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Action Research: A Spiral Inquiry
for Valid and Useful Knowledge

This article discusses methodological and philosophical issues linked to action research. The concepts of subjectivity and objectivity—potential sources of bias that mislead researchers in dealing with these concepts—and how to cope with them are discussed. Controversial issues of truth in positivism, postpositivism, and other schools of philosophy are considered. Finally, the article touches on validity criteria, validity types, and how to grapple with validity in action research.

Cet article porte sur des enjeux méthodologiques et philosophiques liés à la recherche-action. On y discute les concepts de subjectivité et d'objectivité, sources potentielles de préjugés qui ont induit en erreur les chercheurs, et la façon de leur faire front. Des questions controversées touchant la vérité dans le positivisme, le postpositivisme et d'autres écoles de philosophie sont également étudiées. Finalement, l'article évoque les critères de validité, les types de validité et la façon d'aborder la validité en recherche-action.

Introduction

In recent years there has been increasing acceptance of action research among teachers. It might be counted as a shift from academic research to more actionable research by teachers. As Holly, Arhar, and Kasten (2005) describe, action research tends to move "from research on teachers to research on the company of teachers, to research with teachers, [and] finally to research by teachers, with teachers, students, and others" (p. 14). Perhaps teachers have come to realize that academic research has failed to meet their needs in classroom situations because its orientation has been to produce papers and books, but in Lewin's (1988) words, "research that produces nothing but books will not suffice" (p. 41). What is action research, and what is about it that has caused such a turn? According to Kemmis (1988), "action research consisted in analysis, fact-finding, conceptualization, planning, execution, more fact-finding, or evaluation; and then a repetition of this whole circle of activities; indeed a spiral of such circles" (p. 29). Action researchers aim to improve what is happening in the workplace in which they are involved as action research essentially means "research that affects action" (Corey, 1988, p. 63). It is through such a process that teachers develop their pedagogical knowledge as well as that of subject matter.

Teachers recognize action research as a means of professional development and a useful approach for generating actionable knowledge pertinent to their own field of activity and changing the educational setting for the better (Friedman, Razer, & Sykes, 2004). Using action research, teachers try to understand

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various phenomena, particularly the ongoing dynamics of human interactions in their educational environment. Unlike traditional academic research that intends to declare uniform, overarching, or scientific rules, in action research, rules are more or less constructed as a result of teacher-student interactions. They "negotiate what counts as knowledge in the classroom, who can have knowledge, and how knowledge can be generated, challenged and evaluated" (Cochran-Smith & Lytle, 1993, p. 45). During this process researchers are involved such that they evaluate their own work. Considering such a critical evaluative process, the researcher must know how valid the data are and how to persuade the audiences that the research findings are worthwhile. In this regard the notion of validity in action research is of critical importance. In order to see how valid the results are, teachers must consider how close their findings are to truth, and truth in part is in close relationship with objectivity and subjectivity. In what follows the concept of bias, its potential sources, condensing methods, and how it could affect subjectivity and objectivity are discussed. Then these concepts are sought as the derivatives of truth theories, validity and its criteria, and the methodological concerns of action research method.

Objectivity and Subjectivity

Subjectivity means "a way of knowing which is located in a person's own perspective, including experiences and expectations as well as 'here and now' perceptions," whereas *objectivity* is understood as "a way of knowing which is not specifically located and in this way can see the entirety of any situation" (Ladkin, 2005, p. 110). A claim to truth from objective knowing implies that it states a truth that is valid from any perspective.

Objectivity and subjectivity have roots in two distinct schools of thought about the truth. One of these believes that reality is out there distinct from our interpretations and can be fully captured—the positivists' tenet. At the other extreme is an ideology that unveils the world as a series of phenomena in the minds of human beings who interpret them in as many ways as their characteristics: the ideology supported by poststructuralists. Although the latter denies the existence of the truth and objectivity, positivists believe that the more researchers are objective, the closer they are to the truth. Whether researchers believe in positivism or poststructuralism, a level of objectivity is desired. However, some barriers make this difficult. Researcher bias is one that is in part tied to the researcher's role, and a characteristic of action research is the appreciation of the part the researcher plays in the inquiry. So when such a characteristic comes to existence, bias is there.

