

THE COUNTENANCE OF CURRICULUM ACTION RESEARCH: TRADITIONAL, COLLABORATIVE, AND EMANCIPATORY-CRITICAL CONCEPTIONS

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The action-research movement offers practitioners a research stance toward their work and is now enjoying a resurgence of interest as practitioners continue to expand their notion of what counts as good curriculum research. This paper has three objectives: to examine and explore the evolution of action research as a *scientific* enterprise; to discuss the *countenance*, or character, of contemporary curriculum action research by disclosing and focusing on the key concepts that give substance to the idiom of such inquiry; and finally, to present a practical model of the action-research process.

ACTION RESEARCH

The action-research movement has tried to make sense of the problematic social world and to improve the quality of life in social settings. Action research has been used in industrial, health, educational, and community behavioral settings.¹ Curriculum has no monopoly on action research. The aim of action research, as opposed to much traditional or fundamental research, is to solve practitioners' immediate and pressing day-to-day problems. Elliott has defined action research as "the study of a social situation with a view to improving the quality of action within it."² Practitioners carry out action research, *in situ*, to resolve conflicts and to improve their understanding of events, situations, and problems and so to increase the effectiveness of their practice.

The primary goal of this research is not to write research reports and other publications. Action research aims at feeding the practical judgment of actors in problematic situations. The validity of the concepts, models, and results it generates depends not so much on scientific tests of truth as on their

¹For a historical overview of action research in educational and non-educational settings, see Mike Wallace, "A Historical Review of Action Research: Some Implications for the Education of Teachers in Their Managerial Role," *Journal of Education for Teaching* 13 (No. 2, 1987), 97-115. See also Alfred W. Clark, ed., *Experimenting with Organizational Life: The Action Research Approach* (New York: Plenum Press, 1976).

²John Elliott, "Action Research: A Framework for Self-Evaluation in Schools," *Schools Council Programme 2, Teacher Pupil Interaction and the Quality of Learning (TIQL)*, Working Paper No. 1 (Norwich: University of East Anglia, 1981).

utility in helping practitioners to act more effectively, skillfully, and intelligently. Theories are not validated independent of practice and then applied to curriculum, they are validated through practice. Action research is thus grounded curriculum theory.

Rapoport's definition is often cited: "Action research aims to contribute both to the practical concerns of people in an immediate problematic situation and to the goals of social science by joint collaboration within a mutually acceptable ethical framework."³ Rapoport sees action research as a special type of applied research that involves participants experiencing problems directly in the search for a solution and also feeds social science with some theoretical payoff.

A curriculum is an educational proposal, or hypothesis, that invites a critical response as it is implemented. A curriculum invites teachers and others to adopt a research stance toward their work, suggesting rigorous reflection on practice as the basis of further professional development. Stenhouse defines research as "systematic and sustained inquiry, planned and self-critical, which is subjected to public criticism and to empirical tests where these are appropriate."⁴ The key idea is that each classroom or work space becomes a laboratory for empirically testing hypotheses and proposals that are the planned and implemented curriculum. Every practitioner is thus a member of a critical community of educational scientists.

Therefore,

Action research is the scientific process whereby in a given problem area, where one wishes to improve practice or personal understanding, inquiry is carried out by the practitioner—first, to clearly define the problem, second, to specify a plan of action, including testing hypotheses by applying action to the problem. Evaluation is then undertaken to monitor and establish the effectiveness of the action taken. Finally, participants reflect, explain developments, and communicate these results to the community of action researchers. Action research is systematic inquiry by practitioners to improve curriculum.

This minimal definition stresses two essential points: Action research is rigorous, systematic inquiry through scientific procedures, and participants have critical-reflective ownership of the process and the results.

Historical and Philosophical Foundations of Action Research

Action research has developed from a complex web of scientific and social enterprise. Several writers⁵ argue that Kurt Lewin⁶ was the founder of

³Robert N. Rapoport, "Three Dilemmas in Action Research," *Human Relations* 23 (June 1970): 499.

⁴Lawrence Stenhouse, "What Counts as Research," *British Journal of Educational Studies* 29 (June 1981): 113.

⁵See, for example, Isidor Chien, Stuart W. Cook, and John Harding, "The Field of Action Research," *American Psychologist* 3 (March 1948): 43–50; L. David Brown and Rajesh Tandon, "Ideology and Political Economy in Inquiry: Action Research and Participatory Research," *Journal of Applied Behavioral Science* 19 (No. 3, 1983): 277–294.

⁶Kurt Lewin, "Action Research and Minority Problems," *Journal of Social Issues* 2 (1946) 34–46.

action research through his work in the group-dynamics movement of the post-war reconstructionist period. Careful study of the literature shows clearly that action research is a root derivative of the scientific method reaching back to the science-in-education movement of the late nineteenth century. This paper provides some evidence of action research in use by a host of social reformist initiatives before the Lewinian conceptualization. Action research has employed various principles and procedures throughout its long history and is now in a transient stage of redevelopment.

Today, several historical and philosophical movements have influenced action research:

- the science-in-education movement of the nineteenth and early twentieth centuries
- experimentalist and progressive educational thought
- the group-dynamics movement in social psychology
- the post-war "Corey-era" reconstructionist curriculum-development movement in the United States
- the teacher-researcher movement in the United Kingdom, United States, and Australia, aided by developments in curriculum evaluation, critical theory, and qualitative research methodology in social science

The Science-in-Education Movement

In the late nineteenth century, Mill, Bain, Boone, Dewey, and Thorndike, for example, advocated the use of the scientific method to solve problems Darwin had aroused scientific interest, and by 1900 numerous scientific associations had begun to affect the character and culture of curriculum and education. In 1879, Bain, the Scot, published *Education as a Science*,⁷ in which he advocated the use of the scientific method. In 1904, Boone, the American, argued in the *Science of Education*:

For reliable results there are needed trained observers. . . . There is needed a body of earnest teachers who are students, and who are ready to make everyday's undertakings an object of fresh, thoughtful¹, critical direction. . . . There is needed a mind in studious of professional problems in an impersonal way, open-minded, as if working in a laboratory⁸

Thus, the stage was set for viewing teachers as researchers, working scientifically in their classroom-laboratory. Several progressive and reconstructionist thinkers later developed this image of the teacher as a scientist.

Perhaps the most interesting and influential book promoting the notion of the teacher as an active researcher was *Research for Teachers*, by Buckingham.⁹ In "The Teacher as Research Worker," he states. "Teaching and

⁷Alexander Bain, *Education as a Science* (New York: Appleton and Company, 1879)

⁸Richard Gause Boone, *Science of Education* (New York: Charles Scribner's, 1904), p. 200.

⁹Burdette Ross Buckingham, *Research for Teachers* (New York: Silver Burdett, 1926)

research should be required of faculty members not only in higher educational institutions but also in the public school."¹⁰ Writing from within the scientific movement in education, Buckingham also sensed the need for insider-outsider cooperation in research:

As long as learning experiments are handled by psychologists alone we shall make slow progress so far as education is concerned. . . . We have a lot of piecemeal but no quantity of production. The only persons who can supply that need in this respect are the teachers.¹¹

Buckingham argued for scientific testing and the use of quantitative-statistical skills for teachers, but he was not opposed to qualitative inquiry: "Among the many types of research work available to teachers, the making of case studies is by no means unimportant."¹² Counts remarks: "Without doubt the finest educational fruit which the practical sense of the American people has borne is the movement for the scientific study of education."¹³

The Experimentalist-Progressive Philosophy of Education

The science-in-education movement and the later progressive period overlapped considerably. The links between experimentalism with curriculum research as a scientific activity are important. The paramount influence came from Dewey in *How We Think*,¹⁴ in which he outlines his scientific, or reflective, problem-solving approach. Dewey applied the scientific method and process as a logic, or set of principles of procedure, to be followed in such diverse areas as aesthetics, logic, ethics, epistemology, psychology, and education. In *Logic: The Theory of Inquiry*,¹⁵ he once again argues that there must be a unity of the structure of inquiry in both common sense and science. He promoted logic as a method of scientific thinking and problem resolution. Later action researchers, such as Lewin, Corey, and Taba, also followed these steps of reflective thinking, thus demonstrating the linkage of the scientific method with action research.

