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Tackling a lingering infirmity: On the nature and warrant of action research in education

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Abstract

The BERA initiative on promoting Close-to-Practice (CtP) research raises new challenges for action research, particularly as uncertainties about the standing and rigour of action research were expressed in the report of the education panel for the 2015 Research Excellence Framework (REF) in the United Kingdom. The work of tackling these challenges is essential in advancing CtP research, and it discloses, in turn, new possibilities. In this paper we review some pioneering developments in action research and analyse the difficulties it has experienced in securing parity of standing with other forms of research. We argue that action research is more than, and sometimes other than, a social science. We seek to show that if action research is to be recognised by credentials that are its own, and judged by criteria that are proper to it, not only does it lose any lower standing. Rather, it becomes a major pathway, with deep roots in the critical traditions of Western practical philosophy, through which the defining purposes of education itself, as a distinctive human practice, are ascertained and affirmed, pursued and appraised.

KEYWORDS
domains of relationship, educational experience, ethical orientation, inherent purposes

THE RECURRENCE OF AN OLD PROBLEM

The recent BERA initiative on Close-to-Practice (CtP) research has highlighted the distinction between research that is primarily *about* education and research that is mainly *for*

Key insights

What is the main issue that the paper addresses?
The main issue this article address is a recurring and damaging tendency to regard action research as a pursuit with inferior standing within the field of educational research as a whole.

What are the main insights that the paper provides?
The main insights are: (a) that action research in education is to be properly understood less as a form of enquiry with roots in the social sciences, and more as a form of practical philosophy with origins in Socratic and Aristotelian traditions; (b) that, when judged by criteria that are proper to it, action research can be a form of educational research *par excellence*.

education; between enquiries that investigate education as a social phenomenon and enquiries that seek explicitly to enhance educational practice (Wyse et al., 2018). Earlier forms of the distinction have been drawn by Elliott (1978, 1987, 1991), Carr and Kemmis (1986), Biesta and Burbules (2003) and Whitty (2006). The document *Close-to-Practice educational research*: *A BERA statement* (BERA, n.d.) points out that much educational research could be both *for* and *about* education. But the *statement* also notes a general perception that the highest quality research, as judged for instance by the Research Excellence Framework (REF) in the United Kingdom, 'tends to be *about* education rather than *for* education' (p. 2). High standing is enjoyed by theoretical research projects that are often quite removed from practice, but that attract highly regarded research efforts and the lion's share of available research funding.

As educational research has become more firmly institutionalised in recent decades, the stakes have been steadily raised by the metrification of its products. By 'metrification' we mean the recasting of questions of quality as questions of indexable quantity, especially where assessments of the value of research are concerned. Metrification embodies a technical cast of mind that has become internationally dominant in today's world of business and technology, nowhere more so than in the sphere of public accountability. In making completed research projects more readily amenable to comparative ranking, it characteristically executes a short-cut through the complex discernments and circumspect judgements that such evaluations properly require.

Against this changed background, the BERA *statement* and the associated research project (Wyse et al., 2018) mark a bold and timely departure. The *statement* cites findings of the 2015 REF to support its claim that 'the best research *for* education can be truly excellent' (p. 2). But in his presidential address to BERA in 2019, Dominic Wyse, one of the authors of the *statement*, referred to some disconcerting findings of the education panel for the 2015 REF, to the effect that 'some studies, close to practice, lacked originality, significance and rigour'. Elaborating this finding, Wyse quoted further from the panel report: 'Less strong research in the submission was often the small-scale professional research or action research which was frequently insufficiently theorised to make a contribution to knowledge and/or was low in rigour with poor use of statistical data or inappropriately selective reporting of qualitative data' (REF, 2015b, p. 197, quoted by Wyse, 2020, p. 19). Wyse was at pains to affirm the importance of CtP research and to promote it more widely. The negative conclusion of the REF panel, however, highlights the challenges that face such efforts in relation to action research, as distinct for instance from other forms of practical research such as case studies, ethnographic studies, narrative research and grounded theory. These other

forms were not identified for criticism in the 2015 REF. Nor were there criticisms of teacher research more widely (i.e. research carried out by teachers on their work). But the observations in the panel report bring to the fore again a question about academic rigour and standing, specifically in action research.[1] This recurring question about action research is what we wish to tackle in this paper. Much of what we say may have application to other forms of practical research, such as those just mentioned, but the focus of our concern here is action research itself. Exploring its connections with other forms of CtP research is a further important task, but one that first requires that action research itself has been adequately understood. Pursuing this prior task is our concern here. We aim to show that action research, properly conceived, draws on currents that stretch back through the critical legacies of the Enlightenment to more ancestral origins in Aristotelian and Socratic practical philosophy. We are also keen to show that these strong credentials give action research distinct advantages as a form of *empirical* research, gathering evidence in myriad forms on what makes educational experience genuinely educational.

Questions about scholarly rigour and standing have troubled even the best achievements of action research since the teacher-as-researcher movement of the 1970s, associated with Lawrence Stenhouse, John Elliott and others at the University of East Anglia (Elliott, 2012, p. 92ff). Such questions have arisen afresh in recent years. In 1991, Elliott could confidently write: 'The fundamental aim of action research is to improve practice rather than to produce knowledge. The production and utilisation of knowledge is subordinate to, and conditioned by, this fundamental aim' (Elliott, 1991, p. 49). In his published work from the early twenty-first century, however, Elliott is keenly conscious of a new importance attaching to the knowledge contributions of action research (Elliott, 2006, 2009, 2019).

Many guidebooks (including successive editions) have been published on action research in education in recent decades, for instance, McNiff and Whitehead (2012), Mills (2017), Sagor and Williams (2017), Cohen et al. (2018, chapter 22) and Mertler (2020). These have both responded to and promoted the growth of action research approaches in teachers' professional development, also in postgraduate studies. Much attention is given in this literature to themes like researchers' interrogations of their own values, what they personally value in education, and the importance of action research in the democratising of knowledge. But questions about the inherent values of educational practice itself, and of their claim on the commitments of teachers, *qua educational practitioners*, are, by contrast, under-explored. Accordingly, the key connections between the warrant and standing of educational action research and the inherent purposes of education—as a practice in its own right—tend to get neglected. Viewed in this context, it should not be too surprising that doubts about the standing of action research might continue to linger, like some chronic infirmity that cannot be finally shaken off.

