

Building Educational Theory through Action Research

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In this chapter I will offer an account of educational action research as a form of *practical philosophy* (see Carr 2004: 55–73) that unifies the process of developing theory and practice. This mode of reasoning aims to clarify universal conceptions of value in the process of reflecting in and on the actions taken to realize them. As such it poses an epistemological issue about the relationship between knowledge of universals and knowledge of particulars. The social sciences have tended to assume that these are discrete forms of knowledge and that each has their own distinctive methods of inquiry. *Nomothetic* methods yield universal knowledge while *ideographic* methods yield knowledge of particulars. Practical philosophy, on the other hand, does not draw a tight methodological boundary between these forms of knowledge. Indeed, I will argue that it should not be depicted as a *method* of reasoning.

EDUCATIONAL RESEARCH OR RESEARCH ON EDUCATION?

In 1978 I published a paper entitled ‘Classroom Research: Science or Commonsense?’ In it I coined a distinction between ‘Research on Education’ and ‘Educational Research’. I was drawing attention to the difference between viewing research into teaching and learning as a form of ethical inquiry aimed at realizing the educational good, and viewing it as a way of constructing knowledge about teaching and learning that is detached from the researcher’s own personal constructs of educational value. *Educational Research*, I argued, is carried out with the practical intention of changing a situation to make it more educationally worthwhile. Its sphere is that of ethically committed action, or what Aristotle called *praxis*. At the time I construed it as a form of *commonsense theorizing* in

contrast to the kind of *scientific theorizing* that stemmed from research on education.

Some would claim that the notion of commonsense theorizing is a contradiction in terms, in as much as what marks out commonsense knowledge is its taken-for-granted nature (see Carr, 2004: 61–2 and Pring, 1976: Ch. 5). However, I argued that although much commonsense knowledge may partake of this taken-for-granted character, it is not necessarily so. What fundamentally characterizes such knowledge is that it can be expressed in the vernacular language, hence enabling people to coordinate their actions for the purposes of everyday living. Such knowledge may simply be transmitted on a tacit basis in the process of inducting individuals into a practical tradition. However, at times new knowledge may be needed to address contingencies and situations that arise in contexts of action, which the established way of doing things – the tradition – cannot adequately address.

The kind of commonsense reasoning that I have depicted involves discerning the particularities of a situation from the standpoint of an ethical agent, and in the process, discriminating its practically relevant features. Aristotle called this form of reasoning, which arises in the search for situational understanding or practical wisdom, *phronesis*. He regarded it as quite distinct from theoretical reason, which is aimed at the discovery of universally valid truths that are essential and unchanging and valued ‘for their own sake’ (*episteme*).

‘Case-based’ reasoning in the context of *phronesis* should not be confused with the use of ideographic methods in the social sciences, such as *ethnography*. For example, the latter is a social anthropological method for generating knowledge about the activities of an unfamiliar society or group. Methodologically *ethnographies* aspire to interpret the social world without changing it. All methodology serves to distance the construction of knowledge from the domain of *praxis*. Methodology is inherently prejudiced against prejudice (see Gadamer, 1975: 239–40). *Phronesis*, on the other hand, is inevitably biased by the adoption of an evaluative standpoint. As Carr (2006) argues, practical wisdom can only ‘be acquired by practitioners who, in seeking to achieve the standards of excellence inherent in their practice, develop the capacity to make wise and prudent judgments about what, in a particular situation, would constitute an appropriate expression of the good’. It should, he contends, be regarded as a ‘moral and intellectual virtue that is inseparable from practice and constitutive of the moral consciousness’, rather than the outcome of a method of reasoning that detaches ‘knowledge’ from ‘action’.

In the context of *phronesis* there can be no discernment of the particularities of a situation or discrimination of its practically relevant features that are not conditioned by value-bias. Yet such discernment will be disciplined by a person’s conversation with others, whose perspectives will draw attention to unanticipated features of the situation and challenge her to reconstruct her original biases. *Phronesis* is a naturalistic mode of reasoning that opens up a space for the reflective reconstruction of bias in conversation with others. This is because it does not separate means from ends as objects of reflection. It may be regarded as practical

philosophy since changes in *praxis* will be accompanied by changing conceptions of the good to be achieved, and vice versa.