In 1929, Dewey argued in *The Sources of a Science of Education*¹⁶ that a proper role of the teacher was to investigate pedagogical problems through inquiry. In "The Teacher as Investigator," he suggested:

Educational practices provide the data, the subject matter which form the problems of enquiry. . . . A constant flow of less formal reports on special school affairs and results is needed. . . . It seems to me that the contributions that might come from classroom

¹⁰Ibid., p. 379

¹¹Ibid., p. 369

¹²Ibid., p. 378

¹³George Counts, in *Encyclopedia of Education* 7 (New York: Macmillan, 1971), p. 520

¹⁴John Dewey, *How We Think* (Boston: D.C. Heath, 1910).

¹⁵John Dewey, *Logic: The Theory of Inquiry* (New York: Henry Holt, 1938)

¹⁶John Dewey, *The Sources of a Science of Education* (New York: Horace Liveright, 1929)

teachers are a comparatively neglected field, or, to change the metaphor, an almost unworked mine.¹⁷

Dewey further elaborated on the teacher-researcher idea. "It is impossible to see how there can be an adequate flow of subject matter to set and control the problems investigators deal with, unless there is active participation on the part of those directly engaged in teaching."¹⁸

The progressive era did much to encourage teachers to apply the scientific method of problem solving to curriculum development. Teacher involvement in both curriculum research and development became more direct after 1930 because of two famous American projects: *The Eight Year Study*¹⁹ and *The Southern Study*.²⁰ In *The Southern Study*, which adopted an action-research program, practitioners identified and solved problems of curriculum design and materials production through curriculum working parties and workshops, rigorously employing the scientific method as the work ethic.

The Group-Dynamics Movement

In the mid-1940s, Lewin discussed action research as a form of experimental inquiry based on the study of groups experiencing problems.²¹ Lewin argued that social problems should serve as the locus of social science research. Basic to Lewin's model is a view of research composed of action cycles including analysis, fact finding, conceptualization, planning, implementing, and evaluating action. Lazarsfeld and Reitz²² point out that Lewin used his social scientific expertise to help one of his students, Alfred Marrow, whose family owned a factory with morale problems. Lewin helped not only because of personal interest but because of his belief in applying his theories to work situations—for Lewin, the study of individual attitudes and decisions made under the influence of small groups, which in turn could be later manipulated, attracted his interest. Lewin was interested above all else in group dynamics and the concept of action in group settings. In his native Germany, the concept

¹⁷Ibid., p. 46

¹⁸Ibid., pp. 47–48

¹⁹Wilford Merton Atkin, *The Story of the Eight Year Study* (New York: Harper and Brothers, 1942)

²⁰See *The Southern Study*, Cooperative Study for the Improvement of Education: A Staff Report of the Southern Association Study in Secondary Schools, prepared by F. Jenkins, D. C. Kent, V. M. Sims, and E. A. Waters, reprinted from *Southern Association Quarterly* 10 (February–August 1946). *The Southern Study* is an early example of school-based curriculum action research in which participating teachers used curriculum-development workshops and employed the scientific problem-solving method in the development of their programs.

²¹Cf. Kurt Lewin, "Group Decision and Social Change," in *Readings in Social Psychology*, ed. Theodore Newcomb and Eugene Hartley (New York: Henry Holt, 1947), pp. 330–344; Kurt Lewin, *Frontiers in Group Dynamics II. Channels of Group Life: Social Planning and Action Research*, "Human Relations" 1 (February 1947): 143–153.

²²Paul Lazarsfeld and Geoffrey G. Reitz, *An Introduction to Applied Sociology* (New York: Elsevier, 1975), pp. 7–8

of action (*bandlung*) was pivotal in the social sciences, though not in the United States before the war. Only much later was the term *action research* used in a sense of misunderstanding in social science in the pursuit of practical goals.

Lewin's contribution is important because, although not the first to use and write about action research, he did construct an elaborate theory and made action research respectable inquiry for social scientists. Action research came to be hailed as an important innovation in social inquiry. Lewin believed that science should have this social help function, he stated, "Research that produces nothing but books will not suffice."²³

Action research was used in the study of industry²⁴ and developed a committed following in the United States at the Massachusetts Institute of Technology and in England through the work of the Tavistock Institute of Human Relations in London. Many action-research projects have been described in the journal of the Tavistock Institute, *Human Relations*.

Lewin believed that to understand and change certain social practices, social scientists must include practitioners from the real social world in all phases of inquiry. Several writers used the term or the concept *action research* before Lewin. Writung in 1946, Lippitt and Radke²⁵ document eight studies using the action-research procedure, mainly under the direction of the U.S. Commission on Community Interrelations during the 1940s. In a paper read at the 1938 meeting of the Eastern Psychological Association, Seltiz and Cook, noted social psychologists, asked, "Can research in social science be both socially useful and scientifically meaningful?" The psychologists argued that research should be conducted with social agencies that have action programs in the field to ensure that problems are of live social concern and that the results will be immediately useful and applicable in real life situations²⁶

Another writer who employed the term *action research* before Lewin was Collier, U.S. Commissioner on Indian Affairs (1933–1945) concerned with planning and developing social programs linked with research findings. Collier stated: "Since the findings of research must be carried into effect by the administrator and the layman, and must be criticized by them through their experience, the administrator and the layman must themselves participate creatively in the research impelled as it is from their own area of need."²⁷

²³Kurt Lewin, *Resolving Social Conflicts* (New York: Harper & Row, 1948), p. 203

²⁴See William Foote Whyte and Edith Lentz Hamilton, *Action Research for Management: A Case Report on Research and Action in Industry* (Homewood, Ill.: Irwin Dorsey, 1964); Elliot Jaques, *The Changing Culture of a Factory* (New York: Dryden Press, 1952)

²⁵Ronald Lippitt and Marian Radke, "New Trends in the Investigation of Prejudice," *Annals of the American Academy of Political and Social Science* 244 (1946): 167–176

²⁶Rachel DuBois, *Neighbors in Action* (New York: Harper, 1950), p. 217

²⁷John Collier, "United States Indian Administration as a Laboratory of Ethnic Relations," *Social Research* 12 (May 1945): 276

Post-War "Corey-Era" Action Research in Curriculum Development

Several post-war social reconstructionist writers promoted the use of action research in education. Corey²⁸ led this movement, he believed that action research could significantly change and improve curriculum practice, mainly because practitioners would use the results of their own research investigations. Unlike Lewin, Corey did not believe that generalizations could be made from action-research projects to other populations. Interest was high during the 1950s to use action research as a general strategy to design curriculums and to attack complex problems, such as intergroup relations and prejudice, through large curriculum-development projects.²⁹

This period is referred to as the era of cooperative action research³⁰ because teachers and schools cooperated with outside researchers by becoming clients in making their pupils and teachers available for research. Toward the end of the 1950s, action research declined and was the subject of increased attack.³¹ In "Whatever Happened to Action Research," Sanford³² suggested that the decline was directly related to the split between science and practice, which was supported by the movement toward establishing expert educational research and development laboratories. This movement highlighted the separation of theory and practice and was manifested through the top-down development strategy of the research, development, and dissemination (RD&D) model insulating professional researchers from the teaching ranks. The separation has prevented researchers from studying problems in the field, particularly studies involving innovative practice.

Contemporary Curriculum Action Research and Development

Action research has enjoyed a new rejuvenation because of recent curriculum landmark studies³³ suggesting that school-based problem-solving approaches to curriculum change are more likely to be successfully implemented than large, federally funded, central initiatives. Lieberman and Miller³⁴

²⁸Stephen Corey, *Action Research to Improve School Practices* (New York: Columbia University, Teachers College, Bureau of Publications, 1953)

²⁹Hilda Taba, Elizabeth H. Brady, and John T. Robinson, *Intergroup Education in Public Schools* (Washington, D.C.: American Council on Education, 1952)

³⁰John Verduin, *Cooperative Curriculum Improvement* (Englewood Cliffs, N.J.: Prentice-Hall, 1967).

³¹Harold L. Hodgkinson, "Action Research—A Critique," *Journal of Educational Sociology* 31 (December 1957): 137–153.

