
Article

Exploring Types of Educational Action Research: Implications for Research Validity

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Abstract

In this paper the authors argue that there are three modes of educational action research: emancipatory, practical, and knowledge generating. Furthermore, they suggest that much of action research, although predicated on notions of emancipatory research, is often not primarily emancipatory in nature. There are considerable risks involved when action research fails to adequately justify its truth claims because of a dependence on validities that primarily assess the emancipatory features of the research. Consequently, the authors propose that the various modes of action research require emphasis on different validities that are dependent on the purposes of the research. In doing this, they offer a reconceptualization of Anderson and Herr's (1999) influential approach to validity in action research.

Keywords: action research, validity, epistemology, rigor, education

Introduction

Although the field of educational action research has been the subject of countless articles emanating from both critics and advocates, we have yet to arrive at a satisfactory conclusion with respect to the efficacy and credibility of educational action research as a research approach. In this paper we attempt to uncover the key features of action research and explore the effect of those features on the knowledge claims of research products and processes. In particular, we address the issue of validity claims within action research. Second, we suggest that much of action research, although predicated on notions of emancipatory research, is, in fact, not always primarily emancipatory in nature. Educational action research can be classified as emancipatory, practical, or knowledge building, and, as such, the conception of validity ought to reflect the different modes of research. Finally, we argue that for action research to contribute to a knowledge base about teaching, it must be open to scrutiny by a research community, and to withstand scrutiny, it must be rigorous. We suggest that rigor can be ensured by reconceptualizing validity as contingent on the mode of research being used.

Origins and foundations of educational action research

Educational action research owes much to Lewin (1946) and Collier (1945). Not only was the evocative prefix and prescription of “action” coupled with research by them in response to challenges they saw in improving group relations, but so, too, in the case of Lewin, was the form of research linked to schools, teachers, parents, and students. Out of Lewin’s advocacy of a hermeneutic process based on standards of practice and with his and Collier’s specific interests in the resolution of social, economic, and political injustices found in schools and other public institutions, a bridge between the worlds of research and philosophy was erected. Where Collier defined action research as participatory research in which the layperson defines a need and engages the structures that provide scaffolding, however, Lewin’s work arguably broke ground for critical approaches in research. As such, debates engaged by the body of critical theory have subsequently encompassed action research and its various progenies (see, for example, descriptions of debates over Habermasian and Gadamerian hermeneutics in the context of teacher research in Brown & Jones [2001] and more provocative social change advocated in the work of Freire [1970], Giroux [1998], and McLaren [1998] on critical pedagogy).

Lewin’s (1946) work has emerged as the predominant representative of the concept, and his inclusion of schools as a key venue for action research means that school-based and teacher research that follows the structural requirements explored in Lewin’s writing, as well as the contributions of others to the development of the method, is its progeny.

Criticisms of educational action research

Action research in schools has not been without its detractors. Cordingley (2000) suggested that teachers “were attracted to research that was relevant and enabled them to do their tasks more effectively and/or more efficiently” (p. 1). In other words, teachers prefer research that addresses issues that are practical in nature. Yet the mismatch between the practical problems identified as important to teachers and the use of emancipatory action research approaches requires some explanation. True emancipatory research approaches are a “tough sell” in schools as these approaches demand that practitioners take a hard look at the structures and social arrangements that dominate segments of the population, arrangements that they (teachers) might function to reinforce (see, for example, Pajak & Green, 2003). Brown and Jones (2001) provided a critique of

action research that succinctly questions the critical nature of such approaches.

