



Action Research as a Mechanism for Institutional Improvement

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Definition and Characteristics of Action Research

Action research involves practitioners, acting as researchers, who systematically scrutinize their own practice with the aim of improving it. For academic practitioners, action research involves the use of research methods in one's own classroom, department, or institution to systematically and intentionally examine and improve one's educational practice. "The broader concept of action research is a process of fact finding, taking action, evaluating the results, and sharing the detailed-documented experiences with colleagues and/or the community" (Lewin 1948; Noffke 1997). As Jean McNiff (1993) has argued, educational knowledge is created by individual teachers and educators as they attempt to express their values in their professional careers. Because of this relationship, action research can advance knowledge and improve practice in higher education by discovering what works best in a given situation, allowing for more informed decision making and practice. Through conducting action research, people can develop as professionals. In addition, departments and institutions benefit and become more efficient organizations (Zuber-Skenitt 1993; Mettetal 2003).

A common model of action research starts the process by identifying a problem; devising, implementing, and evaluating a solution; and then modifying practice in light of this evaluation. There are three keys to this type of reflective research: (1) a feeling of dissatisfaction with current practice; (2) a cognitive desire by the practitioner to do something to improve the situation; and (3) a commitment by the practitioner to act on the findings. Without a sense of purpose and commitment to action, the research effort could easily fail.

In short, action research can be defined as systematic processes used by practitioners to improve the quality of their decision making with the aim of increasing the rate of success in desired outcomes. Implied in this definition is the assumption that the products of the inquiry are made public, adding to the knowledge base of learning, management, and decision making, as well as being open to critique by colleagues and peers. Furthermore, in action research the faculty and administrators assume the role of researchers, either studying their own method of teaching and management or examining the cognitive processes of their own decision making.

Expert practitioner-researchers have described action research as having many unique characteristics, which include but are not limited to the following:

- Practitioner-based
- Powerfully engaging
- Targeted and purposeful
- Contextual
- Cyclical and systematic inquiry



- Action, not theory (does not require theoretical background)
- Collaborative and a venue for collegiality
- Model for opportunity in professional growth and development
- Involves responsibility and commitment through action
- Promotes self-reflection through sharing
- Proactive focus on how more than what or why
- Generates intuitive knowledge and is self-renewing
- Addresses real problems/concerns
- Explores one's own perceptions
- Provides a unique role for stakeholders

Action Research on the Scholarship of Teaching

It has been said that “the dedicated teaching of students requires a constant and often systematic search for answers to puzzles such as how best to implant an idea into a human mind” (Janovy 1985, 76). Action research is not only successful in its own right, but also has the ability to stimulate many of the participants to continue activities of similar kinds simultaneously (Kember 2000). Seeking systematic feedback on the impact of one's teaching performance can permeate educational practice. Furthermore, it does not require “previous theoretical exposure of any kind to initially engage in action research” (De Clerck 1990). Even if the actions are unsuccessful, practitioners gain new knowledge and perspectives, and they learn to be critical of their own practice, thinking, and actions (King 1990). However, action research could benefit if the individual or collective of individual instructors were aware of their own educational philosophy, teaching philosophy, and institution's mission statement, including knowing exactly who they are, what they believe, and what they want for their students (Black and Stave 2001). Awareness such as this helps practitioner-educators to develop clear conceptual frameworks and goals through which to base their inquiry. In addition, “As educators seek to bridge the gap between research and practice, action research empowers teachers to inform others of the results found in their own classrooms and schools” (Cox and Olson 1996).

We will provide a few examples of problems for action research in improving the scholarship of teaching identified by participants in one of our previous workshops. See Appendix 2, Table 1.

Action Research in Educational Management

In academic administration, action research aims to improve management and decision making by encouraging administrators to inquire how their own management and leadership actions allow them to make effective decisions and achieve desirable outcomes. Because of this, action research “has become increasingly prominent among management researchers as an espoused paradigm used to justify the validity of a range of research outputs” (Eden and Huxham 1996, 75). The broader concept of action research in change management and organizational development is a process of fact finding, developing strategies, taking purposeful action, evaluating the results, and sharing experiences with colleagues with the goal of improvement in decisions and decision making as well as changes and change implementation. It is a process in which practitioner-educators and academic managers use systematic and disciplined inquiry to study their own practices and the results of these practices in order to improve the quality of their decision making, change implementation process, and in turn academic achievement (Black and Stave 2001; Watt 1995; Calhoun 1994; Lippit, Langseth, and Mossop 1985).