³²Nevitt Sanford, "Whatever Happened to Action Research," *Journal of Social Issues* 26 (No. 4, 1970): 3–23

³³Paul Berman and Milbrey Wallin McLaughlin, *Federal Programs Supporting Educational Change, Volume VII Factors Affecting Implementation and Continuity* (Santa Monica, Calif.: Rand Corporation, 1977), John I. Goodlad, *The Dynamics of Educational Change* (New York: McGraw-Hill, 1975), and John I. Goodlad, *A Place Called School* (New York: McGraw-Hill, 1984).

³⁴Ann Lieberman and Lynne Miller, "School Improvement: Themes and Variations," *Teachers College Record* 86 (Fall 1984): 4–19

posit that in the 1970s action research was rediscovered and renamed *interactive research and development*. This interactive or collaborative research and development perspective has been widely endorsed. Previous interventions have included: The Interactive Research and Development on Teaching Study (IR&DT) of Tikunoff, Ward, and Griffin;³⁵ the Interactive Research and Development Study of Schooling (IR&DS) of Griffin, Lieberman, and Jacullo-Noto;³⁶ the IR&D projects by Huling and others;³⁷ and the project sponsored by the National Institute of Education, Action Research on Change in Schools (ARCS).³⁸

Collaboration suggests that each team shares in planning, implementing, analyzing, and reporting the research and that team members contribute unique skills and expertise in a collective process.³⁹ Often, teams are made up of university faculty, district teachers, administrators, educational laboratory research and development personnel, and representatives of funding bodies. Some IR&D projects do not use the term *action research* in their remit, yet through the collaborative relationship with practitioners organized as a team of teachers, a researcher, and a staff developer, pressing curriculum problems are addressed. Several key concepts discussed later (in The Countenance of Curriculum Action Research) have been identified through the interactive perspective. This interactive team perspective is now the major mode of conducting action research in the United States.

Besides helping practitioners acquire research skills, collaborative-interactive action research will probably increase the likelihood that teachers will use their own research, and learn from others' research, in their work. It will also enable practitioners to develop a more personal conception of what counts as legitimate research.⁴⁰ Contemporary approaches have stressed the development of teachers' research skills.⁴¹ In the United States, the National Science Teachers' Association has called for every teacher to be a researcher.⁴²

³⁵William J. Tikunoff, Beatrice Ward, and Gary A. Griffin, *Interactive Research and Development on Teaching Study*, Final Report (San Francisco: Far West Laboratory for Educational Research and Development, 1979)

³⁶Gary A. Griffin, Ann Lieberman, and Joann Jacullo-Noto, *Executive Summary of the Final Report on Interactive Research and Development on Schools* (Austin: University of Texas, Research and Development Center for Teacher Education, 1983)

³⁷Leslie R. Huling, Myron Trang, and Linda Correll, "Interactive Research and Development A Promising Strategy for Teacher Education," *Journal of Teacher Education* 32 (November-December 1981): 13-14

³⁸Sharon Nodie Oja, *Final Report A Two Year Study of Teacher Development in Relation to Collaborative Action Research in Schools* (Durham: University of New Hampshire, Collaborative Action Research Project Office, 1983)

³⁹F. Michael Connelly and Miriam Ben-Peretz, "Teachers' Roles in the Using and Doing of Research and Development," *Journal of Curriculum Studies* 12 (April-June, 1980): 95-107

⁴⁰Dorene D. Ross, "A Practical Model for Conducting Action Research in Public School Settings," *Contemporary Education* 55 (Winter 1984): 113-116

⁴¹Jean Rudduck and David Hopkins, eds., *Research as a Basis for Teaching* (London: Heinemann, 1985).

⁴²John W. Butzow and Dorothy Gabel, "Be Researchers," *The Science Teacher* 53 (No. 1, 1986): 33-37.

The contemporary status of the action-research movement is closely linked with the growing belief in school-based curriculum development, inservice education and training, curriculum evaluation (especially self-evaluation), and the fundamental notion of teacher professionalism itself. A major impetus for this new professionalism is the teacher-researcher movement.

The Teacher-Researcher Movement

The teacher-researcher movement marks a radical departure from the conventional view of curriculum research as a specialist occupation. In Britain, the call came initially from Stenhouse⁴³ and his pedagogical concerns based on the Humanities Curriculum Project (1967–1972) and his curriculum writing. In his influential *An Introduction to Curriculum Research and Development*, published in 1975, Stenhouse states his major thesis in “The Teacher as Researcher”: All teaching should be based on research, and research and curriculum development are the preserve of teachers; the curriculum then becomes a means of studying the problems and effects of implementing any defined line of teaching. Practitioners increase their understanding of their work, and thus teaching is improved.

The goal of understanding was paramount for Stenhouse. At the Centre for Applied Research in Education, University of East Anglia, where Stenhouse held the Chair of Education, a plaque reads: “It is teachers who, in the end, will change the world of the school by understanding it.” Elliott, a former colleague of Stenhouse, said: “What Stenhouse offered teachers was a curriculum conceived as a set of hypotheses they could experiment with as the basis for a reflective translation of educational ideas.”⁴⁴ Stenhouse linked action research to his major pedagogical innovation: the neutral chairperson strategy in the discussion of controversial issues through the Humanities Project.

Another important concept for Stenhouse was emancipation, and his *Authority, Education, and Emancipation*⁴⁵ makes compelling reading. For Stenhouse, emancipation is the autonomy we recognize when we eschew paternalism and the role of authority and hold ourselves obliged to appeal to judgment. Stenhouse argued that the teacher-researcher role is the route to emancipation, since it eschews the authority or expert role in favor of the belief that knowledge is provisional and tentative—at best the base camp for the next attack. Stenhouse believed that research strengthens the teacher’s judgment and self-directed improvement of practice and that the most impor

⁴³Lawrence Stenhouse, *An Introduction to Curriculum Research and Development* (London: Heinemann, 1975).

⁴⁴John Elliott, “A Curriculum for the Study of Human Affairs: The Contribution of Lawrence Stenhouse,” *Journal of Curriculum Studies* 15 (April–June 1983) 108–109.

⁴⁵Lawrence Stenhouse, *Authority, Education, and Emancipation* (London: Heinemann, 1983).

tant focus for research is curriculum, since it is the medium through which knowledge is communicated.

Stenhouse's effect has been phenomenal, in Britain at least. Since 1976, a Classroom Action Research Network has been developed by John Elliott, his colleague, and director of the Ford Teaching Project, which produced some interesting accounts of collaborative action research, particularly the method of "triangulation."⁴⁶

The now-defunct Schools Council in Britain sponsored Programme Two—Helping Teachers to Become More Effective—which gave the action-research movement a solid grass-roots base. Many working papers from Programme Two—Teacher Pupil Interaction and the Quality of Learning (TIQL)—are extremely enlightening.⁴⁷

In the last few years, several books have appeared on the teacher-action-researcher theme in Britain, some written by teachers. Some recent British work has focused on research skills and methods for doing action research in naturalistic settings. Two interesting books addressing action-research methodology are Rob Walker's *Doing Research. A Handbook for Teachers*⁴⁸ and David Hopkins's *A Teacher's Guide to Classroom Research*,⁴⁹ both pieces addressing aspects of inservice education and the need to equip practitioners with practical methods for conducting inquiry. Interviews, questionnaires, observation, logs, diaries, checklists, and case studies.

In Britain, Europe, and Australia, the growing band of teacher-researchers who have become teacher-writers are almost advocating a rigid separation between insiders and outsiders. Nixon's *A Teacher's Guide to Action Research*⁵⁰ was written exclusively by teachers for teachers, and Hustler, Cassidy, and Cuff's *Action Research in Classrooms and Schools*⁵¹ suggests that this trend of reporting small, practical case studies of action research by teachers will continue. More and more teacher researchers are forming a community of discourse and are willing to risk failure through inquiry. They are largely autonomous with their own action research networks, associations, and meetings.

Other useful ideas relating to the teacher researcher notion are developed in *Issues in Educational Research Qualitative Methods*, by Burgess⁵²

⁴⁶John Elliott and Clem Adelman, *Innovation at the Classroom Level The Ford Teaching Project CE203* (Milton Keynes: Open University Press, 1976).