This kind of dialectical process is appropriately located in a community of practice for the purpose of securing the conditions for co-ordinated action amongst ethical agents. Any constraints on reasoning leading to modifications of bias and prejudice will stem, not so much from any methodological disciplining of inquiry, as from the constraints that are embedded in good conversation within the community of practice, and which might be described in terms that Dewey depicted as the *democratic virtues* (see Dewey, 1974: 182–92).

BEYOND METHODOLOGY

In my 1978 paper I claimed that one could either theorize from the standpoint of practice or from the standpoint of science. I had assumed that the standpoint of science was that of an impartial spectator freed from the prejudices that biased human understanding in the practical circumstances of everyday life.

However, in the wake of the post-modern deconstruction of all epistemologies that claim to specify conditions for grasping essential truth, I have found it increasingly difficult to draw a tight boundary between the standpoints of the scientist and the practitioner. I would now claim, following Rorty (1999), that all science is a form of practical reasoning and that all theories are practical tools. Hence, I no longer wish to draw a distinction between theorizing from the standpoints of commonsense and science. Rorty claims that in general ‘To argue for a certain theory – is to argue about what we should do’. He is happy to use the term ‘theory’ in the context of the inexact as well as the exact sciences. For Rorty, ‘whether we are arguing for a theory concerning the microstructure of material bodies or for one about the proper balance of powers between branches of government, we are arguing about what we should do to make progress’. The first argument, he points out, is about what we should do to make technological progress and will therefore take the form of instrumental reason. The second argument about what we should do to make political progress involves, I would suggest, something like *phronesis* as a form of reasoning. Rorty appears to imply that the term ‘theory’ has an intelligible use in the context of social practices like politics, and can accommodate *phronesis* as its mode of production.

The spectator theory of knowledge, embedded in so much of what has passed for ‘science’, is no longer philosophically sustainable. The revival of philosophical pragmatism has purged our picture of science of its essentialist assumptions. Hence we find Rorty contending that there are no methodological constraints on inquiry (1982: 165), ‘derived from the nature of objects, or of the mind, or of language’. The only constraints are conversational ones, ‘those retail constraints provided by the remarks of our fellow inquirers’. He argues that those of us engaged in inquiry ‘have a duty to talk to each other, to converse about our views of the world, to use persuasion rather than force, to be tolerant of diversity, to be

contritely fallibist' (1991: 67). Such are the democratic virtues that Dewey associated with the scientific method (see Dewey, 1974: 182–92), but which Rorty wishes to dissociate from the essentialist connotations of the term 'method'. In this sense he gives us an account of inquiry without method. It is one that puts methodology on the run, and supports an account of 'educational research' as a dialogical and democratic process of inquiry that is grounded in *phronesis*.

THE IDEAS OF 'TEACHERS-AS-RESEARCHERS' AND 'TEACHERS-AS-EDUCATIONAL THEORISTS'

The above account of educational research is rooted in my experience as a teacher researcher in a secondary school at the height of the school-based curriculum development movement in the UK during the mid-1960s, and further shaped by the experience of working with Lawrence Stenhouse on the Nuffield Foundation/Schools Council Humanities Curriculum Project. In the context of this project Stenhouse linked the idea of 'teachers as researchers' (see Stenhouse, 1975: Ch. 10) to the construction of a theory of education (1979: 19–20). From his point of view a theory of education is an articulation of teachers' shared practical understandings of how to make their practice in classrooms more *educational* through concrete and situated action. He was quite clear that it was the task of teachers conceived as researchers to construct a body of common knowledge – what he called *a tradition of understanding* – about how to effect educational change from their experimental actions in the particular contexts of their practice. A theory of education, for Stenhouse, constituted a tradition of understanding about how to effect educational change, and a condition of its construction was the collective engagement of teachers in researching their practice. On this view teachers have a central role in generating practically valid educational research findings that can be cast in the form of an educational theory. In the context of the Humanities Project the task was to build a tradition of understanding about how to teach controversial issues in classrooms. Stenhouse regarded the development of 'educational theory' as inseparable from the idea of the 'teacher as researcher'.

This link destabilizes the specialist domains of the educational philosopher and theorist, the empirical researcher, and the practitioner. It will be contested by those post-modern thinkers who associate theory with the claim to grasp essential and unchanging truth (*episteme*). For such thinkers the concept of 'theory' is inextricably linked to foundationist and essentialist assumptions.