Such an approach . . . has the potential to lead not to the unlocking of complexity but to the elucidation of rigid preconceptions which serve only to confirm injustices of the “found” world. Hitherto, action research has assumed a reality which can be uncovered and then altered in some way or improved upon for emancipatory purposes. This however begs key questions about where our ideas of what counts as “improvement” come from. How can the researcher both “observe” reality as well as being part of it and thus be implicated in its continual creation and recreation? These issues are much more complex than action research has acknowledged so far. (p. 5)

Similarly, Heydenrych (2001) stated that action research ought not to involve simply reflecting on practice and finding ways to improve performance. It ought to focus on examining those practices and arrangements within education that are commonly accepted and universally justified and then problematizing them. As Noffke (1997) articulated,

Despite the concern with social issues and even social transformation on the part of academics writing about action research, there have been few examples of practitioners engaged in efforts to link their practices with efforts focused on gender and racial inequality. (pp. 329-330)

In what ways have the foci of action research projects been directed, if not to emancipatory ends? Lytle (2000) suggested that although action research has tended to focus on matters of classroom pedagogy, it often problematizes “the nature and purposes for reading, writing, and talking in school” (p. 699) and, through this, maintains an emancipatory focus. In other words, educational action research often links the improvement of practice with emancipation.

More recently, action research has been linked to staff development and professional development (see, for example, Parsons, McRae, & Taylor, 2006). “Action research, though, is often employed primarily as a form of in-service education or staff development. In these approaches, efforts to redefine professional roles in education, particularly that of the teacher, are evident” (Noffke, 1997, p. 323). Noffke, however, has cautioned that such instrumental uses of action research are problematic: “Seeing action research as a means for professional development raises a complex set of questions related to issues of power: Who and what is being ‘developed’ and by whom, and, most important, in whose interests?” (p. 334). In addition, she identified the manner in which action research, professional development, and school improvement are increasingly being linked: “Within these contexts, action research as a form of staff development centered on areas for improvement is an increasingly visible aspect of school reform initiatives” (p. 326).

Similarly, Lytle (2000) recognized the use of action research as a mechanism to address larger institutional and societal goals. “Universities, school districts, state education departments, and national reform networks have begun to attach some form of teacher inquiry to all manner of teacher education and professional development, school reform, and curricular improvement” (p. 694). The implications for action research as an institutionally directed (rather than emergent) mode of inquiry seem obvious. The purposes of action research are clearly moving away from locally determined improvement initiatives. In this case, action research is focused on the improvement of practice as its primary purpose. Anderson, Herr, and Nihlen (1994) posed this question over a decade ago. “It remains to be seen whether this movement will lead to empowerment or be co-opted as the latest teacher in-service scheme by a top-down reform movement” (p. 8).

Self-directed action research approaches coupled with external accountability measures (as experienced in education systems in Canada, the United States, the United Kingdom, New Zealand, and Australia) represent an uneasy partnership. If such collegial professional learning and action research approaches serve a social legitimizing function within schools or function to achieve organizational ends, there exists no antithesis to the dominant discourse of accountability and large-scale, high-stakes testing-directed policies and practices. Brown and Jones (2001) suggested that action research, in its currently conceived form, serves to reinforce this dominant discourse. "Presently, practitioners have a tendency to expect the research task to tell them 'how it is' so that they can then plan new strategies for the creation of new outcomes" (p. 169). Indeed, the most influential school improvement fad in North America (at the time of writing), professional learning communities (PLCs), identifies action research as "the engine of improvement" (DuFour & Eaker, 1998, p. 25). This is troubling in that these authors have defined improvement targets as "clear, measurable performance standards" (p. 102). Although their work suggested that many factors contribute to effective schools, the authors maintain that action research used to achieve gains relative to performance standards are key to the learning community. This vision of action research lies far from the type of research envisioned by Lewin (1946) and others. It is our contention that the conceptualization of action research proffered by DuFour and Eaker is frequently exercised in North American schools. Put in another way, we suggest that purposes of research under the guise of school improvement are not emancipatory; rather, they might very well serve to reinforce a dominant discourse in educational policy.