This sense of a failure by action research to realise its potential is evoked by Chris Higgins in a forthright paper, tellingly titled: 'The promise, pitfalls and persistent challenge of action research' (Higgins, 2016). At the heart of Higgins' critique lies the charge that action research has fallen victim to a self-disabling 'methodolatry' (p. 233ff). Higgins argues that conventional social science conceptions of knowledge have distorted action research, and he concludes that action research is 'an important intervention that has largely fossilized into a banner or method' (p. 235). Higgins' analyses and conclusions have drawn criticisms (Foreman-Peck & Heilbronn, 2018), particularly relating to the alleged failure on his part to distinguish clearly between action research and critical reflection, and also for his alleged pessimism (p. 133ff). But Higgins' critique has also been foreshadowed in key respects by Carr and Kemmis (2005, p. 351). His identification of a lingering debility is not easily dismissed and recalls a long-familiar refrain: that action research just is not in the premier league. The criticism might be dismissed as a passing irritant—even an academic prejudice—if heard from

researchers of various traditional stripes, but it lands a damaging punch when contained among the conclusions of official evaluation reports.

In short, while action research has contributed substantially to advances in professional development in teaching, its attempts to win an equal and secure place among educational research approaches call to mind a Sisyphean endeavour. It is difficult to see how its inferior standing can be remedied while action research is judged by criteria that, in central respects, sit ill with the nature of that research itself. As this paper proceeds, we will seek to show that if action research is to be recognised by credentials that are its own, and judged by criteria that are proper to it, not only does it lose its lower standing. It becomes a major pathway, with deep roots in the critical traditions of Western thought, through which the defining purposes of education itself, as a distinctive human practice, are ascertained, pursued and appraised. We turn now to the main points of our case.

THE ANCESTRY AND SCOPE OF ACTION RESEARCH

It is customary to locate the origins of action research in the work of social psychologist Kurt Lewin (Adelman, 1993; Marrow, 1969; Schön, 1984), but its intellectual and ethical ancestry are older and more inclusive. For Lewin, action research meant 'the experimental use of social sciences to advance the democratic process' (Marrow, 1969, p. 128). Lewin's work provides helpful resources for introducing innovations in work practices, for monitoring, analysing and critically reviewing developments in the light of experience with such innovations, and hence for modifying and bettering these work practices. This describes in summary a cycle of an action research process; but subsequent cycles can build on an initial one, where the basis for the innovations now introduced arises from the more successful outcomes of a preceding cycle. It is not difficult to see how developmental strategies forged in this way might yield improved effectiveness, and increased participation, in a range of different workplaces—from business offices to hospitals to schools. Viewed thus, an action research process might allow for many variants, including those that are authored by participants themselves, by work supervisors, or by outsiders. It also allows for research initiatives that are conducted by individuals or by collaborations.

What is absent from this characterisation of action research, however, is any searching provision for scrutiny and appraisal of the actual goals currently pursued by the particular practice or occupation, or of how the innovations introduced might influence those goals. Here, the action research process could be turned to this purpose or that, so long as some serviceable notion of effectiveness, or utility, or some meaningful degree of participation, remains central to it. This could be effectiveness in yielding more profitable returns in business, higher exam results in schools, more wins for a basketball team, and so on. Increased participation, for its part, could strengthen a team's commitment to the designated goals, without necessarily involving a critical appraisal of the worthiness or defensibility of these goals. Where education is concerned, for instance, such a characterisation provides no way of ascertaining the *educational merit* of the actions pursued. What counts as effectiveness or improvement, then, could readily be decided in essentials by somebody other than the practitioners, whose participation might be largely a form of compliance. Neither is there anything here that is theoretically incisive, or that might safeguard action research from becoming degraded to a set of techniques, thus inviting critiques like that of Higgins.

A range of more refined conceptions of action research, or related approaches that fall roughly within CtP research, emerged from the late 1970s to the end of the century. This range, as well as including scholars working centrally in action research, also takes in highly original departures in qualitative investigations of practitioners' more widely. Characteristic figures in this range include Eisner (1979), Schön (1984), Carr and Kemmis (1986), van

Manen (1990), Elliott (1991) and Brookfield (1995), to mention but a sample. A perusal of such sources reveals that the intricacy and intellectual incisiveness of the work contained in them ranks favourably with anything in the literature on educational research. Any of the sources could serve to illustrate this point, but we have chosen *Becoming critical* (Carr & Kemmis, 1986) for this purpose, chiefly because it enables us to do so succinctly. Throughout the text, the authors highlighted the ethical and political assumptions, especially habitually overlooked ones that are lodged in all kinds of educational activity, including educational research itself. Carr and Kemmis located action research in two prominent currents of Western thought, namely, critical theory and Aristotelian practical philosophy. The former current, concerned mainly with cultivating a capability for critique, they traced from Kant through Marx to Habermas. Critical reflections springing from this current would enable educators, as teachers-cum-researchers, to identify and analyse ideological influences at work in and upon environments of teaching and learning—through educational policies, through the curriculum, and through the practices of teachers. The contribution of Aristotelian practical philosophy was mainly through the twin notions of *phronesis* (deliberative reasoning about the most defensible course to follow) and *praxis* (actions pursued in the light of such reasoning). Here, reflection turns from critique to constructive practice, focusing on possibilities that are promising and practicable, but that also hold up well under criticism.

Uncovering the tensions between educational values and values from elsewhere that get ingrained in educational practice becomes a core feature of action research in Carr and Kemmis' approach. So does the informed negotiation of these tensions by participants in action research, whether directly as teachers or more indirectly as research supervisors or project leaders. Similarly stressed is the point that educational values must continually be rendered explicit for purposes of critique and appraisal. Yet, the question of what it is that makes educational values distinctly *educational* remains under-explored (i.e. what distinguishes educational values from those of other pursuits, including forms of democratic activism, with which they might become confused or conflated?). The authors' brief reference to 'the "good" intrinsic to this practice' in their twentieth-anniversary paper, 'Staying critical' (Carr & Kemmis, 2005, p. 352) calls attention to the kind of exploration that is needed, but pursuing the exploration itself remains a further task.