RECONTEXTUALIZING THE USE OF THE TERM 'THEORY' IN EDUCATION

I will now argue that there are practical reasons for trying to re-contextualize the use of the term 'theory' in the way Stenhouse did. The use of the term conveys

meanings other than a claim to provide knowledge of essential and unchanging truth. Some of these, as I hope to show, are also implicit in the concept of practical reason linked to *phronesis*. By wrenching the term ‘theory’ out of its historical context of use and thereby divesting it of its essentialist connotations, and putting it into service as part of the practical discourses that arise in contexts of action one might strengthen the generative capacity of teachers (and other social practitioners) to effect change and to resist the domination of *techne* over their practical reasoning. A re-contextualized conception of educational theory – one that is fused with the concept of *phronesis* – may help teachers to reclaim their activities as having a space for *praxis*. It may also help social researchers based in higher education to construct better links between research and practice by demonstrating that knowledge, which carries many of the hallmarks of theory, can be generated in action contexts without the need for any methodological guarantees. Any unification of educational theory and practice through action research will depend on how successful attempts to fuse the concepts of *theoria* and *phronesis* are in terms of constructing meaning for action.

The meanings of *theoria* that educational action researchers need to integrate into their practical discourse are:

- 1 It is a process of reasoning that yields universal knowledge.
- 2 It constructs a clear and systematic view of its subject-matter.
- 3 It enables the prediction of future possibilities.

In modern culture the idea of universal knowledge became appropriated by the construction of a positivist science that served the practical interests of technical rationality. In this context it was understood as knowledge of the general laws of cause and effect governing events in both the natural and social world. Such knowledge is cast in the form of empirical generalizations that can be applied by human beings in choosing the best means for achieving a given end. It provides a clear and systematic view of what needs to be done to bring about certain states of affairs, and thereby promises to give human beings the power to predict and control the outcomes of their behaviour.

Dunne (2005: 373) characterizes the mode of rationality that underpins this conception of theory or universal knowledge as follows:

It puts a premium on ‘objectivity’ and detachment, suppressing the context-dependence of first-person experience in favour of a third-person perspective which yields generalized findings in accordance with clearly formulated, publicly agreed procedures. These procedures give an indispensable role to operations of observation and measurement, modes of testing that specify precisely what can count as counter-evidence, replicability of findings, and the adoption of a language maximally freed from possibilities of misinterpretation by its being maximally purged of the need for interpretation itself. And through these procedures, knowledge is established that is both explanatory and predictive.

Dunne’s account of technical rationality – a mode of reasoning that Aristotle called *techne* – appears to capture all of the meanings I attributed to *theoria* above. In this context theory provides the rational foundation for technical

knowledge about how to achieve given ends. It leaves no space for context-dependent inquiry based on first-person experience. Hence, the view that one cannot generalize from the case studies of action researchers. I now want to show how *phronesis* as a mode of practical reasoning can also capture the meanings I attributed to *theoria*.

As Carr (2006: 7–8) has pointed out both *phronesis* and *techné* are alike, inasmuch as both subsume particular cases under general principles. However, he also points out that unlike *techné*, *phronesis* ‘is not a deductive form of reasoning which issues in a prescription for action’. The judgements in which it issues are context-dependent and constitute understandings ‘of what, in a particular situation, would constitute an appropriate expression of the good’. *Phronesis* therefore constitutes the relationship between the general and the particular in a form that is very different from the relationship that obtains in *techné*. In the latter one deduces what ought to be done in a particular situation from general propositions. In the former what actions might count as an instance of a general principle is a matter of interpretation that takes into account the particularities of the practical situation. *Phronesis* is a mode of reasoning in which general conceptions of the good and the actions taken to realize them in particular situations are mutually constitutive.

As such, it possesses the quality of deliberative reflection in which both ‘means’ and ‘ends’ are objects of inquiry in a process where ‘the “means” are always modified by reflecting on the “end” just as an understanding of the “end” is always modified by reflecting on the “means”’ (Carr, 2006: 7–8). The capacity to engage in Deliberative Case-based Reasoning (*phronesis*) is best depicted as a virtue rather than the mastery of a method. Dunne (2005: 376), for example, refers to it as ‘a cultivated capacity’ to make calls to judgement ‘resourcefully and reliably in all the complex situations that they address’. Dunne, like Carr, is reluctant to depict such judgements as contributions to the development of theory. They assume that theories must take the form of empirical generalizations, which serve the interest of technical rationality in prediction and control (see Dunne, 2005: 384–86). However, I would argue that Dunne’s model of theory, derived as it is from the natural sciences, does tend to blinker him to a different and more commonsense notion of ‘predictability’ as an anticipation of future possibilities for action. The latter is a notion that arises in the context of *praxis* conceived as ethically committed action. Indeed it is implicit in Dunne’s own account of *phronesis* where he depicts ‘general understanding’ in very different terms to the grasp of the kind of general principles or ‘generalizations’ that are shaped by technical rationality. He writes of the need of *phronesis* ‘to embrace the particulars of relevant action-situations within its grasp of universals’ (p. 375), and argues for ‘richly descriptive studies’ that possess ‘epiphanic power’ by ‘illuminating other settings’ (p. 386). Such studies I would argue are a source of what Stake (1978) has termed ‘naturalistic generalizations’, whereby social practitioners are able to build a common tradition of understandings from their concrete experiences of particular situations. Such common understandings can be