Action research, like any other kinds of research, is a human activity subject to the same kind of failings as other human activities. One might make mistakes and get things wrong. There is no paradigm solution for the elimination of error and bias. Various forms of research may be inclined to varied sources of error, but clearly none is immune (Elliott, 1990). Although there are methodological strategies for handling validity, less consideration has been given to researcher bias and to the personal and social strategies needed to address it.

Much bias comes from data collection and the interpretation process. Because every researcher starts doing research with an idea in mind, he or she looks at events from a specific perspective that might be based in a particular theory. So the researcher's observation would be to some extent theory-laden.

It is somewhat easier to control the biasing effects of prior knowledge and beliefs when one is observing inanimate nature than when one is observing human or social phenomena (Phillips, 1987). For we are human, and our beliefs about mankind are strongly held, and are connected with our feelings and evaluations. Such feelings and evaluations lead the researcher toward findings that might be biased. Norris (1997) explains a range of potential sources of bias in research as follows.

1. the reactivity of researchers with the providers and consumers of information;
2. selection biases including the sampling of times, places, events, people, issues, questions and the balance between the dramatic and the mundane;
3. the availability and reliability of various sources or kinds of data, either in general or their availability to different researchers;
4. the affinity of researchers with certain kinds of people, designs, data, theories, concepts, explanations;
5. the ability of researchers, including their knowledge, skills, methodological strengths, capacity for imagination;
6. the value preferences and commitments of researchers and their knowledge or otherwise of these;
7. the personal qualities of researchers, including, for example, their capacity for concentration and patience; tolerance of boredom and ambiguity; their need for resolution, conclusion and certainty. (p. 174)

The researcher must be aware of such sources of bias and try to reduce them. One of the strategies used to understand researcher bias is called reflexivity, which means that the researcher "actively engages in critical self reflection about his or her potential biases and predispositions" (Johnson, 1997, p. 12). Through reflexivity, researchers become more self-aware and monitor and attempt to control their biases.

Norris (1997) believes that *detachment* is another way by which the researcher can reduce bias. According to Norris, to remain open-minded, alert to foreclosure and to sources of error needs some measure of detachment. Research requires detachment from oneself, a willingness to look at the self and how it influences the quality of data and reports; in particular "research demands a capacity to accept and use criticism, and to be self-critical in a constructive manner" (p. 173).

Hüsserl (1970) and Heidegger (1962) were also concerned about having as much objective perception as possible while doing research. Both were concerned about how it might be possible to arrive at a pre-interpreted apprehension of reality in order that the things to which our consciousness is directed might speak for themselves. Hüsserl suggested how to do this through a process he called eidetic reduction (Sokolowski, 2000), which leads the inquirer to an understanding of the essence of what the researcher was inquiring. Eidetic reduction is a "method by which the philosopher moves from the consciousness of individual and concrete objects to the transempirical realm of pure essences and thus achieves an intuition of the *eidos* (Greek: shape) of a thing" (*Encyclopedia Britannica online*). This reduction technique involves describing a thing as clearly as possible. Through repeated interactions of this process and by releasing those qualifiers that do not speak to a fundamental aspect of the thing, its essence would be revealed.

Hüsserl (1970) and Heidegger (1962) tried to find a way of knowing phenomena as they are without any recourse to interpretation. This was the aim of Hüsserl's process of eidetic reduction. An aspect of this method to reach beyond subjectivity is *bracketing*. Bracketing refers to the phenomenological goal of putting aside one's preconceptions or expectations in order to encounter the essence of a phenomenon. Sokolowski (2000) elaborates on how this is done.