Any form of research that seeks to illuminate a practice in its fullness, and to provide an adequate warrant for its own findings, must venture searchingly through this terrain of values. It must distinguish between the inherent values that define the particular practice and its goals, and other values that the practice might be made to serve. The connection between the values that define a practice and how these become realised—or neglected, compromised or betrayed—in the work of practitioners is crucial here. Such values, and the connection itself, come into sharper focus, or perhaps become properly explicit for the first time, when conflicts arise. A concrete example will better illustrate this point, revealing also the scope and ethical orientation of *educational* action research.

The teachers in school X understand that the school's funding may be reduced next year, with a consequent loss of some teaching posts, if examination results this year do not equal or exceed last year's. Some teachers, accustomed to this situation, routinely acquiesce, dismissing any misgivings as soon as they surface. But other teachers are troubled by misgivings and find, through discussions with colleagues, a conflict between the values they are now called on to embrace and those that led them to choose teaching as a career. They discover further that the priorities they are pressurised to pursue also bring about some far-reaching changes in the main relationships that constitute their practice. They come to realise that these include relationships in at least four broad domains; domains that only now become properly explicit. Firstly, their relations with their students become excessively focused on preparation for exams and tests, with decreasing scope for introducing examples and interconnections, or following up potentially rich questions that arise in class. Secondly,

their relationships with the subject(s) they teach become likewise diminished by considerations of the likely shape of the examination papers or the format of tests. Thirdly, significant changes also result in the teachers' relations with colleagues, the school management and parents. Insofar as cooperation remains a feature here, they find it becoming a narrow and functional transaction rather than something that is essentially collegial and creative. Finally, the teachers become more keenly aware that these three domains of relations live together—harmoniously or otherwise—in each teacher's self-understanding. Accordingly, this fourth domain, the teacher's relation to him/herself, is seen as the key to the others, but also as vulnerable to myriad influences that may be at odds with the defining purposes of their work.

Action research in education necessarily includes in its scope these fours domains, each of which could be further elaborated. The same can be said of any form of research that is 'for education' as distinct from 'about education'. Action research in other practices (e.g. medicine, social work, business management, nursing, etc.) explores comparable domains, but they are different from those in education. They are different because the values that are inherent to each practice involve different kinds of capabilities, different priorities for action and not least, different forms of relationships. The importance of this point cannot be over-emphasised, because if the values of one practice are uncritically absorbed into another, the inherent values of the latter practice are likely to become compromised or even colonised. Any educational research, whether *for* or *about* education, needs to be alert to the possibilities of such colonisation. But the point is particularly important for action research as this engages directly with the embodiment of values in the actions of practitioners. Prior to any considerations of methodology then, such research needs proficiency in a reflexive critical discipline; one that is keenly vigilant where the inherent values of education itself as a practice are concerned. In turning to consider this issue now, we will also endeavour to uncover the fuller origins of action research.

INHERENT EDUCATIONAL PURPOSES

In the preceding paragraphs we have referred repeatedly to practitioners and to practice. We now need to refine both terms and draw out the close connections between them. This will help to distinguish anything that is called a practice from other kinds of activity, and to differentiate 'practice' in this occupational or career sense from colloquial uses of the word (e.g. 'her practice was always to have the last word'; 'it's ok in theory but it won't work in practice'; 'he made a practice of showing up late'). Aristotle defined practice (*praxis*) as informed human action in relation to things that are good and bad for human beings (Aristotle, 1934, 1140b1-6). He distinguished it from *theoria* on the one hand and from other forms of human activity such as making, or crafting (*poiesis*) on the other. Good practice in any given field—politics was Aristotle's central example—would embody some characteristic virtues and excellences in bettering human affairs. In books like *After virtue* (MacIntyre, 1985) and *Back to the rough ground* (Dunne, 1993), Alasdair MacIntyre and Joseph Dunne have extensively explored Aristotelian traditions of practical philosophy, relating these to major ethical concerns of our own day. Both, moreover, have furnished characterisations of practice that are probing and broadly comparable (Dunne, 2005; MacIntyre, 1985). Here we shall avail of Dunne's characterisation because, unlike MacIntyre's, it is offered in an educational context. It also makes explicit the connection between practice and practitioner, a connection that remains implicit in MacIntyre.[2] Dunne's characterisation states:

> A practice is a coherent and invariably quite complex set of activities and tasks that has evolved cooperatively and cumulatively over time. It is alive in the

> community who are its insiders (i.e. its genuine practitioners), and it stays alive only so long as they sustain a commitment to creatively develop and extend it – sometimes by shifts which at the time may seem dramatic and even subversive. Central to any such practice are standards of excellence, themselves subject to development and redefinition, which demand responsiveness from those who are, or are trying to become, practitioners. (Dunne, 2005, pp. 152–153)

On this thought-provoking account, anything that might properly be called a practice (nursing, farming, teaching, medicine, etc.) has core purposes that define and orient its practitioners' commitments and that call for the development of the practice itself, not least through research. As well as highlighting the built-in nature of purposes to which practitioners become committed *qua* practitioners, Dunne's characterisation highlights the point that bold shifts of perspective may be involved in efforts to enhance a practice. In fact, the more significant enhancements in a practice involve qualitative shifts of this kind—very often research-informed ones—as distinct from just advances in efficiency. There is abundant historical evidence, however, showing that teaching, or educational endeavour more widely, has had its sense of being a distinct practice weakened by being regularly required to implement a disparity of purposes. These might be non-educational purposes, or educational purposes that have become strongly infused with others. Historically, they have included the purposes of a church or a state, those of a monarch, emperor or dictator, those of a political party, a business or lobby group, and so on.