Research purposes and the types of action research

Resolving these contested perspectives on educational action research is no easy task. White (1999) described three modes of research: explanatory, interpretive, and critical. Each of these modes is influenced by a corresponding philosophical position and logic. "Explanatory research is heavily influenced by the positivist tradition in the philosophy of science" (p. 3). Interpretive research is fundamentally concerned with discovering meaning within a social phenomenon, while critical research is concerned with affecting political, social, or personal change. White's modes of research owe much to the work of Habermas (1987), who referred to types of human interest that are knowledge constitutive. That is, the manner in which knowledge is acquired or the extent to which knowledge claims can be justified is dependent on the arena of human action. If the arena of human action is technical, then empirical and hypothetical-deductive modes of inquiry are appropriate. If it is practical (i.e., social knowledge), then interpretive or hermeneutic approaches are warranted. If it is emancipatory in nature, critical approaches are appropriate.

Berg (2001) suggested that there are three modes of action research: (a) technical/scientific/collaborative, (b) practical/mutual collaborative/deliberative, and (c) emancipating/enhancing/critical science. Each mode has a distinct goal. The technical/scientific/collaborative mode has as its goal "to test a particular intervention based on a pre-specified theoretical framework" (p. 186). The practical/mutual collaborative/deliberative mode "seeks to improve practice-and-service delivery" (p. 186). The emancipating/enhancing/critical science mode can "assist practitioners in lifting their veil of clouded understandings, and help them to better understand fundamental problems by raising their collective consciousness" (p. 187).

The authors above suggested that there are distinct approaches to educational action research that are dependent on the goals and purposes of the inquiry. These distinctions are significant, and, as we suggest later in this paper, the type or mode of action research ought to direct how we can conceptualize validity and how we can justify our knowledge claims. For the purposes of this paper, we identify these three modes as (a) a knowledge-generating mode, (b) a practical

(improvement of practice) mode, and (c) an emancipatory mode. These modes are commensurable with those offered by Berg (2001), White (1999), and Habermas (1987) but resonate more with us in understanding the nature of inquiry in educational institutions.

New paradigm argument

Before we speak of validity in action research, it is prudent to explore claims of scholars in action research that it represents a new paradigm and therefore requires a new understanding of the testing of truth claims.

Concurrent with this spread and growth has been an intensified debate about whether teacher research is a new *paradigm*, a new *genre* of research that is part of a wider social and political movement, or even qualifies, epistemologically and methodologically, as *research* at all. (Lytle, 2000, p. 694, emphasis in original)

Does action research represent a new and incommensurable research paradigm? We cannot make sense of this question easily, for in establishing whether research belongs to a new paradigm, we must justify this claim from within an existing paradigm that we are reasonably sure exists. Huberman (1996) characterized the teacher-researcher claims that their research represents a new paradigm as follows:

The argument for the new paradigm goes something like this: Our values and biases dictate many of our methods and findings: our knowledge is purely situation specific and socially constructed, and so there are many plausible “truths,” corresponding to the many a priori assumptions and methods of investigation. (p. 127)

We are left with two options: Either practitioner action research is a new paradigm or it is not. We do not intend to conclusively determine the answer to this question here, and, as Denzin and Lincoln (2005) suggested, it is not possible to do so in any case as “these beliefs can never be established in terms of their ultimate truthfulness” (p. 183). However, Lincoln and Guba (2005) have concluded that even if practitioner action research represents a new paradigm, it is commensurable with qualitative research. As such, we propose that techniques for ensuring validity of qualitative research must similarly apply.

The question remains, then, one of commensurability rather than paradigmatic exclusivity. If the argument were presented that action research is not commensurable with other research methods, then a systematic justification of epistemic claims about knowledge exclusivity to the domain/paradigm of action research akin to that explored in the 1980s by, among others, Guba and Lincoln (1982) is required. For our purposes, and in the absence of such an argument positing the incommensurability of action research, we proceed from the assumption that it is appropriate to apply qualitative research’s requirement for validity to action research.