> We suspend our beliefs, and we bracket the world and all the things in the world … When we so bracket the world or some particular object, we do not turn it into a mere appearance, an illusion, a mere idea, or any other sort of merely subjective impression. Rather, we now consider it precisely as it is intended by an intentionality … We consider it as correlated with whatever intentionality targets it. If it is a perceived object, we examine it as perceived; if it is a remembered object, we examine it as remembered; if it is a mathematical entity we consider it as correlated with a mathematical intention … Bracketing retains exactly the modality and the mode of manifestation that the object has for the subject. (pp. 49-50)

Habermas (1984) proposes another way to be more objective. Proposing the *Theory of Communicative Action* (TCA), Habermas implies that dialog is a powerful tool to understand meaning. Dissatisfied with the interpretive understanding of language, Habermas' pragmatism recovers the agency of the subject so that language becomes a means that the subject uses to coordinate actions and to mediate how people experience reality. In this context, dialog becomes a powerful means for people to learn from one another and about the objective world (Beck, 1992). One of the most important premises of TCA is that any subject has a universal capacity for language and action, making it possible for any subject to participate in intersubjective unrestricted dialogs. Furthermore, the recognition of the universal communicative capacity to understand and generate new knowledge leads to the demonopolization of scientific version of knowledge.

According to Habermas (1984), the scientific explanation cannot be based only on the subjectivity of the expert or the researcher who is considered objective; it should also be based on the intersubjectivity resulting from the dialog among the participants and the researchers. In this way each person brings his or her thoughts to the table. It is through the intersubjective process of knowledge sharing that objectivity is guaranteed. This is why Habermas believes that the epistemic authority transfers from the private understanding of a subject to the public practices of a linguistic community (Sorde-Marti, 2004).

Heidegger (1962) looks at the issue through the engagement lens. He stresses the importance of active engagement with things as a means by which knowing occurs. Heidegger makes the distinction between types of engagement in his terms "presence-to-hand" and "readiness-to-hand." Engaging with something in a present-to-hand way is to observe it from a distanced perspective. Heidegger argues that positivist science intends to understand the world from the present-to-hand stance, attempting to engage with it as an objective observer, set apart from the things being studied. Readiness-to-hand is the kind of quality that equipment possesses, which means we know about equipment only if we use it.

The notion of readiness-to-hand is just as appropriate and more relevant to action researchers, when the thing being used is of a nonmaterial nature. For example, influence as a concept can be understood only in a limited capacity by considering it cognitively. To understand the nature of influence, one must be in its realm either as an influencer or as the one being influenced (Ladkin, 2005).

Although most researchers who lean toward positivism have been trying to be as objective as possible, action researchers are encouraged to embrace their subjectivity as the base from which they inquire, but this does not necessitate dismissing any idea of objectivity. The challenge is how to conceptualize and act on the interrelationship between subjectivity and objectivity in developing our own meanings and truths.

One question that often arises for action researchers, especially in the first-person dimension of inquiries, is that of how they might avoid being self-indulgent or solipsistic in their inquiries. This seems to speak of a concern for achieving balance between articulating and honoring the subjective influences that affect an inquiry and the desire to create knowledge or foster understanding that will have meaning and applicability to others, knowledge that is acceptable and persuasive, in other words, speaking of a truth to convey a similar meaning to what the researcher has in the mind.

Truth: Philosophical Schools

Human efforts to find the truth have a long history, and in every field of study there have been debates about ways and possibilities of discovering it. The concern of positivists has been to become detached from self, have a neutral look toward research, and consequently avoid the bias; however, because they have not been able to meet such a goal, positivism and the questions it has been proposing about truth inquiry, particularly in terms of the possibility of the objectivity it offers, have lost their historical dominance. But similar questions about truth inquiries persist, questions like: Is the discovery of truth ever possible, or is the desire for it an artifact of post-enlightenment thinking? What is the nature of truth that is revealed through subjective ways of knowing, and how can it be of value and use to anyone other than the subjective knower? What is the relationship between subjectively oriented meaning and any objectively valid truth? And finally, how can we distinguish between our own desires, interpretations, perspectives, and any truths the inquiry may reveal? Is this a valid pursuit?