Given this history of recurring interventions and colonisations, one might reasonably conclude that educational purposes are essentially contestable, as distinct from intrinsic and enduring; that control of education is essentially for powerful interest groups to fight about. An inverted or disfigured order of things might thus be taken to be the natural order of things. Inherently educational purposes are, however, crucial to education itself and to all research that is chiefly *for* education. Summarising to bare essentials, they might be described under three broad headings, each involving complex encounters that are invariably laden with risk, if not always with promise:

a) Firstly, uncovering those potentials for constructive thought and action that are native to each individual human being, while recognising that humankind, even in specific local contexts, is always a plurality.
b) Secondly, cultivating those emergent potentials through renewed imaginative engagements with diverse inheritances of learning, from the classical to the avant-garde.
c) Thirdly, trying to ensure that the educational environments where such actions are pursued provide learning experiences that embody shared benefits and virtues—where the gain of one is not at the loss of others.

This threefold outline presents the experience of teaching and learning in terms that should be readily recognisable, but also acceptable, to a wide diversity of teachers, *qua educational practitioners*. Describing as it does educational practice from the inside, yet in publicly recognisable terms, it identifies normative orientations that are intrinsic to the practice itself as distinct from orientations ascribed to the practice from without. It also gives due attention to some characteristics that frequently pass unobserved, not least by educational research. In the first place, teaching and learning are understood here as a joint and ongoing encounter; one that is experienced—happily or otherwise—from different perspectives by teacher and students. As a joint encounter, or unfolding interplay, the event of teaching and learning is thus differentiated from anything that is primarily a transmission—of knowledge, values, skills or anything else. For all its prominence in educational discourse, transmission is a

mechanistic notion that serves to becloud more than to reveal what is central to educational experience.

Secondly, this account of inherently educational purposes puts a focus not only on behaviours that can be systematically observed in the encounter, but also on decisive things that are happening anyway, but often beyond the consciousness of teacher and students. Of particular importance here are the attitudes that students might be taking to the teacher, to the subject, to each other, and so on. Dewey used the phrase 'collateral learning' to refer to this inescapable but tacit dimension of learning environments. He also added that these often inconspicuous attitudes may be much more important in the long run than the lesson in history or geography that is learned (Dewey, 1938/1997, p. 48).

Thirdly, a joint encounter, or interplay, highlights the importance of relationships in a way that transmission conceptions of education can never do. It is through studying what happens within these relationships—in domains like the four mentioned earlier—that the decisive and lasting consequences of educational experience can be explored and appraised. We begin to appreciate here just how much of importance is missed by an 'evidence-based' research that understands evidence in terms of measured results as distinct from enduring consequences. Finally, while the larger landscape of educational experience often remains in the shade in much research that is called 'empirical', it is central to any research that is *for* education, or that seeks to be close to practice. It is the stock-in-trade of action research.

We have seen that Aristotelian practical philosophy and the traditions of critical theory in modern philosophy provide valuable resources for illuminating this landscape, and for locating the intellectual ancestry of action research. We are keen now to introduce another key source. In addition to practical philosophy and critical theory, an even more telling case can be made for Socratic philosophy. That case has less to do with any technique called 'Socratic method' than with a shared commitment to forms of enquiry that bring to light unconscious biases, overlooked assumptions and unacknowledged contradictions. The early dialogues of Plato, writings like *Euthyphro*, *Gorgias*, *Protagoras, Republic BK* and, in a special way, *Apology* feature a quite different Socrates, and also more vibrant forms of enquiry, than the bulk of Plato's middle and later writings (Plato, 2010). In these middle and later works, the dialogue form is notably contrived and 'Socrates' becomes largely a literary device for voicing Plato's own theories (Hogan, 2010, chapter 3; Vlastos, 1991). In the early dialogues, by contrast, the issues being investigated—piety, temperateness, virtuous conduct, justice—involve the venturing of different and contrasting viewpoints by various participants. Socrates leads the discussions, and while it becomes evident that he has been down these particular paths before, the reader also perceives that he has not reached any final destinations or demonstrable certainties. Rather, he is keen to set out afresh in each case, availing of the fruits of previous encounters and hoping to harvest something new with each current group of students.

Notwithstanding their exposure of unsound stances, the outcomes of the early Socratic dialogues appear somewhat inconclusive. This might be disconcerting to anyone seeking definite directions or prescriptions. Unconscious biases are adeptly brought to light but nowhere is what has been dismantled replaced by concepts of justice, wisdom, courage, temperance, and so on that possess a crisp certainty and completeness, or that provide action with unshakeable foundations.[3] The merits of these dialogues would appear to lie in something that is mainly negative—the disclosure of assumptions, preconceived ideas, logical flaws, prejudices, and so on. But are there no constructive steps? There are, but they lie more in a fresh ethical–intellectual orientation than in prescriptions or certainties. The appeal of certainty and the quest for unshakeable foundations are earnest themes in Western intellectual traditions—for instance, epistemological efforts from Descartes to Husserl. Yet Socrates seems to have understood, at some enigmatic level, that reaching such ultimate destinations requires an omniscience that lies beyond the capacity of mere

humans. Hence his well-known remark, offered during his trial, that 'real wisdom is the property of God' (*Apology* 23a). Here is an implicit acknowledgement—discovered afresh by twentieth-century philosophers (e.g. Wittgenstein, Popper, Dewey, Gadamer)—that there is something unavoidably incomplete, or partial, in even the best achievements of human knowing.[4]

The constructive side of action that is genuinely Socratic, then, is that regular engagement in self-critical dialogue cultivates a vigilant self-knowledge in the conduct of one's life and work. Where educational practitioners are concerned, far from being any self-preoccupation, this is a singular kind of ethical orientation in one's relations with students, colleagues and others. It also betokens a similar shift in one's relations with inheritances of learning, old and new. Being both receptively attentive and questioningly critical, this orientation acknowledges that one regularly needs the constructively critical insights of others. These help to ascertain what values—inherent, external, unconsciously biased, and so on—have *actually* informed one's thoughts and actions as a practitioner. But in this reflexive effort of jointly detecting mistakes and omissions, and of identifying notable advances, equal attention is given to uncovering possibilities for further action that are both promising and defensible. Such an orientation does not guarantee that thought and action can be made free of all error and bias. It seeks to ensure, however, that those possibilities that emerge as promising and defensible embody values that are actually educational. In attending closely to the quality of relationships, moreover, it endeavours to pursue such possibilities in ways that are progressively less parochial, or exclusionary, as one's practice develops and advances.