⁴⁷See John Elliott, "Action Research: A Framework for Self-Evaluation in Schools," Working Paper No. 1 (London: Schools Council TIQL Project, 1981), Dave Ebbutt, "Teachers as Researchers How Four Teachers Coordinate the Process of Research in Their Respective Schools," Working Paper No. 10 (London: Schools Council TIQL Project, 1983).

⁴⁸Rob Walker, *Doing Research: A Handbook for Teachers* (London: Methuen, 1985).

⁴⁹David Hopkins, *A Teacher's Guide to Classroom Research* (Milton Keynes: Open University Press, 1985).

⁵⁰Jon Nixon, ed., *A Teacher's Guide to Action Research* (London: Grant McIntyre, 1981).

⁵¹David Hustler, Anthony Cassidy, and Ted Cuff, eds., *Action Research in Classrooms and Schools* (London: Allen and Unwin, 1986)

⁵²Ray Burgess, ed., *Issues in Educational Research Qualitative Methods* (London: Falmer Press, 1985).

and in a collection of Stenhouse's writings, edited by Rudduck and Hopkins, *Research as a Basis for Teaching*.³³

Critical Action Research

Carr and Kemmis proposed a radical alternative approach to educational action research, both philosophically and methodologically, in *Becoming Critical: Education, Knowledge, and Action Research*.³⁴ This book is intellectually sterner stuff and adds a new, exciting critical-reflective perspective to doing action research. Carr and Kemmis eschew a positivist-empirical approach in favor of a critical-interpretive-activist philosophy, which has much in common with the new critical theory in philosophy and the social sciences informed by Habermas and members of the Frankfurt School, with aspects of Friere's liberation pedagogy and Marxist conceptions added.

Carr and Kemmis have sketched this critical-emancipatory mode of action research and describe its relationship with educational science and theory. This critical action research is akin to the new interpretive sociology, with the added dimension of action accompanying the sister concepts of interpretation and explanation of social reality. At a substantive level, critical educational action research rejects the positivist belief in the instrumental role of knowledge in problem solving, arguing that critical inquiry enables practitioners to search out not only interpretive meanings that educational actions have for them but to organize actions to overcome constraints on action. It is a critical theory linked with reconstructive action and is critical of both positivist and critical interpretive theories because they are passive—seeking to explain, not linked with human action.

Critical educational action research is supposedly grounded in the interpretive categories of practitioners. Like other critical theory, the Carr and Kemmis account gives priority to a critique of practices that thwart rational goal achievement. It also deviates from more conventional action research in its field-work methodology, laying stress on equipping practitioners with discursive, analytical, and conceptual skills so that they may be liberated and emancipated from the control of positivism and interpretive theory through their communities of self-reflective group understanding. Heightening understanding through hard critique is the *modus operandi*.

In Australia, significant critical-emancipatory action research has been developed at Deakin University and reported by Kemmis and others in *The Action Research Reader*³⁵ and by McTaggart and others in *The Action Research*

³³Jean Rudduck and David Hopkins, eds, *Research as a Basis for Teaching* 53 (No. 1, 1986). 33–37

³⁴Wilfred Carr and Stephen Kemmis, *Becoming Critical: Education, Knowledge, and Action Research* (London: Falmer Press, 1986).

³⁵Stephen Kemmis, ed., *The Action Research Reader* (Geelong, Victoria: Deakin University Press, 1982).

Planner.⁵⁶ Critical-emancipatory action research perceives of curriculum problems as value-laden, moral concerns rather than purely technical, and the problems combine what Habermas refers to as two knowledge-constitutive interests: practical and emancipatory.⁵⁷ Science then becomes hermeneutical, or critical, based as it is on a series of self-reflective spirals of human action, playing off past retrospection against possible future action. Critical theorists argue that positivism has made scientific thinking technical, thus placing constraints on reason. Critical action research is a flight from this "technologization of reason."

If practitioners do not easily accept ideology and educational theories, then what is the use of such an intellectually complex and difficult set of theoretical propositions for practitioners? This approach appears more ideally suited for the academy and the postgraduate seminar rather than the classroom because of its lofty discourse and analytical complexity—it would have more attraction for teachers enrolled as research students pursuing doctoral studies in university departments. Carr and Kemmis explain that the ideology is necessary for teachers to examine and critically assess the key philosophical positions in the field of educational research and "to give teachers, teacher educators and educational researchers access to the language and arguments with which they may resist the claim that educational research should be the sole preserve of academic experts."⁵⁸ This position of giving practitioners the new philosophical language and conceptual discourse seems at odds with the declared intention of grounding critical action research in the language of practitioners.

Developments in Evaluation and Qualitative Methodology

Demands for school accountability, curriculum program evaluation, and teacher self-evaluation have developed simultaneously with the explosion of interest in qualitative field methodology—all moving away from strict measurement, prediction, and control toward increased description, narrative, and explanation rooted in understanding as the principal concerns of investigations. Illuminative evaluation was an initial starting point in evaluation, and Short⁵⁹ has noted that the major trends in curriculum research between the mid-1970s and 1980s included increasing work using historical, ethnographic, humanistic or artistic, interpretive, critical, and other forms of inquiry.

Alternatively, a growing number of teacher-researchers have been doing research in response to the demands of accountability. These practitioners

⁵⁶Stephen Kemmis and Robin McTaggart, *The Action Research Planner* (Geelong, Victoria: Deakin University Press, 1982).

⁵⁷Jürgen Habermas, *Knowledge and Human Interests* (Boston: Beacon Press, 1971).

⁵⁸Stephen Kemmis, ed., *The Action Research Reader* (Geelong, Victoria: Deakin University Press, 1982), p. 2.

⁵⁹Edmund Short, "Curriculum Research in Retrospect" (paper read at the annual meeting of the Society for the Study of Curriculum History, Washington, D.C., April 1987).

often reject psychometric forms of educational research, preferring a discourse rooted in the linguistic framework of classroom language. This alternative community of teacher researchers has also continued to expand, largely because of the inability of more traditional styles of research to address practitioners' pressing problems. Even when outside experts have studied the problems, they have tended to define the problems being researched in their own terms, employing social scientific conceptual frameworks and using research methods and report language alien to the practitioner.

Curriculum research, and much educational research, still remains a specialist activity engaged in by professionally trained social scientists who operate outside of the curriculum and classrooms, chiefly for the benefit of those outside the school and classroom. New traditions of collaborative and critical action research fosters practitioner equality in research work from problem definition to data collection, analysis, and solution. This dynamic partnership of insiders and outside facilitators mutually benefits all participants, but most especially those inside the classroom.

THE COUNTEANCE OF CURRICULUM ACTION RESEARCH

The nature or face of curriculum action research may be disclosed by careful analysis of the central concepts, which give structure, unity, and understanding to the action-research process. The purpose of this section is to offer a sketch of the major concepts that illuminate the character and countenance of action research.

The 16 key concepts are not an objective summation of traits and trends drawn from an equal emphasis; they represent my own perspective: an implicit theory and ideology about what counts as good action research. Accordingly, this portrait borrows concepts from the Type I action-research tradition (Dewey, Corey, Lewin, Taba), the Type II tradition (Stenhouse, Ellfott, IR&D exponents), and the Type III critical theorists (Carr, Kemmis, Freire, Habermas). Thus, the portrait is eclectic and synthesizing, incorporating profound ideas from diverse strands of theoretical and practical interventions in the field. Rather than dismiss whole paradigms and traditions in building this conceptual framework, I took what is useful and good and brought these together in a coherent body that provides economy and structure in understanding action research. Key concepts are needed to capture the essence and express the nature of this understanding. These concepts should be regarded as tentative and provisional. Their usefulness needs to be tested further, and new concepts need to be generated to build a more rigorous theory.

The unifying theme is that all action research is a form of scientific inquiry, governed by rigorous principles or canons of procedure. The scientific method provides a unity of the structure of common-sense thought and science. This portrait is rough-hewn, even opaque—yet it aspires to portray the idiom of the activity.