What, then, is validity in action research? Many qualitative researchers have rejected validity as a useful concept within qualitative approaches. They have instead sought alternatives for ensuring the quality of the research and the justification of truth claims. Heikkinen, Huttunen, and Syrjälä (2007) emphasized the importance of arriving at some measure of “goodness” of action research. Although they take a pragmatist perspective on the quality of action research, focusing on the notion of “workability” of the results of action research, the importance of ensuring quality is central to their argument: “We certainly should not take lightly the question of quality assessment” (p. 7). Similarly, Moghaddam (2007) suggested that “validity refers to the reasons we have for believing truth claims” (p. 236). As we argue later in this paper, how we might align

approaches to validity that provide reasons for believing in the truth claims we developed as part of our research process becomes a central concern for action researchers. This conception of validity is highly dependent on the nature of the truth claims being generated. As we argue later in the paper, the three purposes of educational action research reflect three different types of truth claims and, consequently, require different types of validity.

Feldman (2007) articulated this concern for the nature of truth claims and tackled the notion of validity from an ontological/epistemological position. He suggested that qualitative researchers have attempted “to seek alternatives to the use of validity as an indicator of the quality of their work” (p. 22). He argued that the quantitative origins of the concept of validity have been viewed as incongruent with, in particular, constructivist epistemologies. “Many if not most qualitative researchers reject the realist epistemology upon which the definition of validity appears to be based” (p. 22). Feldman, however, is somewhat critical of the alternatives that have been proffered by the qualitative research community. He argued that alternative conceptualizations of validity such as “credibility, persuasiveness, verisimilitude and others . . . tend to focus on the quality of the report rather than the quality of the research” (p. 22). He called for a conception of validity that takes a middle road between naïve realism and constructivism and argued for

a more realistic view of realism . . . [in which] it is possible to construct knowledge about the world that has some correspondence with a reality separate from ourselves, and that that knowledge can be tested to see how well it corresponds to reality.
(p. 23)

In an argument similar to the one we intend to propose in this paper, he suggested that

there is much that is in an action research report that we can accept based on criteria such as credibility, persuasiveness and verisimilitude, but there are other claims, such as how and what to teach, for which I, for one, would like to see some evidence that it is an accurate representation. (p. 24)

The conceptualization of validity that we offer later in this paper addresses some of Feldman’s concerns regarding the differing claims embedded within action research.

Potential risks of not attending adequately to validity

The tenets of action research articulate a concern for the welfare of research participants and the objects of research (if we can use that term). However, it is not clear that action research taking place daily in schools has given a sufficient accounting of such factors as anonymity, coercion, and confidentiality. Indeed, many of the research projects we have witnessed in schools do not require an ethical review. Most educational action research projects never see the light of scrutiny with respect to ethical standards of research. Action research projects that are developed as part of a graduate studies program or facilitated by an academic researcher will have been subjected to this scrutiny, but these types of projects are in the minority of all of the educational action research projects that have been developed (Noffke, 1997). The risks inherent in overlooking or disregarding ethical protocols do not require further explanation here; however, we cannot leave it at that. Clearly, the ethical features of the research must be attended to. We recommend that school districts establish research offices whose job it is, in part, to ensure that action research projects adhere to minimal standards of ethical conduct. In many action research studies, the researchers themselves are the objects of study. Certainly, this situation helps to mitigate some of

the risk involved, but, for example, coercion of teachers into action research projects is one ethical concern that requires further investigation. Furthermore, in cases where the “objects” of the research projects are children, the risk must be considered to be at least moderate.

The second concern is one more fundamental to the nature of action research. This is a concern with the capacity of teacher researchers to ensure that selected modes of inquiry are appropriate to the research problem, that research approaches can reasonably be assumed to produce desired research outcomes, and that teacher researchers can assess whether they have, in fact, achieved the desired outcomes for the research process. Huberman (1996) argued that teacher research (as it is not, he believes, a new research paradigm and has no unique system for justifying teacher research knowledge claims) borrows knowledge justification approaches from qualitative research: “We are bringing some fairly classic techniques of qualitative research to bear on the teaching experience, techniques used more and more routinely by people in the academy, and ones requiring methodical training and practice” (p. 128).