ACTION RESEARCH IN EDUCATION: THE QUESTIONS OF REACH AND WARRANT

When a Socratic current is joined with other currents in action research—Aristotelian, critical theory, reflective practitioner—it provides a context in which these currents become more powerfully confluent. It highlights strong resemblances and calls attention to common roots in Western traditions of practical philosophy.[5] Secondly, it helps to keep research efforts properly educational through its reflexive appraisals, particularly of the *educational* in the purposes being pursued. In the conflicts of priorities that attend educational practice—among and between teachers, students, school leaderships, parents, policymakers—reflexive critique enables priorities that are inherently educational to be more explicitly discerned, winnowed and affirmed. This also brings the tacit dimensions of educational experience, including the crucial collateral forms of learning referred to by Dewey, more fully within the reach of educational research. Thirdly, domains of relationship that were shaped largely by habit and routine now emerge as distinct, yet interweaving, areas for exploration. Consequently, initiatives whose educational merits remain in the critical spotlight can be undertaken, monitored and reviewed in practitioners' relations with students, with the subjects they teach, with colleagues, parents or others, and not least with themselves. In addition to teachers, practitioners here can also include school leaders, school inspectors, educational policymakers, and not least educational researchers. Fourthly, action research projects that follow this kind of rationale can of course be undertaken by individual practitioners. But the collaborative nature of the rationale itself suggests that it would be particularly productive to undertake a number of related, or coordinated, projects. The participants centrally include the practitioners themselves, but might also include participants-at-a-distance, such as research supervisors, critical friends from other schools, nearby or further away, and, not least, consultative committees that include policymakers and educational officials.

A concrete example might show how action research, conceived in this way, might proceed in practice, yielding insights and information that are more inclusive than the results

of standard empirical studies, but that also offer convincing warrant. We take the example of 'Jane', which does not correspond exactly to that of any particular person. Jane's research is representative, however, both in conception and process, of the action research studies we support with participant teachers in a research and development programme our university runs with consortia of schools.[6]

Jane's research study began at the start of the school year, with a group of Second Year science students. Her specific aim at the outset of her research was to improve the level of engagement among the students, under two headings: to bring about (a) better examination results and (b) a better understanding of science. Her students, boys and girls, were regarded as 'a very difficult class'. Typical characteristics included low-level engagement in school and homework, poor achievements in tests and exams, resistant attitudes to teachers, including sudden disinterest, serial disruption and dismissive indifference. School records showed that above-average numbers in the class were frequently subject to disciplinary proceedings.

Following a three-week period of reconnaissance, during which she planned carefully and shared expectations with her science class, Jane began her first initiative by arranging the class in groups of four (card table layout). Each group had a placemat—A3 size—with a circle in the middle and four sections, enabling each student to work on his/her own section. Each student also had a 'show-me' board, on which he/she could write questions, or answers, or comments, without having to speak or disturb anyone else. Jane began the class with a demonstration of a hard-boiled egg (shell removed) squeezing itself through the neck of a beaker and dropping to the bottom of the beaker. A lit scrap of paper had previously been dropped into the beaker and the flame was allowed to go out before placing the egg in the neck of the beaker. The question each student had to answer, using just his/her own corner of the placemat, was: What made it possible for the egg to squeeze into the beaker? A 5-minute period of silence was given for this individual task, during which 'show-me' boards could be used to communicate with the teacher, if necessary. Then each group had to rotate their placemat so that each student could see what each of the other three had written. Groups then had to discuss their *theories* about what had happened and write their agreed theory in the middle circle. Answers included: 'the smoke swirling inside pulled down the egg'; 'the smoke made the inside of the glass more slimy'; 'the egg likes the heat'; and others. While Jane was leading a review of these, another theory was suddenly offered by Dan: 'the egg got aroused and he took a sudden plunge!'. Jane had anticipated something like this. She gave Dan a prolonged stare, allowing the laughter to die down, and visibly pointed to her wristwatch with her forefinger ('we have an appointment'). She then continued with the review, adding that while some of the theories offered were grappling well with the problem, none had contained a correct explanation.

Jane repeated the demonstration with a new egg and beaker, this time giving a step-by-step explanation of what was happening to the air pressure in the beaker as the internal air cooled. She then announced, calmly and suggestively, that it was possible to get the egg out without breaking the egg or the beaker. Initial responses included 'no way!', 'impossible!', 'that's crazy man!'. The placemats were turned over so that the students could work on an identical rear side. The question for the second placemat exercise was: What's your theory on how to get the egg out? Answers this time included 'turn the beaker upside down and thump it', 'fill the beaker with water and boil it and the egg will be pushed up out', 'fill the beaker with water and shake the water and egg out of it together'. Jane credited these answers with phrases like 'cool', 'getting warmer', 'getting colder', carefully contributing to an air of expectancy. Finally, she agreed to show the conjurer's trick. Holding the beaker upside-down over the sink, she ran the hot tap over it. As the trickling water heated the glass surface, she explained that the rising air pressure inside the beaker was now beginning to push the egg through the neck, till it dropped into the sink. Finally, to get rid of any misunderstandings associated with smoke and its effects, she selected two students to try

the full experiment using only water, cold and hot, to cool or to heat the beaker and the air inside it.

Jane's follow-up 'appointment' with Dan took place at a table in the school assembly-cum-dining area. She quietly told him she had put a lot of trouble into making the science lessons interesting, and asked why he had tried to ruin these efforts with his remark about the aroused egg. Dan replied that he only did it for a laugh. Jane asked him to think about this. How would he feel if something he had carefully prepared was suddenly ruined by someone else, just for a laugh. Dan asserted that he wasn't undermining anyone, and that he was trying to get a laugh only because science was one of the most boring subjects in school—and that would not be very hard. Jane availed this as an opportunity to suggest that science might be really exciting, full of experiments like the one about the egg. Dan replied that it had been very boring in First Year and that the teacher was more dead than alive. Jane intervened, saying that any remarks about other teachers were off limits, but that feedback on her own science teaching would always be welcome, provided it was sincere. She then explained that their options in dealing with the issue before them were: (a) entering a note about it on the school's behaviour monitoring system—something the teacher would normally be expected to do anyway; or (b) renewing an agreement here and now about expectations and acceptable conduct in the science class. While option (a) would mean more trouble for Dan, and wasn't appealing for the teacher, option (b) could offer a promising path for both. Dan chose option (b), but only after a few more bouts of his verbal bravado were disarmed by Jane. Before concluding the meeting, Jane reminded Dan that option (a) was being put aside for now, but wasn't being abandoned.