Key Concepts in Action Research

1. *Increased human understanding.* A major goal of action research is to increase personal and group understanding of curriculum situations, events, problems, and other objects of inquiry. Action research is thus a form of critical or hermeneutical inquiry; it focuses on the problem of understanding our own and others' understanding of a curriculum problem. Reflective thinking is the chief element in this process. In Gadamer's⁶⁰ view, interpretive understanding is the most central act of being human, and by engaging in such acts we enhance our humanity.

In all types of action research, the goal is to improve practices and our understanding of practices. Noffke and Zeichner,⁶¹ in their multinational review of the effect of various action-research projects on teacher understanding and thinking, report the following claims made by several Australian, British, and American projects:

- changes in teachers' definitions of professional skills and roles
- an increase in teachers' feelings of self-worth and self-confidence
- changes in teachers' developmental stages and "stages of concern"
- an increase in teachers' awareness of classroom events
- changes in teachers' dispositions toward reflection
- an increase in teachers' awareness of changes in specific educational beliefs and values
- the development of greater congruence between teachers' "practical theories" and practices and a greater awareness of and more coherence in teachers' practical theories
- a broadening of teachers' views on teaching, schooling, and society

Understanding is relational; it involves establishing relationships of knowledge or of knowledge to skills. Understanding is both a private and a public activity or phenomenon. Understanding as a concept presents even skilled philosophers with enormous problems, and we must be clear about the kind of understanding claimed. It is possible to have a correct understanding as well as an incorrect understanding, just as it is possible to have a full or partial understanding of events and situations related to action research. Also, a full understanding may prove to be wrong or false. It is also possible to feign understanding when there really is genuine misunderstanding.

As inquiry, action research is founded on curiosity and a desire to understand—the major questions then become: Can action research be used to

⁶⁰Hans Georg Gadamer, *Reason in the Age of Science* (Cambridge, Mass.: MIT Press, 1984).

⁶¹Susan E. Noffke and Kenneth M. Zeichner, "Action Research and Teacher Thinking: The First Phase of the Action Research on Action Research Project at the University of Wisconsin-Madison" (paper read at the annual meeting of the American Educational Research Association, Washington, D.C., April 1987)

promote a practitioner's understanding? How can we get practitioners to use action research skillfully to this end?

Thus, can we make a case for a scientific approach to understanding? Can we engage some disciplined process that is reflective, detached, and objective in the act of understanding? Habermas⁶² argues that in a minimal sense, understanding must count as grasping the fundamental nature of the phenomenon under consideration and the ability to interpret and explain the phenomenon to another. Discourse is highly relevant here, for actors must understand linguistic expressions in the same way. Communicants must reach an accord on the correctness of an utterance.

2. *Concern to improve the quality of human action and practice* Curriculum action research is research by practitioners to solve problems and improve the quality of their practice and effectiveness as professionals. Action research seeks to improve professional performance so that practitioners act more intelligently and effectively, skillfully, and reflectively. Through reflection cycles of action, a type of formative evaluation continuously seeks to uplift performance and thus improve the quality of life in the setting.

Here, we must recognize the perceived gaps between aspirations and performance—the gap between what a practitioner hopes to achieve and the actual results. This perception leads practitioners to inquire, through action research, so that a difficult or problematic situation can be arrested or solved to everyone's satisfaction. Action research peruses unacceptable practical problems or situations. The practitioner must define the practical problems in practitioner's terms, rather than the theoretic or arcane concerns of traditional curriculum researchers.

3. *Focus on problems of immediate concern to practitioners.* Practitioners, not external facilitators, must define problems because practitioners are best placed to identify serious constraints on their goal achievement. This strategy also ensures that problems are relevant to the investigators. Also, problems are researched as they arise and create difficulties for practitioners. A chief complaint leveled at traditional educational research is that problems are usually researched with an enormous time lag between initial inquiry, data collection, and report writing. Practitioners cannot wait around for theories to be disseminated down from the academy or in the research literature—their need is immediate.

Any scientific understanding of human action at whatever level of generality must be anchored in an understanding of the ongoing, pressing day-to-day concerns and needs of the practitioners performing these actions. Simply to be able to rank these needs and to describe problems of immediate concern is a significant step in the process of action research

⁶²Jurgen Habermas, *Communication and the Evolution of Society* (Boston: Beacon Press, 1979), p. 3

4. *Collaborative.* Action research is collaborative, all those with a stake and an interest in the problem have a right to be involved jointly in the search for a solution. This is one of the most powerful notions of action research—the interactive self-critical community of investigators. Thus, practitioners such as teachers and administrators will work alongside external agents or facilitators, such as curriculum-development officers, professionally trained researchers, and evaluators in a cooperative and collaborative group.

Collaboration implies a strict equality principle. that practitioners are not merely co-opted as “cooperating” clients but are active and equal participants in the research process. Therefore, joint and equal collaboration on problem definition, data collection, and dissemination of findings will result. Collaboration implies a self-critical community, cell, or network of working individuals—most often consisting of teachers, administrators, and external facilitators.

Kyle and McCutcheon⁶³ argue that collaboration is a response to eliminating the traditional “division of labor” separating the “researchers” from the “researched.” Collaboration allows insiders and outsiders to take account of practitioners’ theories, ideas, and accounts of curriculum knowledge. This division of labor acts as a serious constraint on the production of valid curriculum knowledge. Curriculum knowledge has historically been produced by academics, although schoolteachers have been the main producers and consumers of curriculum knowledge.

5. *Conducted in situ.* Action research is conducted in the naturalistic social setting where the problem is encountered and is investigated by those who experience the problem. Action research is thus a form of naturalistic or field research, since it is implemented on site, and it seeks to explain the phenomenological world view held by actors in the setting. Accounts of understanding are communicated through practitioners’ ordinary discourse.

An important principle is that research collaborators maintain the integrity of the research setting during the course of research. That is, action researchers must be careful not to change or interfere with this naturalistic setting by attempting to control key variables affecting subjects or by distancing research activity from this setting. The goal is to seek empirically tested and constructed accounts from those facing the research problem from within the problem setting.

6. *Participatory character.* Action research is dynamic and participatory, those affected by a problem become the chief investigators and users of the solutions proffered. This participatory element indicates a process that is truly social research—focusing on social problems and human relationships, interests, and behavior within the essentially social practice of education. Action

⁶³Diane W Kyle and Gail McCutcheon, “Collaborative Research. Development and Issues,” *Journal of Curriculum Studies* 16 (April–June 1984) 173–179

research demands that participants celebrate the social character of their understandings and situations, since action research allows the practitioner to see how one's practice is socially constructed. Action research is also participatory in terms of its public nature—it demands a sharing of understanding among participants affected by a project. By moving beyond mere interpretation and personal understanding to a communal understanding, we necessarily move from a critical interpretive social science to an activist, social reformist perspective characteristic of emancipatory action research.

As a project unfolds and develops within a setting, we expect that it will affect an ever widening circle of practitioners. Thus, this concentric process of involvement activates participation. Participation is an educative element allowing for enormous inservice training to result by sharing knowledge and learning observational and other research skills. Those involved can gain a rational understanding of events, problems, or practices only by reflecting on action. Since only the practitioner has access to action in practice, only the practitioner can inquire into action. Action research cannot masquerade as anything other than inquiry into our own practice. Research then becomes the basis for teaching and for curriculum theory.

7. *Focus on the single unit, or case* Action research examines a single case, not a sample population. Whole populations are studied—a classroom or a school—and the concomitant discussion and solutions thrown up by the inquiry apply to this single unit. Thus, there is little scope for generalizations to be made to other units or populations. Generalization is problematic in action research. The case study is a chief research method for doing action research, and it recognizes the idiosyncratic and unique features of the actors, problem, and setting.

With a case study, there will be case data, case records, and casework. A case study tells a story about the problem or situation being scrutinized. Events, actions, and results are documented principally through ethnographic description, narrative, and interpretive accounting. Therefore, practitioners must also become good research writers as well as inquirers.

8. *No attempt to control setting variables*. Key variables are not isolated and rigorously manipulated and controlled, as in much traditional experimental research. Action research argues that once action steps are taken in the form of experimental hypotheses, the problem studied will often undergo enormous change, as will the subjects affected by the problem. Strict control and manipulation thus become a nonsense operation. Much traditional research is set up and conceived as if no change results after experimentation has begun—that is, during the life of the innovation, which of course is not the case. Furthermore, to attempt to control variables within a naturalistic behavior setting is akin to placing limits on the possibility, diversity, and creative nature of human response.