summarized as ‘universal rules of thumb’ (see Nussbaum, 1990: 67–8) that pick out those practically relevant respects in which particular situations are judged to be similar. Such universal rules, from which Nussbaum is careful to distinguish general causal rules, enable practitioners to anticipate if not exactly predict the consequences of their actions in a particular concrete situation. This is why in the context of teachers’ research I have tended to use the term ‘hypotheses’ to depict the universal rules of thumb being constructed through such research. As Nussbaum argues, ‘universal rules of thumb’ are open to the experience of surprise. Our capacity to recognize the unique and novel features of a case that are nevertheless ethically significant depends on their use. Becoming capable of recognizing the unanticipated when it occurs depends on the anticipations provided by universal rules of thumb or *action hypotheses*.

Alasdair MacIntyre has argued (1990: 59–61) that the standards of reasoning that characterize moral inquiry are universally valid, inasmuch as they are embedded in a tradition of understanding – about how to realize goods that are internal to a social practice in particular circumstances – that has withstood the test of time and circumstance. Such a tradition embodies the best standards developed to date. As such they express the shared experience of a community of practice situated in time and place, and are therefore not fixed and unchanging as if they were based on rational foundations that transcended the contingencies of human existence. *Universal* standards of non-instrumental practical reasoning, according to MacIntyre, are always open to revision in the light of new contingencies that challenge practitioners to find novel ways of expressing their values in action. The aspiration that underpinned the notion of ‘teachers as researchers’ was for teachers to respond to the challenge of curriculum change by building together through their action research new understandings of how to express their educational values in action.

I have tried to explain why the consensus of judgements that emerges in the course of educational action research might warrant the description of ‘theories’. Such judgements constitute both a knowledge of particulars and of *universals*, and express a *clear and systematic* (unified) *view* of the practically relevant features of situations, and enable practitioners to anticipate if not infallibly predict future occurrences and to recognize unanticipated ones when they occur. As anticipations such judgements do not enable practitioners to exercise strong technical control over events, but by enabling them to recognize the ethical significance of the unexpected when it occurs they establish conditions for sustaining the practitioner as an ethical agent in the situation. In other words they enable the practitioner to exercise ‘ethical control’ of their conduct in unanticipated situations.

If one looks at the case study and generalization issue in the light of the distinction between universal and general rules governing the relation between means and ends, one can argue that case studies cannot yield general rules, but when constructed in action situations they are the means by which universal rules are both tested and developed. Any use of the term ‘theory’ in the context of action will differ from its use in a purely intellectual context that is dominated by a

Cartesian picture of the mind. Indeed John Macmurray (1957: 198–202) finds no use of the term beyond an *intellectual* mode of reflection where it takes the form of generalization. Within what he calls the *emotional* mode reflection is concerned with valuations of situations, i.e. discernments of their practically relevant features. Such ‘situational understandings’ provide descriptions of situations that are conditioned by the intention to change them for the better. ‘Understanding’ in this sense is not a claim to know a world that exists independently of the intention to change it. For Macmurray, it claims knowledge of the world ‘as a system of possibilities of action’. As such, its development involves an increasing particularization of action possibilities in a given situation. The greater the particularization of descriptions of situations the more they take the complexities of making wise judgements and decisions into account. Yet at the same time, I would contend, such ‘situational understandings’ can also be of universal significance by throwing light on possibilities for action in other situations. Cannot such understandings be meaningfully described as ‘theories’?