The use of research methods in one's own work setting to examine and improve one's management practice has been defined as action or active research in management. It is the educational research that bridges the gap between theory and practice in the management and supervision processes with the aim of improving one's own decisions, implementing changes, and purposefully redirecting curriculum, instructional practices, and policies and procedures. In other words, it is a way for individual administrators to discover what works best in their own work environment by identifying a problem; devising, implementing, and evaluating a solution; and then modifying practice in light of this evaluation, thus allowing informed decisions to shape their day-to-day practice and achievement (McNiff 1993; Mettetal 2003). In short, "Action research is a way for people within an organization to study their own situations individually and collectively, try new practices, evaluate those innovations, adjust, and try again. It is one big cycle of continuous improvement" (Perry 2006, xii).

Action Research in Change Management

The goal of action research in change management is to improve academic managers' decision making and change implementation through directing their practice toward specific desirable ends. Its focus is to provide a format for documenting academic managers' efforts to improve their decisions, decision making, and change implementation and communicate their successes and failures to peers (McNiff 1993; Boyer 1990). In doing so, action research provides avenues to simultaneously examine and improve one's own administrative and management practices (Angelo 1991) and provides the means to create a decision and change implementation portfolio that can be used by upper administration as tangible evidence of success and professional development (Adams and Slater 1998). In this sense, and as Zuber-Skenitt has argued, action research not only advances knowledge, but also improves practice in higher education, simply because

Action research is conceived as a philosophy, a theory of learning, a methodology and a technique. The philosophy includes theories of action, critical theory and personal construct theory. The learning theory encompasses adult learning, experiential learning and double-loop learning. The methodology is based in the dialectical epistemology and the non-positivist paradigm. Examples of action research as a technique are the nominal group technique, the repertory grid technique and other tools aiding reflection and group discussion. (1993, 45)

Action research projects and case studies in educational management require the use of both quantitative and qualitative methods simply because they are based on holistic and systemic thinking and use multidisciplinary and cross-functional approaches. Thus, in order to advance and develop action research in educational management, we first have to understand paradigms and their influence on how we approach and evaluate research. Second, we need to "develop criteria for evaluating action research projects in educational management" (Näslund 2002, 321).

We provide a few examples of problems for action research in change management identified by participants in one of our previous workshops. See Appendix 2, Table 2.

Action Research in the Framework of the Academic Quality Improvement Program (AQIP)

Today, "We are in a critical age of assessment and accountability" (Perry 2006, xii). Most colleges and universities are confronted with quality issues on three levels: quality assurance, quality enhancement schemes, and quality enhancement of organizational development and supervision. While quality assurance and



quality enhancement schemes both are related to classroom teaching, learning, and curriculum, quality enhancement of organizational development and supervision is related to change management and decision-making processes. According to Kember, quality assurance schemes that are often imposed by universities or other related regulatory bodies aim “to ensure that teaching and courses reach some usually undefined minimum level of acceptance,” while quality enhancement schemes aim “for an overall increase in the quality of teaching” (2000, 6–7). On the other hand, quality enhancement of organization and supervision aims to improve the creation of planned change and decision-making processes throughout the vertical and horizontal levels of administration. Its aim is to identify current situations, set specific targets to research, design paths to take to attain identified goals, take designed purposeful actions, evaluate outcomes, and make needed changes to achieve continuous improvement based on data-driven decisions in cyclical form (Perry 2006).

Action research is designed and carried out as a quality enhancement scheme and quality enhancement process in which participants determine how to address a given matter that they themselves identify as of major concern within their professional domains (Kember 2000). They can do this by identifying a problem; devising, implementing and evaluating a solution; and then modifying practice in light of this evaluation (McNiff 1993). In this sense, action research provides practitioner-educators and managers with a state of constant exploration of their practices and opportunities to develop new alternatives for approaching problematic situations based on constant reflection and feedback. In this regard, it is very consistent with the AQIP methodology of institutional improvement. It is a methodological framework that helps academic leaders to design and conduct their own research projects and discuss how to use the outcomes to improve management and decision-making processes and, in turn, maximize performance and the achievement of desirable outcomes. Practitioner-educators and academic managers need to be proactive and responsive in actively participating in research in a way that is individually meaningful and that enhances, rather than interferes with, the primary activity of their institution. In other words, they need to be skilled reflective practitioners who are willing to engage in conducting research from inside out instead of from the outside in with the focus on a search for self-knowledge and improvement.