In our postmodern context, most people speak about truths rather than truth, and the emergent nature of such truths has gradually been accepted. In terms of action research, such a belief in multiple truths is more defensible because an action research report explains events in a particular context. It seeks an account of a specific situation that comes sufficiently close to its underlying structure. Therefore, the value of the work depends in part on how it changes the situation for the better and eventually how far others find the report persuasive. Therefore, a clear conception of what makes an action research report more persuasive, rather than less so, is certainly a matter of truth that is worth further exploration (Winter, 2002).

The level of persuasiveness depends on how close outcomes of research are to truth, although truth itself is veiled in a variety of dimensions, and the action

researcher does not always get back what is expected as a result of the action applied to the situation. Winter (2002) explains how truth might be hidden. According to him, given the "chaotic" complexity of the feedback loops in social affairs, some of the consequences of action will be other than those anticipated, so that rationales for decision-making are likely to contain delusion and miscalculations. Besides, some of the effective motives for individual action are hidden in the unconscious parts of the psyche and are thus determined by past and forgotten events, either in the early life of the individual or in prehistoric patterns of meaning. Moreover, some of the meanings of our actions are structured by hegemonic ideologies, which systematically distort the meanings of action in the political interests of the powerful and against the interests of the culturally oppressed, but also systematically conceal that this is the case. In addition to this, the fundamental disjuncture between perceiving phenomena in sense experience and understanding their *real* meaning is a basic tenet of any philosophical system that does not begin from an empiricist reduction.

These hidden dimensions have been treated variably by philosophical schools, and each explores truth from a different perspective. Healy and Perry (2000) explicate on judging validity in the realism paradigm that relies on multiple perceptions about a single reality. They argue for the involvement of triangulation of several data sources and their interpretations with those multiple perceptions in the realism paradigm (Golafshani, 2003). In this regard action researchers do not have to present the truth to justify their findings. In this school all researchers need to do is to look for multiple sources of data and apply triangulation techniques to interpret and understand what the text means.

Like realists, naturalist inquirers make virtually the opposite assumptions to positivistic scientific inquirers. They focus on the multiple realities that like the layers of an onion nest within or complement one another. Each layer provides a separate perspective of reality, and none can be considered more true than any other. Phenomena do not "converge into a single form" (Guba & Lincoln, 1981, p. 57), a single truth, but diverge into many forms, multiple truths.

From the coherence theory of truth perspective, research results consist of a set of coherent beliefs. The coherence theory of truth presents truth and the tests for truth as applying more to a set of beliefs and the relationship between them than to a single proposition in isolation. In the simplest terms, one's beliefs are true insofar as they are internally consistent and coherent (i.e., not only do they avoid self-contradiction, but they are mutually implicative and supportive) and comprehensive (i.e., the more extensive their scope and elucidatory capacity—while retaining coherence—the stronger the confidence they invite, Bridges, 1999).

Coherence in the ideal sense may be defined as the relationship holding between a body of propositions such that none of them can be false if all the rest are true, and that none of them is independent of the others. That is, between all the several propositions exists a mutual entailment such that any of them is deducible from all the rest, and none of them could be true if any of the others were false.

At any given time the degree of truth in research results is the degree of system it has achieved. The degree of truth of a particular result is to be judged in the first instance by its coherence with other research results, all comprehensive and fully articulated, in which thought can come to rest (Blanshard, 1939). Action research seems not to be able to fit within the coherence theory of truth because, as stated above, the results that come out of action research are mostly context-bound, and two characteristics of this theory of truth (internal consistency and coherence and comprehensiveness) do not apply to an action research framework.