9. *The research problem and goals may shift as inquiry proceeds.* Action research cannot be thought of as a single loop of problem indication, hypothesizing, acting, observing, and reflecting—this is only an initial beginning to serious research and is merely constrained or “preliminary action research.” This view conceives of problems as fixed and knowledge as purely instrumental in arriving at a terminal solution. Action research, through its constant cycles of reflection over an extended time period, allows the initial problem to shift and change as a result of action implemented. Thus, after taking an action step, it is the chief responsibility of the researcher to monitor carefully the results of the action and to redefine the new face of the problem as it affects and manifests itself in the setting. Action steps will often radically alter the problem, and new problems and issues may be presented for investigation. One of the characteristics of science is the ability of research to uncover new and interesting hypotheses and relationships for further inquiry.

10. *Evaluate attempts to explain the amount of participants' growth.* It is vital at some stage, preferably near the end of a particular loop or cycle of reflection and action, to stop and reflect on the experience, as a collective, self-critical group, and attempt to describe, interpret, and explain what has happened and what participants have learned so far through the project. Thus, participants need to learn to move from action back to initial baseline positions to reflect where they were and where they have arrived. Action research is thus “trans-situational”; it begins with one series of actions and terminates with another—it is a temporal or historical process. Participants must look for antecedents, transactions, and outcomes in doing action research and must be able to describe and evaluate the relationships. Although a particular solution to a problem may not be forthcoming, participants' understanding, knowledge, and awareness are still increased and altered by the experiment, and so it is significant to document and carefully chart the experience.

11. *Methodologically eclectic and innovative.* Action researchers may have to design new research methods and instruments for inquiry. The unique nature of action-research problems may dictate that a totally creative or novel strategy for collecting evidence may have to be developed. Action research does not consist of any one preferred research methodology or package of inquiry skills. It is wholistic and eclectic—a methodological rag-bag that is getting larger over time. The case study is used with interviews, questionnaires, rating scales, participant and non-participant observation, logs and diaries, field notes, and many other methods. The area of research methods and skills appears to be a chief area in need of further development. Action research resembles aspects of formative evaluation by using a host of methods to secure data and to monitor outcomes in the provision of feedback to improve a curriculum.

12. *Scientific.* Perhaps the least appreciated feature of action research is that it is rigorously scientific. Table 1 sets out the principles of procedure by

Table 1. Scientific Inquiry and the Action-Research Process

Dewey	Lewin	Corey
1. Recognize the problem (indeterminate situation)	General idea	Identify the problem
2. Observe the problem	Reconnaissance (fact finding)	Form hypotheses
3. Suggest solutions (as hypotheses to guide observation)	General planning	Record actions
4. Reasoning of ideas	Execute action step 1	Draw inferences from the data
5. Experimental testing (verification/corroboration)	Decisions about action steps, further fact finding	Continue to retest generalizations in action setting
6. Conclusions		

SOURCES: John Dewey, *How We Think* (Boston: D.C. Heath, 1910), Kurt Lewin, "Frontiers in Group Dynamics II. Channels of Group Life, Social Planning, and Action Research," *Human Relations* 2 (1947), 142-153, Stephen Corey, *Action Research to Improve School Practices* (New York: Columbia University, Teachers College, Bureau of Publications, 1953) For a useful discussion of model building and action research, see David Hopkins, *A Teacher's Guide to Classroom Research* (Milton Keynes: Open University Press, 1985), pp. 33-39

three prominent exponents of practitioner action research. Thus, the linkage of scientific problem solving as a method can be clearly demonstrated—deriving from science-in-education to experimentalist, group-dynamics, and Corey-era curriculum movements.

Procedures in Action Research. The Scientific Method of Inquiry

Probably the most important distinction that separates action research from common-sense, critical inquiry is the rigorous process of planning, data collection, analysis, and evaluation employed. In scientific inquiry, there is a strong sense of curiosity or desire to understand and discover truth; there is a need for order in the data and a commitment to testing any hypotheses or ideas proposed as truths in empirical observations at some stage; and finally, there is a commitment to accept these tests as valid only when they can be shared publicly and objectively. All scientific knowledge is shared knowledge. Scientific action research also has a practicality dimension, or the desire to improve one's practice. Lewin and Corey were quick to point to the scientific nature of action research. Corey⁶⁴ argued that the following steps be adhered

⁶⁴Stephen Corey, *Action Research to Improve School Practices* (New York: Columbia University, Teachers College, Bureau of Publications, 1953), pp. 71-85

to. defining the problem, hypothesizing, designing tests, obtaining evidence, and generalizing.

13. *Shareability-utility.* A fundamental characteristic of action research is its utility value and the allied notion of shareability. The degree to which knowledge is shared is the acid test or goodness of fit of its inherent utility. A fundamental objective of action research is to produce solutions and understandings that are useful and that serve practitioners. To count as valid knowledge, scientific knowledge must be publicly shared and subjected to criticism. Public research benefits from criticism; private, undisseminated work does not. This desire for usefulness forms the foundation for discourse and subsequent reflection, so that scientific knowledge is grounded in usefulness.

14. *Dialogical-discursive.* Face-to-face discourse is central to the action-research process. The goal of understanding can be achieved only through unconstrained dialogue with participants involved in a project. This process involves a considerable amount of discourse among actors in the research setting. Discussion and reflection on discussion linked with self-reflection on the action appear axiomatic.

Indeed, the usual data bases for action research are linguistic expressions as manifest through audio and video transcripts and written documentation containing participants' discourse. Narrative accounts of the action and dialogue between actors often become part of formal project reports—for example, field notes and recorded interview commitments. Dialogue thus forms the data base and opens up work to public criticism. Dialogue must be intelligible to participants; it must use the common-sense language of practitioners.

Since action research uses unconstrained dialogue between participants, it must employ linguistic concepts and ideas of practitioners—not the abstract empiricism of functionalists, nor the clever concepts of academic life. We must guard against using unnecessarily technical and scientific argot of traditional researchers. It is heartening to witness the new wave of British teacher-researchers who write in the vernacular of the school world. Language and dialogue can pose a severe constraint on understanding and thus act as a barrier to doing action research.

15. *Critical.* Action research is not interested in constructing grand or middle-range theories but in developing a reasoned critique grounded in social practice. It aspires to being good "grounded theory." Self reflection causes insights and ideas to arise from the examination of practice. The validity of the critical perspective can be validated and verified only through practical discourse among those forming the critical community of researchers.

Critique is a pivotal aspect of the entire process. Self-reflection is required for personal understanding. Collaborative discourse is the instrument for public understanding. The vehicle for critique is the collaborative group. Yet critique is essentially a passive endeavor in the process. Only when a course

of action is decided on and implemented in practice can a group be free from a particular problem. Thus, a critical social science is concerned with interpretation and critique, whereas critical-emancipatory action research is profoundly concerned to transform and change curriculum.

A major task of critique is to expose constraints on action research. McKernan⁶⁵ has identified four major constraints: the division of labor between researchers and practitioners, the problem of language in reporting research, the lack of practitioners' research skills, and most fundamentally, the lack of time available for practitioners to do research.

16. *Emancipatory*. A central feature of much action research is its emancipatory nature—its ability to free the practitioner to make us more autonomous. The intention is to improve the rationality and justice of the practice. In emancipatory action research, the critical group takes responsibility for developing practice and understanding, viewing these as socially constructed within the interactive dynamic of curriculum life. Emancipation counts as the empowerment of the research group in its quest for a more just, rational, and democratic curriculum.

A goal is to allow the group to take charge of decision making about curriculum matters—about which problems to study, how to study them, and what changes to implement as a result of inquiry. This is the idea of pure school-based curriculum development within a social reconstructionist philosophy. Teachers become not only critics of curriculum but cultural change-agents, they seek to bring about changes in schooling and curriculum, as well as in students' values and beliefs.

The creation of personal meaning in a democratic context is at the heart of this process. Practitioners are free to exercise their critical perspectives and assume control over knowledge and curriculum, not to function as the servants of authority.