Action research in which educators and academic managers engage in systematic inquiry to develop new alternatives for approaching problematic classroom or institution situations has increasingly become a vehicle for involving teachers and managers in change processes (Spiegel 1995). Action research can be used as a tool, both for selection of AQIP Action Projects and to foster smaller, more organic activity within the organization in support of larger quality initiatives.

Action research is not only successful in its own right, but has the ability to stimulate many of the participants to continue activities of similar kinds simultaneously (Kember 2000). Seeking systematic feedback on the impact of one’s working performance can permeate educational practice. Educators and academic managers can begin to engage in action research without previous theoretical knowledge (De Clerck 1990). Even if the actions are unsuccessful, practitioners will gain new knowledge and perspective, and they will learn to be critical in and of their own practices, thinking, and actions (King 1990).

Final Remarks

Put simply, action research is a research methodology of problem solving of investigative practices through a cycle of systematic “reflection, investigation of issues, action, data collection, analysis, and more reflection in order to identify further areas for investigation” (Wallace 2008, 6). Involvement in action research helps to increase satisfaction with one’s own standards of practice and achievement of professional goals. This



is simply because it involves a reflective analysis and informed judgment of a person's practice, compared with what he/she wants it to be.

Riding, Fowell, and Levy put it in this way:

We believe that an action research approach can contribute very positively to activity within the tertiary sector concerned with teaching quality issues, and with national Teaching Quality Assessment initiatives. As "reflective practitioners"...we can achieve greater ownership of the evaluative process by becoming systematically self-assessing, alongside, and feeding into, external assessment processes:

Through systematic, controlled action research, higher education teachers can become more professional, more interested in pedagogical aspects of higher education and more motivated to integrate their research and teaching interests in a holistic way. This, in turn, can lead to greater job satisfaction, better academic programmes, improvement of student learning and practitioners' insights and contributions to the advancement of knowledge in higher education. (1995, 4)

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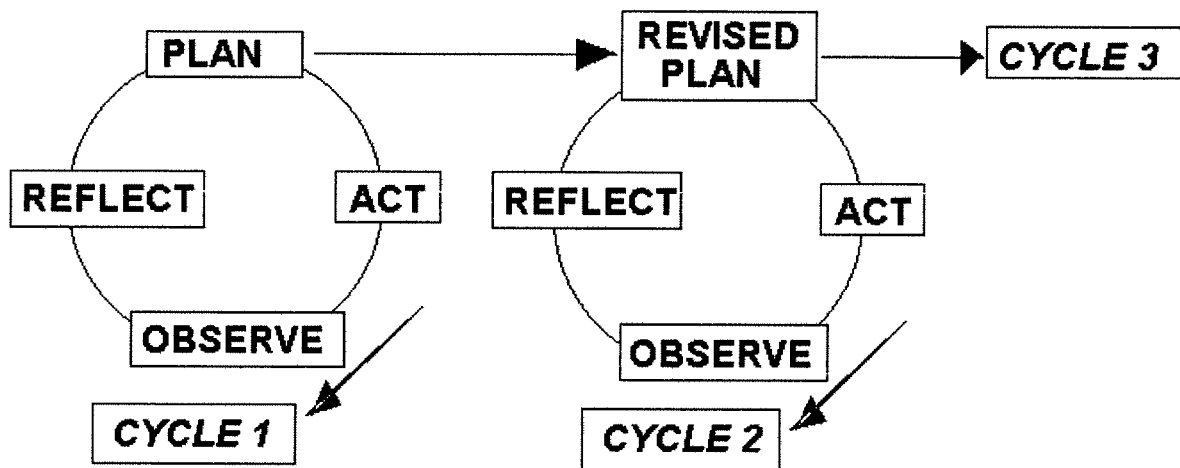
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Appendix 1 Conducting Action Research

A variety of forms and models have evolved in the literature. However, action research does not have a rigid list of steps or phases (Torp 2000). Most models include variations of similar steps including problem identification, action planning, implementation, evaluation, and reflection. As shown in the figure below, "The insights gained from the initial cycle feed into planning of the second cycle, for which the action plan is modified and the research process repeated" (Riding, Fowell, and Levy 1995, 7).