The practically relevant features of particular action contexts will tend to repeat themselves across contexts. Indeed one can argue that the discernment of practically relevant similarities across contexts is enhanced by more concrete, particularizing, descriptions of action possibilities in each. Hence, when communities of teacher researchers develop such descriptions in disciplined conversation with each other they will increasingly experience an ‘overlapping consensus’ about action possibilities, and with it a capacity for co-ordinating the development and testing of action-hypotheses across their classrooms. Such a process is what constitutes rigour in action research rather than any adherence to methodological dogma. As Rorty argues ‘rigour’ is something ‘you can have only after entering into an agreement with some other people to subordinate your imagination to their consensus’ (1998: 339).

Educational action research ‘findings’ will take the form of ‘universal rules of thumb’, which I would regard as elements in a theory of education. However, these rules are never fixed and unchanging, since their applicability to new and changing circumstances will need to be continuously tested. A theory of education is perhaps best depicted as a provisional summary of the common features of good practice across a given range of contexts.

It has been my experience that educational action research, which involves teachers sharing and developing their practical insights into the problems and dilemmas of realizing their educational values in concrete teaching situations, together with their judgements about how these are best resolved, can yield useful summaries of the universal significance of insights and judgements to guide further reflection and action. The diagnostic and action hypotheses developed in the contexts of the Humanities Curriculum and Ford Teaching Projects in the UK can be regarded as having this form and function (see Elliott, 1976: 14–17 and 1983: 114–16). They constitute both a *tradition of understanding* of educational action and a *theory of educational change*. It is clear that Nussbaum regards the development of universal rules to guide ethically committed action in particular

situations as dependent upon the practical discourse of a community of inquiry rather than individuals acting and reflecting in isolation from each other. This is quite consistent with Aristotle's notion of *phronesis*. It is a form of reasoning that embodies a democratic and foundationless rationality (see Elliott, 2006), that is free from the constraints of methodology. Here we can discern a continuity of thinking about the nature of social inquiry, between the neo-Aristotelian philosophers like Nussbaum and MacIntyre and the philosophical pragmatism of Dewey, Rorty and Amartya Sen. From the latter standpoint all inquiry is practical and discursive, differing only with respect to the kinds of practical interests it serves. That which serves the interests of morally committed action in the form of *phronesis* is no less scientific than that which serves the interests of technical rationality. Moreover, from the standpoint of philosophical pragmatism, a practical social science may need to unify and harmonize instrumental and non-instrumental reasoning – *techné* and *phronesis* – within a single process of inquiry shaped by a discursive and democratic rationality that protects the integrity of each.

The work on social choice by the philosopher and economist, Amartya Sen, provides an interesting account of such a process. Sen (2002: 39–42), points out that a principle of instrumental reasoning couched in terms of the maximization of utility leaves no space for the rational scrutiny of goals and values. Not all our values, he contends, are goals. Some may rule out the pursuit of certain kinds of goals or at least impose restrictions on the means we adopt to bring them about. Hence our choice of behaviour may be based on reasons that qualify the maximization of utility principle. Sen argues that we need a broader conception of practical rationality that reaches beyond the maximization principle to include a 'critical scrutiny of the objectives and values that underlie any maximizing behaviour' and an acknowledgement of values that constitute '*self-imposed* constraints' on that behaviour. He casts such a conception in terms of a democratic process of *rational scrutiny* that is based on discussion of the reasons people might offer for their choice of actions. Such reasons will be various. They will include non-instrumental as well as instrumental considerations, and considerations of ends as well as the means of bringing them about. Sen (2002: 287), argues along similar lines to Rorty, that values are rationally established and validated through free and open discussion alone, and like Rorty, claims that rationality in the sphere of values does not require some set of Kantian-like transcendental rational principles for ordering people's values. He also shares with Rorty the view that the process of reasoning about values through discussion is a disciplined affair, and it is discussion itself that provides it rather than 'a favored formula, or an essentialist doctrine' (p. 46).

CONCLUDING REMARKS

What frankly disappoints me is the extent to which educational action research, originally conceived as a practical philosophy, has become distorted by the methodological

discourse of the social sciences and sucked into the battle between the qualitative and quantitative paradigms. This has meant that published accounts of action research have tended to be dominated by descriptions of, and justifications for, the method of research as opposed to the representation and discussion of the understandings and insights it generated. Any vision of educational values and how they might be realized in action is often missing from such accounts and with it the capacity of action research to represent its findings in a form that might sustain *educational praxis* within the teaching profession. Such a capacity depends not on any particular methodological standpoint but rather on a commitment to creating space for a community of inquirers to engage in a good conversation with each other about how best to express their educational values in action. Of course, this goes against the grain of an educational system that has increasingly been shaped by the logic of technical rationality in which the ends of education are no longer treated as open to discussion and inquiry.