The coherence theory of truth appears to suggest that we cannot really determine the truth of any belief until we have developed an entire and wholly inclusive system of beliefs. Also, it is not clear how in a coherence theory of truth one could decide between two sets of beliefs that were both internally coherent, but that were nevertheless mutually incompatible; or perhaps it is supposed that ultimately only one such set of beliefs can stand—that one system only is true, namely, the system in which everything real and possible is coherently included—in which case the theory seems to be invoking a principle additional to that of coherence, namely, that of comprehensiveness or universality. Besides, the theory appears to rely on a truth presupposed independently of the theory itself: the truth of some of the basic laws of logic that themselves underpin the notion of coherence (Bridges, 1999).

Correspondence theorists look for indicators to check truth. In the framework of the correspondence theory of truth, action research embraces both a notion of what it means for a proposition to be true and an indication of how one might check whether a proposition is true. Essentially, on this account a proposition is true if and only if it corresponds with a currently existing fact. However, as an ideal, correspondence between the world and the action researcher refers not only to what the inquirer perceives and understands, but to what he or she has to say about the world. In other words, "correspondence is to occur not only in perception and understanding but in representation as well" (Eisner, 1992, p. 10).

This philosophy of thought has shortcomings in looking for truth. The word *correspondence* suggests that when, for example, action researchers make a true judgment, they have a sort of picture of the real in the mind and the judgment is true because this picture is like the reality it represents. But the judgment is not like the physical things to which it refers. The images researchers use in judging may indeed in certain respects "copy or resemble physical things," but researchers can make a judgment without using any imagery except words, and words are not at all similar to the things that they represent. Researchers must not "understand correspondence as meaning copying or even resemblance" (Ewing, 1951, pp. 54-55).

A second difficulty about the correspondence theory of truth is that it comes close to circularity. A proposition is true if it corresponds to a fact, but what is a fact? Is it not a state of affairs represented by a true proposition? So how informative is the correspondence theory? All so-called perception or observation is not simply the camera eye recording the given; it is also the mind interpreting according to the pattern of one's past experience; and exactly what you will see will depend on what your interests are, either in general or in this special case. The correspondence model of truth relies in the end on a circular

dispute, because we have no means of establishing the facts other than through our investigations and our accounts of those investigations. Correspondence is thus a claim rather than an objective criterion for judgment (Winter, 2002).

Consensus theory is based on a philosophy that appreciates group thoughts and an agreement among people. Consensus theory draws on some of the constructivist thinking that underpins philosophical pragmatism, but effectively turns the truth or falsity of a belief into a matter of social agreement. For example, some contexts lend themselves more readily to consensus theory than others. So philosophers have tended to be skeptical of consensus theory as an account of what it means for a belief to be true. Perhaps researchers ought to share especially in this skepticism of consensus, because it is arguably their particular function as intellectual citizens to challenge the easy and self-perpetuating consensus that society creates for itself (Roszak, 1968). At least they have to observe that what any group of people believes or agrees to be true may rest on, for example, unexamined tradition, the hegemony of a dominant class, the suppression or self-censorship of dissenting opinion, or collective hysteria: everything that intellectuals and researchers have traditionally been expected to subvert.

However, consensus theory has come to occupy an important place, particularly in action research and evaluation, that is dominated by the language of, for example, triangulation (one form of which might involve establishing consensus between varied observers or stakeholders) and the negotiation of an agreed position in relation either to events themselves or some published account of those events.

Another paradigm that can be useful for action researchers is constructivism, which views knowledge as socially constructed and changeable depending on the circumstances. From social perspectives, constructivism is defined as "the view that all knowledge, and therefore all meaningful reality as such, is contingent on human practices, being constructed in and out of interaction between human beings and their world, and developed and transmitted within an essentially social context" (Golafshani, 2003, p. 603). The constructivist notion, that reality is changing whether the observer wishes it or not, is an indication of multiple or possibly diverse constructions of reality. Therefore, to acquire valid, multiple, and diverse realities, multiple methods of searching or gathering data are in order.