Phases of Action Research

Phase One: Targeting an Area of Interest: Problem Selection and Question Formulation

1. Circle one of the following areas where you would like to enhance what happens in your work environment: *Teaching, Learning, Curriculum, Assessment, Management and Supervision, Other*.
2. Identify any frustration (problems) or concerns that you may have within the area you have selected.
3. Has the frustration (problem) arisen in your mind as a result of observations and/or measurement of your own and or your coworkers' achievement, coworkers attitude, and/or coworkers behavior, or a combination of any of these factors? Elaborate.
4. Is the frustration (problem) or concern you have identified "nagging" or aggravating you? How/why?
5. If your answer to question 3 or 4 or both is no, think of another pressing problem or concern that you have with your change management and or work environment. State it. Check it against questions 3 and 4.
6. Transform the frustration (problem) or concern into a "how" question on which your action research will be centered. Start by transferring the frustration into problem and then the problem into question. This is important because as Perry (2006) has argued, problems can be solved, but frustrations can't.



7. Is your “how” question (a) about your own change management and or work environment; (b) involving thinking and exploring, not just answering questions; (c) useful/helpful in addressing your concerns and seeking practical answers?
8. How can you validate the clarity of the relationship between your main concern/problem and your inquiry-research question? Will exploring your “how” question address the problem/concern you have identified?
9. Now that you have your focus, where will you look for related research to clarify your question?
10. Now that you have reviewed relevant research, what sub-questions will you ask to inform your principal question?

Phase Two: Planning and Collecting Data

1. Identify those persons (stakeholders/participants/observers) who could provide answers to your inquiry-research questions and in turn be the main sources of data for which your action for quality enhancement of organizational development and supervision will be based.
2. What are the methods and procedures that would be the most effective in collecting sufficient data/information related to the identified concern/problem and your research question? (Examples: conducting observations, interviews, surveys, questionnaires, focus groups; examining exit cards, course evaluations, student work, course syllabi, videotapes, small group discussions, discussion boards, test scores, quizzes, attendance records; journaling; recording anecdotal notes.) List your preferences.
3. Is close observation of coworkers and or colleagues at work and the understanding based on their own perspective a constituent of your data sources in this action research? Which methods ensure both sources of data?
4. Which data sources will you be using for each sub-question that will be examined? Why? List the sources you have chosen by sub-question: (How will you triangulate the data?)
5. Will you be using quantitative methods, qualitative methods, or both? How and why?
6. Now design the methods and procedures that you have already determined to be the most effective, in order to collect sufficient data for you action research.
7. What kind of predictions will you make of the possible responses by the stakeholders?
8. Do you plan to have other people help you collect data, for example, by interviewing stakeholders, organizing and categorizing data, using evaluation grids and checklists? Who?
9. If your answer to question 8 is yes, what steps will you take to ensure accuracy, academic quality, and a high level of success?

Phase Three: Organizing, Analyzing, and Interpreting Data

1. What kind of techniques will you be using to organize the data and information you have collected (for example, from interviews, surveys, journal writings, small group discussions, results of assessments from colleagues or coworkers performance, and/or your own notes that you collected throughout specific period of time, such as checklists, theme charts)?
2. What kind of evaluation techniques will you be using to quantify qualitative information (for example, Richert scale)?



3. How will you analyze and interpret your data to assess the effectiveness of your own practice and to identify areas for improvement?
4. Since no single answer is correct in this kind of research, how will you validate the results of your data analysis, interpretation, and conclusions?
5. What kind of questions did the stakeholders bring up when you shared and discussed your findings and conclusions with them?
6. What did you and will you do with the questions and/or concerns that were brought up by stakeholders?

Phase Four: Planning for Action and Implementing Desirable Changes

1. How will you plan improvement strategies for your own practice?
2. Are the changes that you are able to identify based on the findings of the study you conducted?
3. Do you perceive the data you have collected, as well as the perspectives of the stakeholders, as “real” and “valid”?
4. In order to maintain focus and to make the changes more productive, how will you show alignment between the results of your data collection and the subsequent changes you plan to make?

Phase Five: Implementation of Changes

1. Having designed and implemented your action research plan, what is the most important feature of this type of research that distinguishes it from many other kinds of research?
2. Based on the results of your research, what are the immediate and long-term actions you will make?