As her research project progressed, Jane had such one-to-one meetings with others from the class—some less fruitful than the meeting with Dan—but cumulatively they contributed to a major change in relations, and in the classroom atmosphere. Jane came to understand more of the students individually, and differently. Her new insights enabled her to find, sometimes to stumble upon, unexpected ways of presenting science. Increasingly, her lessons became more of a joint endeavour, where her contributions were devoted to opening up new imaginative paths, providing clarifications and corrections, giving directed feedback, encouragement and sometimes warnings. For their part, the students (most though not all) gradually took on more responsibilities: for enquiring, for venturing relevant ideas in class, for sharing tasks, for completing better work and not least, for listening to contributions from others. Some of Jane's own unconscious habits, biases and omissions became evident to her through feedback from the students—verbal and written—but also through regular discussions of her emergent findings with a few colleagues. These were chosen as 'critical friends' for purposes of constructive criticism and offering ideas that might sometimes contrast considerably with Jane's own.

Jane's completed research project presented evidence on many dimensions of educational experience. It showed marked improvements in the students' achievements in the end-of-term and end-of-year exams, but also in their *attitudes* to learning science and their *practices* of learning: much better homework and some striking changes in their cooperation in class. In addition to records of examination results, the forms of evidence included: short video clips of group work in class—from different stages of the year; representative samples of students' work—again from different stages of the year; recorded discussions with groups from the class; samples of feedback from collections of 'post-it' notes, 'show-me' boards and short questionnaires; extracts from Jane's journal, presenting some high and low points of her journey and her own analysis of these.

Especially enlightening were Jane's observations in her overall analysis of the work of the project. She was pleased with the transformation in her relations with the students. Although she could still have difficult days, the apprehensions and even dread that this class aroused in her—and in other teachers—had been largely replaced by a bracing sense of possibility,

indeed a desire to stand up for the students. Jane also became aware that she was undergoing changes in her view of science. In fact, she felt she had begun to teach a new subject; different from the textbook science she had taught for many years. She was now increasingly 'writing her own script' and science itself was becoming a more lively presence in her own life. Jane also developed a new appreciation of the colleagues who had shared their views, criticisms and ideas so candidly, yet also so supportively, with her. She now had a more incisive understanding of collegiality and its potential, particularly when encouraged by an active school leadership. Finally, Jane was agreeably surprised at how she had changed as a person and as a teacher. Her changing view of science and her deeper understanding of the diversity among her students had also evoked a keener sense of something different in herself; something more venturesome, more inventive. This was enabling her to be productively firm when necessary, without losing her warmth, or without having to place her own self to one side to play the expected role of the teacher.

Jane's explorations and analyses during her action research led her to introduce important qualitative changes in the four domains of practitioner relationships in teaching that we reviewed earlier: with one's teaching subject(s), with one's students, with one's colleagues and with oneself. This last domain, which might also be called the teacher's self-understanding, is where all the domains interweave, fruitfully or otherwise. Giving proper recognition to it highlights the Socratic nature of action research. While not suggesting that the unexamined practice is not worth pursuing, we are keen to stress how action research grants access in unique but unforced ways to the intricacies of practice itself. Such intricacies, including obstacles, predicaments and unforeseen possibilities, do not disclose themselves as fully to more conventional forms of empirical research. Yet, they are just what needs to be identified and negotiated if enhancements in practice are to be meaningful and enduring.

CONCLUSIONS

The case we have been making suggests that action research is not exclusively a social science—sometimes not primarily so—though any particular action research study might have some social science features. Its ancestry in Western traditions of practical philosophy means that educational experience in its fullness is brought within its scope. This makes its enquiries a form of empirical research, but with a more far-reaching meaning of 'empirical' (disclosing experience in its many dimensions) than that conveyed by normal academic usage of the term. This is not to suggest, moreover, that quantitative methods are never appropriate in action research. Indeed, they may well be, as for instance in gathering statistics on the extent of change over one or more cycles of research: in study, practices among a class of students; in their readiness to participate in learning initiatives, in their completing of homework, and so on. Rather than assuming, however, that the usual criteria for evaluating empirical research studies can be adopted for evaluations of action research, criteria need to be identified that are properly inclusive, and tailored to this purpose. Establishing such criteria is not a cut-and-dried matter. It is, rather, an ongoing iteration and refinement that attends carefully to points like the following:

1. **Identification of issues and questions.** To what extent does the research study identify genuine educational questions or problems, including problems that have been passed over in educational practice hitherto? Because of the twin concerns of action research—critiquing and enhancing practice—this will normally involve going beyond the usual reach of empirical studies. It will involve uncovering capably one or more of the collateral dimensions of learning, and disclosing how the quality of educational experiences is influenced by the different domains of relationship that constitute educational practice. In identifying

and analysing questions that are genuinely educational, moreover, action research will be informed by the crucial notion of education as a practice in its own right, with its own inherent purposes, or values.