THE PRACTITIONER AND THE ACTION-RESEARCH PROCESS: A NEW MODEL

Curriculum has come to be conceived as a practical, as well as technical endeavor, in which means and ends are negotiated through complex human interaction and decision making shared by a wide range of participants: teachers, administrators, parents, policy makers, and others. This new style of *rational-interactive* curriculum research and development is also informed by curriculum and educational research, social trends, and a more accountability-conscious public. In this system, the practitioner needs technical skills—how to define instructional objectives—as well as practical skills—

⁶⁵Jim McKernan, "Action Research and Curriculum Development" (paper read at the annual meeting of the Society for the Study of Curriculum History, Washington, D.C., April 1987)

making judgments, self-reflective monitoring, skills in small-group work, but most especially, curriculum development and research skills.

The model in Figure 1 presupposes the scope for total curriculum planning, not ad hoc or piecemeal reform. As a change-agent, the practitioner has a problematic situation to consider. What is proposed here is that action research be considered as a rational and systematic process. Moreover, all those with an educational stake in the process need to be involved. parents, practitioners, and pupils.

The First Cycle of Action

A time-process model of the action research process is illustrated in Figure 1. At some particular point in time (T1), an indeterminate, or unacceptable, situation or problem is identified that requires improvement. The first cycle of action is triggered by attempts to more clearly define the situation or problem. A careful statement of the problem next leads to a needs assessment. At this stage, the internal (school-situated) and external (community) constraints that impede progress are established and ranked in order of priority. This needs assessment is roughly equivalent to a full "situation analysis" described by Skilbeck⁶⁶ as the first stage of rational school-based curriculum development.

A review of the situation should suggest hypotheses that will function as strategic ideas deemed worthy of testing in practice. The hypotheses proposed for solving the action-research problem merely claim to count as "intelligent" ideas rather than as "correct" solutions. The next stage is devoted to developing an overall plan of action that will serve as an operational blueprint for the project. The plan will detail who reports to whom and when and will specify roles and goals and the schedule of meetings.

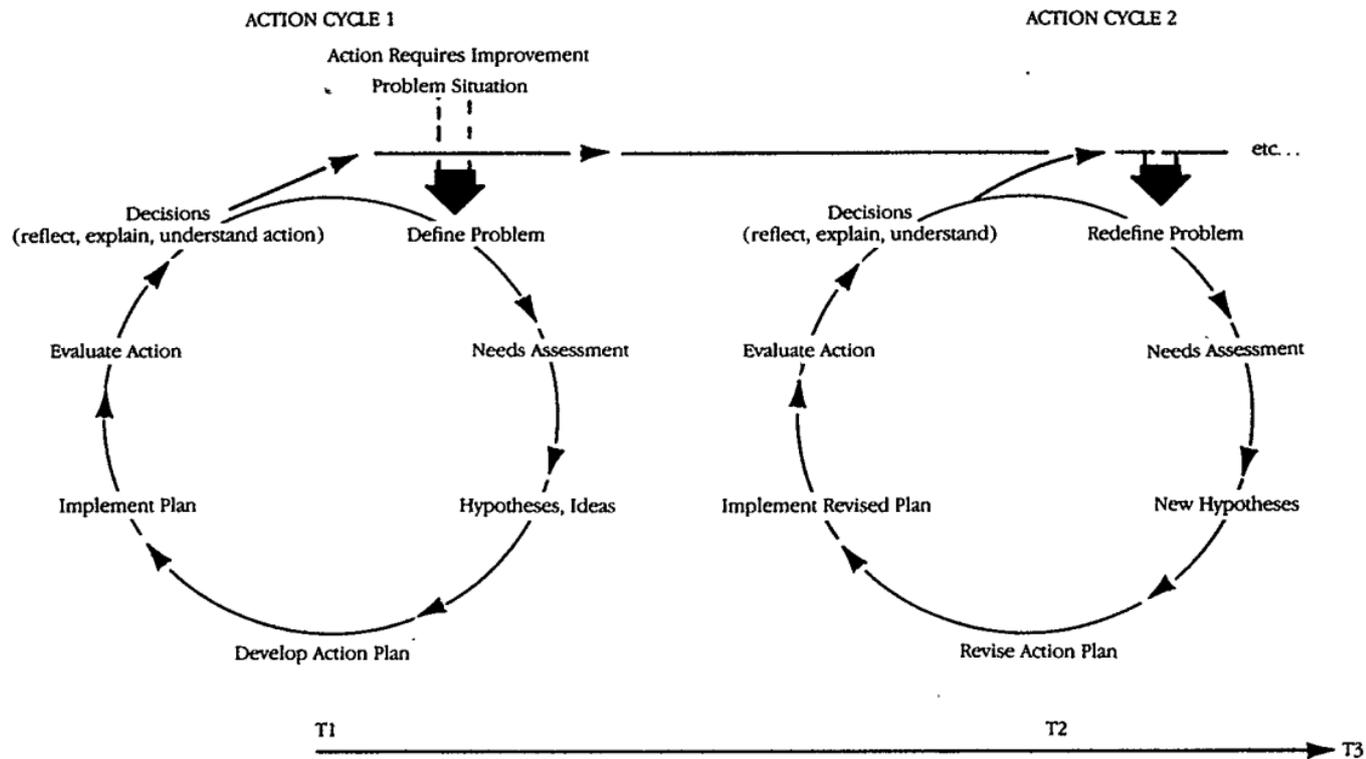
Implementation of the plan follows—installing the plan in the setting and taking action. Evaluation of the action steps taken comes next. At this stage, the critical research group seeks to understand what the effects have been and what they have learned as a result of action. By carefully reflecting on the action, the practitioner becomes a "self-monitoring" teacher-researcher. The data and conclusions are then shared within the group that will make decisions about the acceptability of the steps.

The Second Cycle of Action

The project now embarks on a second cycle of events in which the experience and steps of action cycle 1 are employed to produce a "revised definition of the situation" commencing at a time frame depicted by T2 in the model. The important thing about action cycle 2 (T2) is that the original

⁶⁶Malcolm Skilbeck, *School Based Curriculum Development* (London. Harper & Row, 1984)

Figure 1. Action Research: Time-Process Model



research problem is allowed to redefine itself as the result of the action taken during time period T1. Too often, action researchers seem to allow a problem to become rigidly fixed and adhered to.

In T2, the problem is recast, and a review of the situation is conducted. The collaborative group may have various ideas or hypotheses for improving the situation. These hypotheses are then written into the revised action plan, which is tested and observed empirically in the setting. On the basis of evaluation and group critique, the action initiatives in T2 are subjected to further scrutiny, and decisions are reached. Further testing and experimentation may be deemed necessary, which would then form the basis of a third action cycle (T3) and a wholly reconstructed action plan.

The essential features of this model are its scientific and rational method of problem solving and its democratic or collegial ownership by the self-critical community of researchers. The focus is on improving curriculum through problem solving using practitioners as research and development workers. This practical perspective in "curricularizing" takes precedence over theoretical model building and research report writing because it is concerned with answering the question "What should be done?"

CONCLUDING REMARKS

The countenance of curriculum action research has been flavored by the paradigm in power during each historical period. Early action research was highly quantitative and statistical, rooted in a psychometric, positivist science of education—for example, the research of Buckingham, with his strong penchant for psychological testing as typified by statistical tests he conducted on spelling-word counts to test hypotheses concerning alternative actions. This type of scientific action research characterized much of the early work of Buckingham, Bobbitt, and Charters.

The portrait of teacher action and research offered by Dewey and later experimentalists presents a distinctive picture of action research as a self-reflective science. Despite the title *The Sources of a Science of Education*, Dewey's view of teaching as scientific problem solving differed from that of Bobbitt, Charters, or other measurement-minded educationalists. Yet Dewey's work was rigorously scientific, and the scientific method is the capstone of each movement's concern over the last 100 years.