To illustrate the problematic nature of some educational action research approaches, we call on a recent experience in a school with which we are familiar. We believe this is not an atypical account of the practice of action research in schools. In this school the teaching staff members were directed to conduct research and a planning process to address low levels of achievement in the skill of estimating in arithmetic calculations through a standardized mathematics exam. The staff entered into an action research process in which they used a pretest-intervention-posttest strategy. They took the data from the previous year’s standardized assessment as pretest data, developed and implemented new teaching strategies for teaching estimating through an action research approach, and used the current year’s standardized assessment as their posttest measure. It goes without saying that there were numerous flaws in their design, not least of which was the fact that the sample of pupils was low (fewer than 10 pupils) and (of course) different pupils were administered the posttest than those who took the pretest.

How can we understand the validity of such claims in action research? Kelly and Gluck (1979, cited in Stringer, 1999) stated that the efficacy of action research projects must be evaluated based on emotional and social terms. That is, it must examine the pride and dignity of participants, among other things. In the case we have outlined, the school staff reflected on the research project and determined that it was successful because they achieved their targets, all teachers felt included in the process, and teachers felt that they had improved their collective ability to teach estimating. Although this may be true, however, obviously it cannot be assumed that the new instructional strategies had any impact on student learning. In other words, the evidence for success of this intervention was less than compelling. Similarly, when action research that is truly emancipatory (i.e., directed toward the reduction of pupil marginalization, etc.) is evaluated in terms of the pride and dignity (etc.) of the teachers through the process, it neglects the intended outcome of assessing the pride and dignity of the objects of the research (pupils). In this case, the evidence of emotional and social outcomes experienced by teachers is not compelling evidence that the action research process is effective for students.

Maturity of educational action research

To judge the maturity of a method or practice is naturally a contestable concept and one that is arguably difficult to define. Discussion of what exactly constitutes mature research is minimal at best. In the area of research and development for gambling policy studies, it has been suggested that mature research is inclusive of mixed-methods, long- and short-term study, and the use of contrary arguments in any concluding discussion (Yaffee & Brodsky, 1997). The majority of

educational action research does not produce artifacts for public or academic consumption, artifacts that might enjoy public or academic scrutiny (Noffke, 1997). We would be therefore justified calling into question the maturity of research conducted in a field where the majority of research engaged exists within a vast morass of gray.

Research in psychology and educational psychology since the 1960s suggests that epistemic belief systems mature through developmental, and distinguishable, stages (Schommer-Aikins, 2004). To this end, research, rooted in epistemic belief of the observer (and in the case of action research, observed, if a distinction may be drawn), must similarly mature. Participatory research is particularly capricious when cast in this light, however, as collective maturity might be at issue, yet research that claims a methodology, participatory or otherwise, but fails to demonstrate methodological consistency throughout the life of the research project is arguably less mature than research produced through consistency (Evers & Lakomski, 2000). Alternatively viewed, research that becomes incorporated into a “body of knowledge” (as opposed to being lost or shown to be invalid via scrutiny) might be claimed to hold maturity as the measure of maturity in this case is favorable peer review (see the arguments of Chew & Relyea-Chew, 1988).

Some have suggested that exploratory research offers to provide vitality within a field (Dietterich, 1990). Such exploratory research nicely fits within the central domain of action research as envisioned by Lewin (1946) and Collier (1945); that is, such forms of research are “usually driven by specific problems in specific domains” (Dietterich, 1990, p. 5) and are cyclical in their development. Yet exploratory research is not in itself an indicator of immaturity, nor is it an indicator of maturity. Rather, maturity is reflected in the degree to which the knowledge gained adds to a body of knowledge and receives longevous and favorable peer review (see also Bird, 2007).