Phase Six: Re-reflecting: Looking and Thinking Again

1. What are the new sets of questions and concerns that are generated as the result of the action you took and the changes you made?
2. Do you feel the need to re-examine your stakeholders? How?
3. Do you feel the need to re-examine your methods of data collection, categorizing, and data analysis? Be specific.
4. Do you feel the need to modify the focus of the inquiry-based research question? How?
5. Although generalizability is not a goal of action research, do you think the experience you had and the knowledge you gained worthwhile to share with other colleagues and the community? With whom? Where?
6. If you decide to write and publish your own action research studies, which information would you like to include in this published report?



Appendix 2

Examples of Action Research

The following tables represent a few examples of problems for action research identified by participants in some of our previous workshops.

Table 1. A Few Examples of Problems for Action Research in Improving the Scholarship of Teaching Identified by Participants in Previous Workshops

Number	Identifying Problem, Frustration, or Concern	Transforming a Frustration into Problem, and Problem into "How" Question
1	There is a continued exponential growth of scientific information, knowledge, and related skills and laboratory techniques but there is not enough time to teach everything in a given course and or curriculum.	How can instructor make the right decisions on which information takes precedence when there is not enough time in a semester course to teach everything?
2	Presenting the scientific method in the same way as the textbook and asking the students to read about it in the textbook does not guarantee that the students will understand the nature of science, master the scientific method, and/or be able to apply it in their lab assignments.	How can I best teach the scientific method to my students so they can understand and apply it, both in the lab and in their daily lives?

Table 2. A Few Examples of Problems for Action Research in Academic Management Identified by Participants in Previous Workshops

Number	Identifying Problem, Frustration, or Concern	Transforming a Frustration into Problem, and Problem into "How" Question
1	A number of faculty and administrators are resisting the change to the new blended learning instructional delivery approach.	How can we modify the existing college culture to minimize the resistance to change to blended learning?
2	Many long-time professors worry that cutting lectures into short segments to fit students' desire for Web delivery will lead to oversimplification and fragmented learning.	How can long-time professors adjust to the reality that students prefer short segments to class-length lectures on Web-based delivery?
3	All colleges and universities continually collect and store vast amounts of data, yet many institutions struggle in transforming college data into insightful and productive actions to meet mission goals and objectives.	How can colleges and universities best transfer their vast stored amounts of data into insightful and actionable information to help improve planned change, decision making, successful implementation, performance monitoring, and ability to respond quickly when needed to meet their mission goals and objectives?
4	Only a few students are benefiting from the available extended opportunities of educational services delivered via the Web in colleges and universities.	How can we migrate from a classroom-based class capture system to a full-scale class capture service delivered via the Web? How can we learn to improve student success and expand educational opportunities to include all students through a distributed education service delivered via the Web?
5	Many new college instructors lack educational experience in classroom management that is needed to overcome typical roadblocks facing new faculty. This could lead to significant frustration and poor performance. This in turn could lead to undesirable outcomes for becoming effective teachers and faculty members.	How can new college instructors overcome the typical roadblocks facing new faculty and gain educational experience in classroom management and improve their instructional success, and become effective teachers and faculty members?



Action Research as a Mechanism for Institutional Improvement

Number	Identifying Problem, Frustration, or Concern	Transforming a Frustration into Problem, and Problem into "How" Question
6	Many academic managers either lack understanding of the importance of the institutional copyright policy and intellectual property issues or lack the willingness to reinforce this type of policy and regulation specifically with students.	How can a productive understanding and aggressive reinforcement of institutional copyright policy and intellectual property issues be initiated and better sustained on a daily basis?
7	Most colleges and universities encourage their students and faculty to use student class portfolios, faculty teaching portfolios, etc., but few institutions have a set of standards and trained faculty and academic managers who have experience in how to evaluate these types of portfolios or understand what should be included and how it should be evaluated.	How can institutions set standards and train and support faculty and academic managers to read, evaluate, and assess the intellectual work captured in student learning portfolios and faculty teaching portfolios?
8	Many colleges are struggling in keeping students interested in staying in school and succeeding academically, which are the primary goals of all colleges and universities.	How can colleges and universities develop and implement strategies that help keep students interested in staying in school and succeeding academically?