Not only has the conception of what counts as science shifted but the definition of action research has changed, according to one's orientation—from statistical tests of hypotheses within formalistic models to empirical observations, case studies, and critical-interpretive accounts of the emerging critical theory of Carr and Kemmis, who define action research as "a form of self-reflective enquiry undertaken by participants in social situations in order to improve the rationality and justice of their own practices, their understand-

ing of these practices, and the situations in which the practices are carried out."⁶⁷

To understand the countenance of action research, we must understand the historical traditions of the movement and the diversity of approaches of doing action research. Some quantitative renditions and some qualitative approaches can be found between different time periods as well as within the same time frame and generation. Examples of both ordinary, common-sense-type problem-solving approaches and rigorous scientific hypothesis-testing styles of action research can be found in Corey's *Action Research to Improve School Practices*.

The differences between traditional action research and emerging critical-emancipatory action research need to be examined. Action research originated in Western nations and shares some of the assumptions of industrialized economies, such as task accomplishment, efficiency, social integration, and incremental social reform.

Critical-emancipatory action research has emerged from European critical theory and work with oppressed people in the Third World fueled by the thought of Paulo Freire and his dialogic approach to engaging adults in critical analysis and organized action moving toward consciousness of the forces of oppression and the possibility of liberation. Much of this critical action research is critical of social science and the status quo and assumes that societal groups are in conflict. Yet critical action research can benefit from traditional action-research methodology and perspectives.

Traditional action researchers assume common interests and consensus in problem resolution, and the ideological stance is at the group or problem level—seeking reform from within the system. Critical action research focuses on the wider social structure and forces groups to challenge power and the distribution of resources. These contrasting ideological divisions seek changes and reform, but at different levels. Much more communication is needed between members of these different traditions.

Several criticisms need to be made of the emerging critical-emancipatory action research. I approach this task as a sympathetic colleague and constructive member of the critical community of teacher-researchers and find much that is satisfying in the Carr and Kemmis account. Yet this approach is militant, utopian, unashamedly ideological, historically naive, and bedeviled by conceptual-linguistic constraints that are unattractive to classroom practitioners.

The response of critical action research to scientific action research has been hostile, harsh, dismissive, and typical of the intergenerational struggle among critical theorists, thus neatly avoiding the historical record of what the

⁶⁷Stephen Kemmis, *The Action Research Reader* (Geelong, Victoria: Deakin University Press, 1982), p. 162

earlier traditions and types of action research have achieved and continue to achieve by way of improving curriculum. Type I action research—characterized by the work of Corey, Taba, Lewin, Lippitt, and others—linked with the more collaborative and interactive style of Type II action research—typical of Stenhouse, Elliott, and the various North American IR&D-style projects—has significantly affected the changing curriculum. Will the critical-emancipatory theorists have a similar effect where it counts—in schools—given the celebration of an ideology incorporating neo-Marxist thought, which is likely to have a cool, if not hostile, reception in many Western schools, and an alien linguistic-conceptual character, which would appear more suited to ivory-tower academics than to classroom teachers? Social scientific conceptual language is not the spoken language in the culture of the school.

Critical-emancipatory action research cannot deny its own scientific roots and former life history—evolving as it did from a diverse social and historical context. It is historically naive to disregard this former identity of action research; it seems to contradict the espoused goal of critical-emancipatory researchers to view ideology as socially and historically defined. A magnanimous theory would accept this account and rightfully acknowledge the aspects of previous types of “scientific” action research that it seeks to preserve, protect, and promote.

We cannot deny the conceptual richness of critical action research, which is characterized by such notions as “the organization of enlightenment” and “the organization of action,” both adopted from Habermas; the “dialectical view of historical materialism” (Marx); the notion of “self-reflective spirals of action” (Lewin); the concepts of “personal knowledge” and “authenticity” (Polyani); and the concepts of “problematization-conscientization-praxis” (Freire). We would be more confident if the theory was developed by, and grounded in, the language and interpretive categories of practitioners. The intellectual scaffolding of this new critical action research is clearly forged from the ideas of philosophers and various left-wing social theorists, not from authentic concepts and the language of practitioners. This appears to directly contradict one of the rules set out by Carr and Kemmis for establishing a formal theory of education—that a critical theory of education must accept the need to employ the interpretive categories of practitioners; it must be created by and be rooted in the discourse and language of practitioners. The five properties required for a sound educational theory were not developed by practitioners, through action research at all, but are the product of a prescriptive theory, forged mainly by Carr and Kemmis and drawing on the conceptual thought of social philosophers and social scientists—the Frankfurt School of philosophers, Freire, Marx, and Polyani.

The ideological preference of critical action research for particular political belief systems will act as a brake on its power to conduct open-minded inquiry. Science can never be held hostage to political fortune by being the servant of political ideology.

While it is welcome to view the perspective of moving beyond the mere critique characteristic of critical-interpretative sociology to taking constructive curriculum action, this action should concentrate on matters of curriculum, instruction, and pedagogy rather than the missionary and utopian ideals of changing the practices of the society and culture to make them more rational and just. Type II action researchers have more successfully addressed curriculum issues here, giving a lead to the sort of problems and issues suitable for action research.

Requesting practitioners to become agents of planned social and cultural reconstruction is utopian, missionary, and misdirected. In this sense, critical-emancipatory action research is strikingly similar to the social reconstructionist philosophy of Brameld and other mid-century educationalists who would wish to see schools wage all-out war on conflicting ideologies and perceived hostile social forces. Thus enlightened, man would be free. This notion is vaguely analogous with American military policy in Vietnam, where hamlets and villages had to be destroyed to "liberate" them.

It is possible to have a critical-reconstructive science of action research that discloses wider sources of curriculum constraint and informs members about wider cultural ideas and sources impinging on the curriculum. This perspective would make practitioners sensitive to opposition they may expect in a pluralist democracy through school-based curriculum development that does not function as an ideological crusade.

Contemporary action research does not fit neatly into any one stable but recognizes diverse styles of curriculum inquiry from common-sense-type case-study work, to the teacher-researcher working within the interactive research and development partnership team, to the self-monitoring teacher out of the Stenhouse camp. These teacher-researchers differ from the critical-interpretive researcher. All seek understanding, but they employ different research methods and praxis. This diversity has significant implications for the required research skills as noted by the teacher-researcher movement. Whether we assign meaning to events through numbers or narrative, both styles of quantitative and qualitative inquiry can be rigorously empirical and scientific.

Some final observations. Research is a method. Research is a mode of looking at the world, a point of view. Practitioners are distributors of curriculum knowledge, as well as producers of knowledge. A research stance by practitioners will provide what Schön⁶⁶ has referred to as "reflection-in-action," or schools that learn for themselves. Action research engages both teacher and student in a shared search for knowledge—thus, it is an educative experience for both. It sets up knowledge as provisional and open to question. The practitioner is not cast as an expert but as an inquirer and co-learner.

⁶⁶Donald Schön, *The Reflective Practitioner: How Professionals Think in Action* (New York: Basic Books, 1983)

Action research then becomes the basis for personal and professional development and autonomy. The present fermentation in styles and strategies for doing action research permits the possibility of understanding—not closure.⁶⁹

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McArthur, David L., ed. *Alternative Approaches to the Assessment of Achievement*
Boston: Kluwer, 1987. 265 pp. \$45.00

This volume seeks to place in perspective several models of mental testing introduced in psychometrics during the last three decades. Beginning with a brief history of educational assessment, the volume next turns to a balanced critique of classical test theory that shows how the new models were conceptualized in response to limitations in classical test development. Five subsequent chapters are devoted to the student-problem technique, Rasch model, three parameter logistic model, latent structure models, and generalizability theory. An empirical demonstration of different models using common sets of data is the content of the penultimate chapter. A summary chapter provides a synthesis of the present state of alternative models for measuring achievement and discusses their applicability to different measurement problems.

—Harold E. Mitzel

Grundy, Shirley. *Curriculum. Product or Praxis?* New York: Falmer Press, 1987.
209 pp. \$34.00.

Presented here are three conceptions of curriculum—as product, as practice, and as praxis—based respectively on Jurgen Habermas's three fundamental human interests—the technical, the practical, and the emancipatory. In each case, Grundy provides thorough explication of the relation between the Habermas categories, the parallel conceptions of curriculum, illustrative examples from curriculum projects in Britain and Australia, and possible action-research projects that would incorporate each approach to curriculum. This work synthesizes and clarifies much complex literature and places it within reach of curriculum workers and teachers.

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