Pragmatism is a philosophy that can be a leading theoretical foundation for action research. It can fit between quantitative and qualitative research philosophies. According to pragmatism, truth is *what works*. It allows the researcher to pursue his or her interests in practice (Bridges, 1999). Pragmatic theory serves most comfortably in the world in which it is dealing with things working. Much of what we do may well be governed by projects and belief systems in which the pragmatic principle serves us well. It is less readily applied, although some have attempted its application, to areas like religion, morality, mathematics, or even less applied areas of science.

However, the proper way to conceive of the relationship between truth and *functionality* is not that a belief is true if it works, but a belief will work if it is true. Bridges (1999) argues against pragmatism, saying that it begs some of the most important questions. A decision as to whether some belief in the context of classrooms, for example, works or not "presupposes some view of what

would count as working" (p. 605). In this context, this might involve some judgment about educational aims and procedural principles that cannot themselves be determined by reference to whether they work, because they provide the criteria used to determine whether some particular belief is working.

However, pragmatic theory is clearly represented in the world of classroom action research. For example, classroom action research is posited firmly on the conviction that educational principles have no validity until they have been tested in action, and further, that such principles are best derived from the results of practice in the classroom.

Although these philosophical schools look for truth in varying ways and try to lead research studies to find valid results, some researchers categorize validity and define criteria to determine how valid research findings are.

Validity: Controversial Issues

Norris (1997) believes that validity refers to the reasons we have for believing truth claims, what Dewey called "warranted assertibility" (Norris, p. 172). According to Turnock and Gibson (2001), validity in action research is not about methodology, but about personal and interpersonal issues. They do not wish to reject methodological theory. Instead, they feel that insights acquired in solving issues of validity help inform action research methodology.

In action research the issue of validity is not concerned with instrument construction, because as Patton (2002) observes, "the researcher is the instrument" (p. 14). It is how theory is situated in an actual setting, and as Maxwell (1992) suggests, it is at least in part an attempt to uncover *theory-in-use.*

Although there are many controversial ideas about validity, all show researchers' concerns for the need to justify research results. Broadly defined, validity can fall into the following categories.

Descriptive validity. This refers to the factual accuracy of the account as reported by the researchers (Simco & Warin, 1997). The key questions addressed in descriptive validity are: Did what was reported as taking place actually happen? Does the report reflect exactly what the researchers saw and heard? In other words, descriptive validity refers to accuracy in reporting descriptive information. This form of validity is important because description is a major objective in nearly all qualitative research.

Interpretive validity. This requires developing a window into the minds of the people being studied. Interpretive validity refers to portraying accurately the meaning attached by participants to what is being studied by the researcher. More specifically, it refers to the degree to which the research participants' viewpoints, thoughts, feelings, intentions, and experiences are accurately understood by the qualitative researcher and portrayed in the research report (Johnson, 1997). Accurate interpretive validity requires that the researcher look through the participants' eyes and see and feel what they see and feel. Thus the qualitative researcher can understand things from the participants' perspectives and provide a valid account of these perspectives.

Theoretical validity. This refers to the logical bearing of a study on the development of a theory (Sells, Smith, & Newfield, 1997). Theoretical validity exists to the degree that a theoretical explanation developed from a research study fits the data and, therefore, is credible and defensible. Theory usually refers to discussions of how a phenomenon operates and why it operates as it does.

Theory is usually more abstract and less concrete than description and inter-pretation. Theory development moves beyond the facts and provides an ex-planation of the phenomenon.

Validity Criteria

Quoting Guba and Lincoln (Anderson & Herr, 1999), who stated, "relevance without rigor is no better than rigor without relevance," Anderson and Herr argue that action research will continue to be marginalized unless rigorous validity criteria are agreed. However, they state,

> Action research should not be judged by the same validity criteria with which we judge "positivistic" and naturalistic research. This is not to say that there is no overlap or that it is less rigorous, but that a new definition of rigor is required that does not mislead or marginalize practitioner researcher. As action research is disseminated beyond local sites, there is a need to deepen conversations about these issues. (p. 15)

James and Worrall (2000) propose the following criteria for what is con-sidered research for action researchers.