The related notion of the “goodness” of research has been explored in some greater depth. In psychology, Salmon (2003) has articulated a need within his field of study to identify characteristics of good research. He suggested that key among these characteristics is an openness to scrutiny. Good research invites the reader to “expose the coherence of the finished work to scrutiny” (p. 26). Open, forthright exposure of research results to an open peer review, then, appears consistent with notions of maturity detailed above. Salmon’s argument places responsibility for inciting scrutiny with the researcher. We can infer from it that scrutiny leads to coherence, and we further theorize that coherence leads to incorporation into a body of knowledge.

Similarly, and perhaps most significant, Anderson and Herr (1999) referred to dialogic validity as key to ensuring the goodness of educational action research. We suggest that dialogic validity is a central validity type for all three action research modes. As they have suggested, practitioner peer review serves to ensure the goodness and dissemination of the knowledge generated from educational action research projects.

Conceptions of Validity in Action Research

Although we recognize that considerable debate has occurred with respect to validity in practitioner research, we suggest that many of the frameworks for establishing validity are incomplete. We propose that validity is contingent on the modes of action research; that is, the mode of action research determines the configuration of validities to assess the knowledge claims of the action research project. The validities identified by Anderson and Herr (1999) are particularly appealing for this purpose. They suggested that action research adhere to outcome,

process, democratic, catalytic, and dialogic validities. Briefly, *outcome validity* refers to the extent to which outcomes of the research are successful. Put another way, outcome validity refers to the extent to which the outcomes of the research match the intended purposes of the research. *Process validity* focuses on “the much debated problem of what counts as ‘evidence’ to sustain assertions” (p. 16). This validity is concerned with the efficacy of the research approach in addressing the research problem. *Democratic validity* is concerned with “the extent to which research is done in collaboration with all parties who have a stake in the problem under investigation” (p. 16). *Catalytic validity* refers to the ability of the research process to transform the participants, deepen the understanding of the participants, and motivate participants to further social action. *Dialogic validity* is akin to the peer review process in academic research. In practitioner research, however, it is suggested “that practitioner researchers participate in critical and reflective dialogue with other practitioner researchers” (p. 16).

We argue that Anderson and Herr’s (1999) contention that “all of these ‘validity’ criteria for practitioner research are tentative and in flux” (p. 16) is only partially correct. Each of the action research modes identified earlier in this paper (knowledge generating, practical, and emancipatory) are predicated on the differing goals and epistemologies of each mode. It follows that each action research mode makes somewhat different knowledge claims and therefore relies on somewhat different configurations of validity.

In Table 1 we illustrate how the three modes of action research rely on different primary and secondary validities to assess their knowledge claims. Although all of the validities identified by Anderson and Herr (1999) are present in the illustrated model, the suggestion that some are primary and some are secondary is significant. If we can accept that there are different modes with different primary goals, purposes, and epistemologies, then it follows that the manner in which knowledge claims are assessed is contingent on those factors. Primary validities answer the question, To what extent has the primary goal of the action research mode been achieved? Secondary validities ensure that the research project falls within the domain of educational action research. Primary validities alone are not sufficient to ensure that the research project does not belong to some other research or nonresearch tradition that does not share the epistemological and ontological features of action research. For example, in the case of an action research project in the emancipatory mode that is not assessed using its primary validities, we cannot be certain that the project has been successful in achieving its purpose. On the other hand, such a project that has not been assessed using the emancipatory mode’s secondary validities cannot be assumed to be action research at all. In such a case, the project might conform to primary validities and be merely activism or social transformation but not necessarily research. Similarly, action research of the knowledge-generating or practical modes might achieve their stated purposes yet not be action research at all. Without attending to secondary validities, we cannot be sure that these varieties of research are not another form of inquiry or social process. Dialogic validity (as discussed previously in this paper), in our view, is central to assessing the goodness of the research and in disseminating the knowledge generating from such action research projects.