2. **Incisiveness and reflexive capability.** What standard of reflexive analysis and advanced deliberation does the research study reveal? This question, like those in the early Socratic dialogues, concerns the perceptiveness and thoroughness of interrogation of assumptions; but also the salience (or absence) of inherent educational values in such interrogations. In particular, what is at issue here is the degree to which such values become explicit, and thus invigorate practice, or alternatively, become submerged in conventional or functional conceptions of educational progress.
3. **Evidence and warrant.** Is the evidence that is presented inclusive of the wider range of factors that influence educational experience? Such factors might embrace unconscious assumptions on the part of teachers or students, attitudes embedded in pedagogical practices or study habits, enthusiasms or aversions that orient the dispositions and learning practices of students, and so on. These experiential factors have decisive consequences, and capturing them as valid evidence is a searching but subtle business (Bridges, 2008; Malone & Hogan, 2020). The furnishing of evidence in action research can include questionnaires and interviews, as in standard empirical research. Crucially, however, it will also provide demonstrations of advances, setbacks, new departures in the *experienced quality* of learning at different stages during the research study. Such demonstrations might include video and audio clips, representative samples of students' work, digital and other learning resources used or developed, feedback slips, pertinent extracts from journals and from meetings with critical colleagues. In short, evidence here includes records of things that disclose more fully the learning environment *as experienced*, and *as critically reviewed*, during the successive cycles of the research. In making evaluations of such evidence, the central issue has less to do with conclusive proof, or replicability, or predictive validity, or universalisability, and more to do with adequacy of warrant. Adequacy here has a twofold meaning: the bringing-in of the tacit, or collateral dimensions of educational experience *and* the convincingness of what is yielded from each of these dimensions. Of equal importance as convincingness is the notion of resonance. A well-conducted action research study will be convincing beyond reasonable doubt, and will resonate strongly with practitioners in other locations and circumstances. This is not to say that it can, or should, be replicated. Rather, it may provide practitioners with a fund of rich ideas, with insights into commonly overlooked pitfalls, with the stimulus to take on rather than evade challenges. The resonance of a research study can fuel what Wyse et al. (2021, p. 1517) regard as a priority in CtP research: ‘collaboration between people whose main expertise is in research, in educational practice, or in both’.
4. **Size and scale.** Are the size and scope of the study sufficient to offer insights that speak in fresh and compelling ways to practitioners at a distance, as well as those near at hand? This question serves as a timely reminder that an outlook that associates size with universalisability, and that associates both with the merit and standing of a research study, does serious disservice to action research. A first-rate action research study—say of how the learning environment of a single maths classroom became transformed—may prove very little in an empirical–scientific sense, or may have scant predictive validity. But it may quicken the interest, often in different ways, of countless practitioners, nearby or far afield, who find in it many resonances and many energising ideas for their own practice. Where such successful small-scale studies generate further similar or comparable studies, there is much to be gained in comparing and contrasting the different studies. This can be done by meta analyses, thus yielding findings on a larger scale. But a similar goal can be served by organising action research programmes that promote related studies, or families of studies, on a broadly similar theme or topic. Over time, such coordinated

efforts can strongly reaffirm practitioners' own insights and the genuine educational values embodied in their work, conferring a conspicuous validity on action research that it would be difficult for research evaluation exercises to miss. Equally, such efforts can build a distinct and extensive literature in CtP research, and help to distinguish it from dominant conceptions of educational research that have served CtP research poorly in evaluation exercises.

5. **Contribution to educational knowledge.** To what extent does the study offer ideas for renewing and enhancing educational practice, including practices of educational research? Clearly, this links with the previous point about size and scale, and with the notions of warrant and resonance. But it also highlights the importance of action research in affirming and refining the inherent purposes of education itself as a distinct practice. In this sense, action research can make a major contribution to strengthening the self-understanding of educational practice, making that self-understanding more robust against attempts to bureaucratise or colonise it. While a focus on democratisation of knowledge is to be welcomed, a central spotlight on what makes educational experiences themselves truly educational strikes closer to the heart of the matter. That is why we have continually stressed in this paper the importance of inherent purposes and their guiding role in educational practice. The arguments we have presented, the illustration featuring Jane's practice, as well as these five concluding points, offer ideas and criteria to elucidate the notion of enhanced practice, while highlighting the particular promise of action research in this endeavour. Let us finish by recalling here Dunne's characterisation of a practice and offer the following as a parting word. By affirming inherent educational purposes, and drawing in original ways on the rich traditions of practical philosophy we have referenced, action research can embody the dramatic and ‘even subversive’ shifts that bring both practice and research into fresh and fertile regions.

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CONFLICT OF INTEREST

There is no conflict of interest.

DATA AVAILABILITY STATEMENT

Research data are not shared.

ETHICAL GUIDELINES

The research for this paper was pursued in accordance with the BERA Ethical Guidelines.

ENDNOTES

[1] In the 2021 REF exercise, the report for Panel C, Sub-Panel 23 (Education) made no reference to action research and indicated that ‘the number of outputs focused directly on teaching and learning was smaller than expected’ (REF, 2022, Panel C Report, Sub-Panel 23, p. 161). We wondered if this smaller number had anything to do with the critical comments on action in education in the 2015 REF. There is praise, however, for action research studies in the report of Panel C, Sub-Panel 13 (Architecture, Built Environment and Planning): ‘There were some examples of outstanding methodological innovation, often undertaken in challenging field conditions and building on decades of action research in collaboration with NGOs and local communities’ (REF, 2022, Panel C Report, Sub-Panel 13, p. 51).

[2] For comparison purposes, the full text of MacIntyre's characterisation is as follows: ‘By a “practice” I am going to mean any coherent and complex form of socially established cooperative human activity through which goods internal to that form of activity are realised in the course of trying to achieve those standards of excellence which are appropriate to, and partly definitive of, that form of activity, with the result that human powers

to achieve excellence, and human conceptions of the ends and goods involved, are systematically extended' (MacIntyre, 1985, p. 187).

[3] This 'inconclusiveness' also serves to distinguish the genuinely Socratic character of the early dialogues from Plato's middle and later works. In this connection, Bk. II of the *Republic* marks an important transition in Plato's authorship. There, and henceforth in the *Republic*, 'Socrates' becomes less a leader of explorations and more a literary device for advancing Plato's controversial educational doctrines—on censorship, compulsion of poets, the 'noble lie' and so on. For more on this theme, see Gregory Vlastos' book *Socrates: Ironist and moral philosopher* (Vlastos, 1991).

[4] The quest for unshakeable foundations of knowledge that characterised classical epistemology was challenged in the first half of the twentieth century by philosophers as different as Dewey, Heidegger, Popper and Wittgenstein. The provisional and partial character of human knowing became accepted by the main currents of Western philosophy in the later twentieth century, including analytic philosophy, hermeneutics, pragmatism and others. For a detailed review of these developments, see Bernstein (2010).