In order to reclaim their practice as a sphere of ethically informed action, teachers will need the support of teacher educators in higher education. The great challenge for teacher educators is to integrate their dual roles as educational practitioners and researchers. Rather than seeing themselves as ‘researchers on education’ who find opportunities to disseminate the findings and methods of this kind of research through their teaching, teacher educators will need to see their teaching role as one of enabling teachers to develop and test a common stock of shared understandings about how to realize worthwhile educational ends. This will also involve them undertaking collaborative research with teachers into finding solutions to some of the most persistent problems the latter face in their classrooms and schools. The complexity of these problems is such that they defy many of the solutions proposed by conventional research carried out in accordance with the strictest methodological canons. Such research may secure publication in prestigious academic journals, but is unlikely to support teachers to make worthwhile educational change in their classrooms and schools.

REFERENCES

- Carr, W. (2004) ‘Philosophy and education’, *Journal of Philosophy of Education*, 38 (1).
 — (2006) ‘Philosophy, methodology and action research’, *Journal of Philosophy of Education*, 40 (4): 421–35.
 Dewey, J. (1974) ‘Science as subject-matter and as method’, in R.D. Archambault (ed.), *John Dewey on Education: Selected Writings*. Chicago and London: University of Chicago Press.
 Dunne, J. (2005) ‘An intricate fabric: understanding the rationality of practice’, *Pedagogy, Culture, and Society*, 13 (3).
 Elliott, J. (1976) ‘Developing hypotheses about classrooms from teachers’ practical constructs: An account of the work of the Ford teaching project’, *Interchange*, 7 (2). Republished in *Reflecting Where The Action Is: The Selected Works of John Elliott*, 2006, Ch. 2. Abingdon, Oxon: Routledge.
 — (1978) ‘Classroom research: Science or commonsense’, in R McAleese and D Hamilton (eds), *Understanding Classroom Life*. Windsor: NFER Publishing Company.
 — (1983) ‘A curriculum for the study of human affairs: the contribution of Lawrence Stenhouse’, *J. Curriculum Studies*, 15 (2). Republished in *Reflecting Where The Action Is: The Selected Works of John Elliott* 2006, Ch. 1. Abingdon, Oxon: Routledge.

- (2006) 'Educational research as a form of democratic rationality', *Journal of Philosophy of Education*, 40 (2).
- Gadamer, H-G (1975) *Truth and Method*. London: Sheed & Ward.
- MacIntyre, A. (1990) *Three Rival Versions of Moral Inquiry*. London: Duckworth.
- Macmurray, J. (1957) *The Self as Agent*. London: Faber & Faber, pp. 198–202.
- Nussbaum, M. (1990) 'An Aristotelian conception of rationality,' in *Love's Knowledge*. Oxford: Oxford University Press.
- Pring, R. (1976) *Knowledge and Schooling*. London: Open Books.
- Rorty, R. (1982) *Consequences of Pragmatism*. Minneapolis: University of Minnesota Press.
- (1991) 'Pragmatism without method', in *Objectivity, Relativism and Truth: Philosophical Papers Volume 1*. Cambridge: Cambridge University Press.
- (1998) 'Derrida and the philosophical tradition,' in *Truth and Progress, Philosophical Papers*. Cambridge: Cambridge University Press.
- (1999) *Philosophy and Social Hope*. London: Penguin Books.
- Sen, A. (2002) *Rationality and Freedom*. Cambridge, MA: Harvard University Press (Belknap): Chs.1 and 8.
- Stake, R.E. (1978) 'The case study method in social inquiry', *Educational Researcher*, 7: 5–8. Reprinted in Simons, H. (ed.) *Towards a Science of the Singular*, CARE Occasional Publications 10, pp. 64–7. (Norwich: Centre for Applied Research in Education, University of East Anglia).
- Stenhouse, L. (1975) *An Introduction to Curriculum Research and Development*. London: Heinemann Educational Books.
- Stenhouse, L. (1979) 'Research as a basis for teaching'. Inaugural Lecture at the University of East Anglia: Norwich. Subsequently published in Stenhouse, L. (1983) *Authority, Education and Emancipation*. London: Heinemann Educational.