “itch” that has driven our action research process to this point. To implement this crucial phase of the action research cycle successfully, several questions must be answered: “Am I staying true to the initial plan?” “Am I collecting the data the way I said I would?” “Am I keeping close track of the data collection systems I have?” “Am I keeping in touch with my colleague both for my own support and to formulate ideas for what may be the next iteration of the project?”

Step Nine begins the evaluation phase in the action research cycle. When the practitioner has reached the end of the project timeline, it is important to look carefully at the data collected. Action research requires that the adult education practitioner-researcher do more than offer merely a subjective determination that “things seem to be better or worse.” Core questions at this point include: “What do the data reveal about our problem and the intervention?” “Were our criteria for success met?” “How far are we from attaining them?” “What do others think about the project?” “What are the tangible gains, if any?” “Were there any unanticipated results?”

After evaluating adequately the data from the project and providing some objective judgments about their relative worth, the practitioner-researcher now is ready to move to the final step: reflecting on the results and implications of the project. Some core questions at this step would include: “What has been the overall promise of the project?” “Did the changes observed actually reflect what happened?” “Did the new method or idea make a measurable difference?” “Was the difference sufficient to meet the criteria set?” “How would this work better another time?” “If there is promise in this approach, should there be another cycle?” If the intervention has been successful, the practitioner-researcher must con-

sider seriously conducting the same intervention again or a variation on it, because the capacity to see the same results with repeated tests of the intervention increases the usefulness of the study. While action research findings are not formally “generalizable,” repeated “like-outcomes” from interventions increase the usefulness of findings to others in similar setting of professional practice.

PAARN requests that the practitioner-researchers write up their action research findings into a formal monograph. The monographs, individually and collectively, can be helpful to other practitioners as they deal with similar problems in the practice setting. The growing body of monographs will also make a contribution to the knowledge base of our field.

Although the process of action research was initially taught in a bi-weekly training format, PAARN has employed a two and one-half day Summer Action Research Institute format for the past two years. Potential action research participants for the upcoming year from various regions of the state attend the Summer Institute and receive basic instruction in the methods of action research, personal and group assistance in developing their actual action research proposal, and formal approval on proposed projects before the end of the Institute. Each participant is provided the *Pennsylvania Action Research Handbook & Project Planner*, first written by B. A. Quigley in 1995-1996 and revised periodically based on input from past years. The planner provides a foundation and resource for each project. PAARN experts review all project proposals before the practitioner-researcher is permitted to begin the specific project.

A Summary of Types of Interventions in the First Five Years of PAARN

PAARN has been committed to dissemination of practitioner-research findings so that the benefits of interventions can bridge to agencies beyond the practitioner’s practice setting. Over 100 research monographs have been produced on projects by the practitioner-researchers and are currently available through PDE and from ERIC. In addition, the abstracts of monographs and summaries of findings are available for searching at the Learning From Practice (LFP) Website at www.learningfrompractice.org. Many questions and issues have been addressed over the past five years of PAARN interventions, including recruitment, retention, administration, ESL, student achievement and outcomes, diagnostic and student placement, special needs, and parenting skills.

Understandably, many practitioners were concerned with issues of learning among their clients. Of the 101 monographs currently in the PAARN database, 27 monographs are concerned with student outcomes and concentrate on interventions linked to improving critical reading and thinking skills, cooperative learning, metacognitive teaching-learning processes, increasing vocabulary, incentives, goal setting, eliminating finger counting, self-esteem, student progress, publication of a prison newsletter, computer-assisted learning, and pick-and-choose training sessions.

Recruitment and retention are also very popular. Ten monographs deal with recruitment issues. A sampling of such interventions include submission of names from newly enrolled and past students, direct referrals from post-secondary schools, use of open houses, early identification of new prison inmates who did not graduate from high school, student questionnaires for their opinions, and direct community involvement. The related issue of retention is addressed in 21 monographs. A sampling of the retention strategies tried include fine tuning orientations, offering extra workshops, implementing goal-setting and problem-solving strategies, conducting cooperative learning sessions, involving mentor and staff contact, combining interviews and creative writing assignments, forming support groups, comparing traditional GED to family literacy GED programs, offering extrinsic rewards, offering additional courses, and providing weekly progress meetings.