[5] What Aristotelian thought can contribute to action research has been explored in intricate detail by Olav Eikeland (2008); also by Marianna Papastephanou (2010).

[6] This programme is called Teaching and Learning for the 21st Century (TL21) and was initiated in 2002. Its website address is https://www.maynoothuniversity.ie/TL21.

REFERENCES

Adelman, C. (1993). Kurt Lewin and the origins of action research. *Educational Action Research*, *1*(1), 7–24.

Aristotle. (1934). *Nicomachean ethics (Trans. H. Rackham)*. Harvard University Press.

Bernstein, R. J. (2010). *The pragmatic turn*. Polity Press.

BERA. (n.d.). Close-To-Practice educational research: A BERA statement. https://www.bera.ac.uk/publication/berastatement-on-close-to-practice-research

Biesta, G. J. J., & Burbules, N. C. (2003). *Pragmatism and educational research*. Rowman & Littlefield.

Bridges, D. (2008). Evidence-based reform in education: A response to Robert Slavin. *European Educational Research Journal*, *7*(1), 129–133.

Brookfield, S. D. (1995). *Becoming a critically reflective practitioner*. Jossey-Bass.

Carr, W., & Kemmis, S. (1986). *Becoming critical: Education, knowledge and action research*. Falmer Press.

Carr, W., & Kemmis, S. (2005). Staying critical. *Educational Action Research*, *13*(3), 347–358.

Cohen, L., Manion, L., & Morrison, K. (2018). *Research methods in education* (8th ed.). Routledge.

Dewey, J. (1938/1997). *Experience and education*. Touchstone.

Dunne, J. (1993). *Back to the rough ground: 'Phronesis' and 'techne' in modern philosophy and in Aristotle*. Notre Dame University Press.

Dunne, J. (2005). What's the good of education? In W. Carr (Ed.), *The RoutledgeFalmer reader in philosophy of education* (pp. 145–160). Routledge.

Eikeland, O. (2008). *The ways of Aristotle: Aristotelian phronesis, Aristotelian philosophy of dialogue, and action research*. Peter Lang.

Eisner, E. W. (1979). *The educational imagination: On the design and evaluation of school programs*. Macmillan.

Elliott, J. (1978). Classroom research: Science or commonsense? In R. McAleese & D. Hamilton (Eds.), *Understanding classroom life* (pp. 46–62). National Foundation for Educational Research.

Elliott, J. (1987). Educational theory, practical philosophy and action research. *British Journal of Educational Studies*, *35*(2), 149–169.

Elliott, J. (1991). *Action research for educational change*. Open University Press.

Elliott, J. (2006). Educational research as a form of democratic rationality. *Journal of Philosophy of Education*, *40*(2), 169–185.

Elliott, J. (2009). Building educational theory through action research. In S. Noffke & B. Somekh (Eds.), *The Sage handbook of educational action research* (pp. 26–38). Sage.

Elliott, J. (2012). Teaching controversial issues, the idea of the 'teacher as researcher' and contemporary significance for citizenship education. In J. Elliott & N. Norris (Eds.), *Curriculum, pedagogy and educational research: The work of Lawrence Stenhouse* (pp. 84–105). Routledge.

Elliott, J. (2019). Quality criteria for lesson and learning studies as forms of action research. *International Journal for Lesson and Learning Studies*, *9*(1), 11–17.

Foreman-Peck, L., & Heilbronn, R. (2018). Does action research have a future? *Journal of Philosophy of Education*, *52*(1), 126–143.

Higgins, C. (2016). The promise, pitfalls and persistent challenge of action research. *Ethics and Education*, *11*(2), 230–239.

Hogan, P. (2010). *The new significance of learning: Imagination's heartwork*. Routledge.

MacIntyre, A. (1985). *After virtue: A study in moral theory* (2nd ed.). Duckworth.

Malone, A., & Hogan, P. (2020). Evidence and its consequences in educational research. *British Educational Research Journal*, *46*(2), 265–280.
Marrow, A. J. (1969). *The practical theorist: The life and work of Kurt Lewin*. Basic Books.
McNiff, J., & Whitehead, J. (2012). *Action research for teachers: A practical guide*. David Fulton.
Mertler, C. A. (2020). *Action research: Improving schools and empowering educators* (6th ed.). Sage.
Mills, G. E. (2017). *Action research: A guide for the teacher researcher* (6th ed.). Pearson.
Papastephanou, M. (2010). Aristotle, the action researcher. *Journal of Philosophy of Education*, *44*(4), 589–597.
Plato. (1920). *The dialogues of Plato, in two volumes (Trans. B. Jowett)*. Random House.
REF. (2022). *Research Evaluation Framework 2021 – Overview report by Main Panel C and Sub-Panels 13 to 24*. https://www.ref.ac.uk/media/1857/mp-c-overview-report-final.pdf
Sagor, R., & Williams, C. (2017). *The action research guidebook: A process for pursuing equity and excellence in education* (3rd ed.). Corwin.
Schön, D. A. (1984). *The reflective practitioner: How professionals think in action*. Basic Books.
van Manen, M. (1990). *Researching lived experience: Human science for an action-sensitive pedagogy*. State University of New York Press.
Vlastos, G. (1991). *Socrates: Ironist and moral philosopher*. Cambridge University Press.
Whitty, G. (2006). Education(al) research and education policy making: Is conflict inevitable? *British Educational Research Journal*, *32*(2), 159–176.
Wyse, D. (2020). Presidential address: The academic discipline of education. Reciprocal relationships between practical knowledge and academic knowledge. *British Educational Research Journal*, *46*(1), 6–25.
Wyse, D., Brown, C., Oliver, S., & Pobleté, X. (2018). The BERA Close-to-Practice research project: Research report. https://www.bera.ac.uk/researchers-resources/publications/bera-statement-on-close-to-practice-research
Wyse, D., Brown, C., Oliver, S., & Pobleté, X. (2021). People and practice: Defining education as an academic discipline. *British Educational Research Journal*, *47*(6), 1512–1521l.

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