Action Research Mode	Primary Validity	Secondary Validity	
Knowledge generating	Outcome validity	Democratic validity	Dialogic Validity
	Process validity	Catalytic validity	
Practical (improvement of practice)	Catalytic validity	Process validity	
	Outcome validity	Democratic validity	
Emancipatory	Democratic validity	Process validity	
	Catalytic validity	Outcome validity	

Table 1. Action research modes and corresponding validities adapted from Anderson and Herr (1999).

Anderson and Herr's (1999) contention that validity criteria "are tentative and in flux" (p. 16) is insufficient for ensuring that the assertions made through action research are warranted. Such a contention puts the onus on the action researchers themselves to choose from among the validity alternatives. Without further clarification, action researchers are left to their own devices to determine which validities are "valid." In many cases democratic validity has been overused and misused as a warrant for claims. In such cases there is the potential of abuse of the action research process in reinforcing the dominant discourse in educational reform. Without a robust and well-structured approach to validity, educational action research is susceptible to a number of pathologies. For example, action research that focuses only on democratic validity has the potential to be used to manipulate research participants and to build contrived consensus for a predetermined educational reform agenda (for a philosophical discussion of this general point, see Burgess, 2008). Similarly, action research that focuses solely on outcome validity represents a form of pragmatism that ignores the important moral and political dimensions of teaching and of the research process.

It is our hope that the preceding framework will further refine the notion of validity in action research and will assist educational researchers to successfully engage in a meta-inquiry about the nature of their research. Identifying whether an action research project has as its purpose the emancipation of marginalized populations, the improvement of practice, or the building of knowledge about teaching will necessitate the establishment of approaches to validity and rigor that align with those purposes. This type of meta-inquiry is an absolute requirement if action research is to evolve into a mature form of research.

Conclusion

As Huberman (1996) stated, "Teachers collect, analyze, and interpret data; and they are meant to do it carefully, systematically, and rigorously" (p. 132). It is Huberman's contention that educational action research does not appear revolutionary. If this is, in fact, the case, the examination of action research must focus on those features that ensure rigor and warrant knowledge claims. It is our contention that we have been derailed far too long by questions of new paradigms and epistemologies at the expense of the generation of new knowledge and understandings of education. It is now time to set aside such infertile arguments and turn our attention back to systematic creation of knowledge through rigorous action research. As Huberman succinctly put it,

Teacher researchers will have to move from a multiplicity of cogent, provocative, and promising ideas to a leaner, more internally coherent set of terms and interpretive frames. They will also need a less woolly body of evidence for the descriptions, interpretations, and explanations for grounding those frames. (p. 137)

We suggest that we need not be disheartened, that action research is ready to attain the level of a mature research approach within a qualitative research paradigm. We have argued in this paper that attending to rigor and validity is a critical last step for this research approach. One of the criticisms leveled at action research is its lack of incorporation into a body of knowledge about teaching. We suggest that this particular criticism points to a lack of research rigor, or more accurately, a lack of an accounting of research rigor within action research projects. A systematic approach to ensuring the validity of knowledge claims in the three different modes of action research will go a long way toward the incorporation of action research into a body of knowledge about teaching.

Feldman (2007) suggested,

Because of the moral and political aspects of action research, we are compelled to ask whether the results of our inquiries are valid. . . . If that knowledge is to be trusted and put to use in these larger contexts, then there must be reason for other teachers, students, administrators, policy-makers and parents to believe and trust that knowledge. (pp. 29-31)

In Feldman's view, the knowledge that we build as action researchers is dependent upon the validity of the outcomes of the research. The brute pragmatism that is found in, for example, declarations of "best practice," or the naïve contrived consensus represented in the anecdote presented in this paper are the result of an incomplete conception of validity in action research. An action research process that reconceptualizes validity as contingent upon the mode of research being used promises to move action research toward a form of research that builds knowledge, improves practice, and attends to the moral, political, and emancipatory dimensions of teaching and research.

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