Outcome validity. This views the extent to which the action resolves the problem being studied. However, rather than simply asking whether problems have been solved, this should acknowledge that action research often has a spiraling dynamic that forces the researcher to reframe the problem.

Process validity. Altrichter (1991) believes that process validity refers to the whole research process that tests the quality of research in two ways: critique and practice.

> Via critique the logical soundness, the way categories were developed, the compatibility with accepted standards in theory and in accepted empirical findings, and so forth is checked. Via practice (as replication in research or social practice) the empirical consequences postulated by a theory are tested against a variety of standards as efficiency, side-effects, ethics, etc. (p. 84)

This type of validity determines whether the process is aligned with desired outcomes and refers to the extent to which problems are framed and solved in a manner that permits the ongoing learning of the individual or system. The emphasis on process begs questions about the kind of evidence that might sustain assertions. Insofar as the methods of naturalistic inquiry are relevant, notions of respondent validation, triangulation, and the inclusion of multiple perspectives can be brought to bear.

Democratic validity. This takes into account collaborative processes and multiple perspectives in the research. In fact it refers to the extent to which research is done in cooperation with all the parties who have a stake in the problem under investigation (including students and parents). The issue here is one of ethics and social justice; solutions to problems need to be examined to see whether benefits to one group are introduced at the expense of other stakeholders. Although empirical evidence may be called on in this kind of validation, deliberation of a more philosophical kind is likely to be equally important.

Catalytic validity. This determines the extent to which the action focuses participants toward a greater understanding of active knowledge. In other words, it looks for the degree to which the research process reorientates,

focuses, and energizes participants toward knowing reality in order to transform it. The concept is derived from Lather (1986) and emphasizes the transformative potential for all involved, including the action researchers themselves, who should expect to deepen their own understanding.

Dialogic validity. This is a review of the research by the participants through collaborative processes and refers to the extent to which action researchers seek dialogue with peers in order to engage with others about the quality of their research. This resonates with the concept of peer review in academic research and emphasizes the need for action research to be open to rigorous critique if it is to be valued. There seems no consensus, however, on whether critical and reflective dialogue should extend beyond the "critical friend" or the "community of collaborative inquirers" to other research communities. My own view is that it must if action research is to warrant the *research* title, but it means finding a language and register for communication that other communities will understand. Addressing issues of validity directly may help because criticisms of practitioner research often come down to this.

Conclusion

Proponents of action research emphasize that the uniqueness of each project means that each report must suggest its own criteria for judgment or that the value of the work resides in the practice improvements or enhanced group morale it engenders in the particular context during the time span of the project (Lomax, 1994). They believe that validity-enhancing practices do not ensure that research is accurate, correct, certain, trustworthy, objective, or any of the other surrogates we use for truth. There are no guarantees, no bedrock from which verities can be derived. It is in the nature of research that knowledge can always be revised. In the words of Lather (1993), validity is "multiple, partial, endlessly deferred" (p. 675).

Looking at these debates more rigorously and aiming at the objectivity of our own, as action researchers we must fully take on the implications of our subjectivity, being in a real sense the foundation for our knowing and claims to truth. Rigor could be constituted by the extent to which we can also account for our located perspective, that is, to the extent that we can simultaneously consider our subjectivity from a distance (or objectively). Truths based in objectivity-for-subjectivity are necessarily emergent, located, and to that extent limited. They are also completely and necessarily intertwined with meaning (Ladkin, 2005). And finally, as Chandler and Torber (2003) express, instead of considering action research as a research method without validity, it is time to explore how quantitative *objectivity* and qualitative subjectivity can be interwoven into action research settings to complement one another.

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