Administrative problems are perennial realities for ABE administrators. Since administrators also have been involved in the PAARN initiative, it is not surprising that administrative issues were studied in 17 monographs. A sampling of such interventions includes researching agency impact on students; revising various forms, manuals, and reports; staff empowerment; staff retention; and procedural changes to reduce waiting lists, increase volunteer recruitment, and improve tutor training.

Diagnostic and student placement concerns were studied by 8 researchers and involved strategies such as revising forms, using concept maps and criterion-referenced tests, comparing two GED practice tests, and comparing the Test of Adult Basic Education (TABE) to the Comprehensive Adult Student Assessment System (CASAS). Four additional projects looked into special needs situations including interventions such as testing extra volunteer tutors in the classroom and educational intervention with stroke-impaired patients.

Since a number of practitioners were involved in ESL efforts in their agencies, ESL is the focus of 9 monographs. A sampling of interventions include such strategies as using videotapes, using classroom tests, evalu-

ating progress using audiotapes, and mixing ESL students with native English-speaking students.

A number of projects are hard to categorize. Three of the studies tried to improve parental involvement in their children's education. The action strategies developed in these studies included the use of evaluation tools, independent study materials, and incentives. Two studies focused on increasing correspondence between incarcerated fathers and their children and rewriting to a basic reading level instruction sheets for hospital emergency room patient.

Impact Evaluation Results From PAARN's First Five Years

Because of the important needs in adult literacy that PAARN was designed to address, the Pennsylvania Department of Education has carried out a comprehensive program evaluation process on PAARN's impact. Systematically, since 1995, four core tools have been used to measure PAARN's impact on professional development: (a) impact evaluations with participants from the previous year, (b) impact evaluations with supervisors of participants from the previous year, (c) summative evaluations of current participants, and (d) external evaluation reports from an expert in action research and adult literacy.

Results from the impact evaluations of participants from previous project years have been very encouraging. Participants are interviewed one year after their involvement with PAARN. The majority (90+%) of participants believed that they had improved their problem-solving strategies and felt that they were able to deal with problems more systematically as a result of their PAARN involvement. The majority of participants believed action research had made lasting changes in both their classrooms and their agencies. Summative evaluation done with participants immediately upon finishing their action research projects indicated that 90% were satisfied with the training and support they received and were convinced that action research was a valuable way to resolve practice problems and add new knowledge to the field. All of the participants (100%) felt that action research was helpful to their work.

The impact evaluations conducted with supervisors of the PAARN participants the year following involvement with PAARN have produced equally positive results. An overwhelming majority of supervisors (90+%) rated action research very highly and wanted the rest of their staff trained

in it, while (80%) could point to lasting changes to their institutions and/or programs as a result of action research projects.

Conclusions

PAARN was established to help ABE, GED, and ESL practitioners develop better problem-posing/problem-solving skills, as well as enable them better to discover and validate the most promising strategies and techniques to improve daily practice. The past five years have clearly shown that PAARN has had a major impact on the professional development of adult education practitioners in Pennsylvania who have participated in this initiative. The development of the monographs and the availability of the results through a recently developed website (www.learningfrompractice.org) have permitted other practitioners to benefit from their colleagues' practice-based research. The current goal is to begin a synthesis of results and seek to uncover and validate the most promising strategies and techniques to address problems in the practice setting and improve the quality of ABE in Pennsylvania and beyond. Pennsylvania can be justifiably proud of ABE efforts to improve the professional development of practitioners. PAARN is simply one of many efforts developed through the foresight of ABE leaders. The growing body of evidence regarding the significant impact of PAARN should encourage the State to continue to move ahead with a successful element in its overall staff development efforts.

Notes

- ¹ We gratefully acknowledge the funding and professional support provided by the Pennsylvania Department of Education, Bureau of Adult Basic and Literacy Education. This support helped to create the Pennsylvania Action research Network (PAARN) and to develop the *PAARN Handbook and Project Planner*.
- ² The actual process of action research followed by PAARN is described more fully in B. A. Quigley & G. W. Kuhne (Eds.). (1997). *Creating Practical Knowledge: Posing Problems, Solving Problems, and Improving Daily Practice*. San Francisco: Jossey-Bass. (*New Direction for Adult and Continuing Education*, 73)