Certainty abandoned and some implications for curriculum research

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Certainty abandoned and some implications for curriculum research

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Abstract

This article presents ideas about curriculum as a process in which people come together on an equal footing to explore ideas about how they might live and draw up plans about how they might do so. This is a negotiated process that recognizes the need of all to speak and be listened to, recognizing the historically constituted nature of social situations in different traditions, each with its own sets of culturally specific norms. Curriculum may then be seen as a process of everyday enquiry that may be conducted anywhere and by anyone, grounded in and informed by everyday practices.

Keywords: certainty and uncertainty, closure and emergence, curriculum as enquiry

Introduction

This article is an account of an ongoing action enquiry into how curriculum might be conceptualized as an inclusive, democratic process, what this might look like and how to ensure that it would be meaningful to learners as well as to teachers. From this perspective, curriculum could come to represent a means of personal and social hope, in that it helps learners to know what they need to know in order to navigate an unknowable future. Especially they can learn how to critique any unsatisfactory aspects in the current social order and develop strategies for combating and potentially changing them towards more satisfactory aspects for a more sustainable future. Further, given that all social change originates in people's minds, in that individuals and groups need to decide what they wish to change and how they might do this, it falls to parents and teachers in schools, working collaboratively with the wider community, to imagine what any new order might look like and find ways of realizing their hopes.

The article is structured in terms of the questions asked in a traditional action enquiry, as follows:

- What is the concern?
- Why is it a concern?
- How can the situation be shown in practice?
- What can be done about it?
- What might the outcomes be?
- What might be the significance of this approach to curriculum studies?

A key feature of action research is its emphasis on critique and change: if a situation is unsatisfactory to users, it can be changed, although users need to explain to themselves and others why they are changing things and what they hope to achieve by doing so. The change process may not be straightforward, but it can be done. This article contains ideas about how this might happen.

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What is the concern?

The concern voiced here is in relation to how curriculum is currently understood in terms of its content (the 'what') and uses (the 'what for?'), and who controls decisions about such matters. Dominant views today in much of the developed world hold that curriculum should be understood in narrow, one-dimensional terms, comprising a definitive set of knowledges whose validity may be tested by means of establishing a cause and effect relationship – 'If x, then y', a strategy that has come to be known as 'the scientific method'. This approach is also premised on the idea of certainty: 'If I do this, that will probably happen'. Indeed, the very form of language used communicates this, as in '*the* scientific method' (not '*a* scientific method'), and 'experiments are controlled' and involve 'control groups'. The aim is to test the validity of an existing hypothesis. Further, in spite of its often having been used with wonderfully beneficial results, primarily in science and medicine, this scientific method can also act as a means of social control: think, for example, of forms of discourse such as 'If you don't do this, that will happen'. Perhaps unsurprisingly, many of the elites of contemporary intelligentsia, including traditionalist academics, self-serving politicians and business personnel, opt for this form, given that it usually acts in their interests, so they are committed to its perpetuation. Nothing new here: Toulmin (1990) explains how, historically, this approach has been created by the intelligentsia and passed on to be internalized by the common people, those allegedly passive, non-critical people, described by Walter Lippman (1922) as 'the bewildered herd'. And these days, the elites are doing their job well: they are fulfilling their task that, in Lippman's (ibid.) view, was to ensure that the situation remained as it was by providing and legitimizing appropriate kinds of knowledge for the public: ordinary people should stay bewildered in order to be compliant and biddable.

Why is this a concern?

This view of curriculum as a set of approved knowledges remains the currently legitimized view (Apple, 1993; see also DfE, 2014). Consequently, it permeates all aspects of contemporary schooling and related contexts where teaching and learning are conducted officially. This point is of special concern, because, although the concept and practice of curriculum may be seen in general terms as the organization of knowledge and learning across a range of contexts – in factories and day centres, for example – its misuses are perhaps most damaging when deliberately used in relation to young people's learning.

To address these matters, first consider some of the core assumptions that inform the situation outlined above and why this should represent a concern. Several points emerge, regarding the nature, aims and status of current conceptualizations of curriculum. Many other considerations identified in the literatures should be studied, too, but the following three suffice here, at least for the time being.

Nature of curriculum

A first point is about the nature of curriculum. Dominant perceptions tend to ignore the fact that the concept of curriculum may be variously understood, depending on a person's perspectives and form of thinking. One perspective sees the world and the people who occupy it as in the final stage of development: it is assumed that today is the accumulation of all its yesterdays – we have reached the endgame. This perspective is informed by a particular way of thinking that sees this moment as working towards

closure. According to Berlin (2012) (in his essay 'The hedgehog and the fox'), this is a view held by hedgehogs, who focus on one big idea only. A different perspective sees the world and its inhabitants as in a stage of constant development, a summary of all that has gone before and that forms the beginning of the next moment: this is a view held by foxes, who are nimble on their feet and understand that every question, every situation, requires a different response. From this perspective, experience is seen as a continual process of unfolding, a process of new beginnings in working with knowledge and in the writing of life texts (Said, 1997). It is also rooted in the idea of uncertainty, explored by philosophers such as Berlin. Yet this view does not fit with the dominant one-directional perspectives of policymakers that aim for certainty, nor does it feature to any extent in the literatures of contemporary or historical approaches to education or curriculum, or to philosophy itself. Consequently, dominant assumptions (not all) throughout the literatures of curriculum research and development are that others know what you will learn before you learn it, and that they can specify both what you will learn and how you will learn it. These assumptions, in my view, amount to a monumental mistake, in spite of their permeating the organization and experience of formal education; this idea also informs the thinking behind this article.

Sowell (1987) speaks about these two world perspectives as contributing to two visions of reality: a closed vision and an open vision. When the two visions enter into an understanding of curriculum, they produce two dominant models. The first is understood as a closed field containing a number of objects in the form of concrete objectives, manufactured certainty and the delivery of imagined outcomes; the second is an open vision that sees possibilities in everything – Goethe's (1957) vision of the original leaf that has the potential to unfold into a flower; the raindrop that becomes a flood; the acorn that becomes an oak (Bertoft, 1996). This vision lies at the heart of a number of theories and theoretical frameworks, including complexity theory, emergence and Bohm's (1985) view of unfolding meaning in an unfolding universe. It may also be seen in Chomsky's views, especially in *Knowledge of Language* (Chomsky, 1986), about the generative transformational nature of language, a view that may be brought to an understanding of any aspect of reality. A significant feature is that all these approaches celebrate the idea of uncertainty: the aim is not to achieve finality but to celebrate emergence into, and engagement with, an unknowable future.

Aims of curriculum

The second point is to consider how the aims and purposes of dominant education systems are currently theorized and organized as curriculum. The orthodox view, espoused by many policymakers (such as those responsible for implementing the 2013 National Curriculum in England) and traditionalist academics (such as those advocating a renewed emphasis on powerful knowledge), is that curriculum is a body of those knowledges that people ought to know to function well as socially aware human beings, and that will enable them to achieve their goals and realize their values. This body of knowledge is compiled, organized and delivered by people operating at differently perceived levels of epistemic competence: policymakers include politicians and highly knowledgeable theorists, who hand the knowledge down to reasonably knowledgeable people such as teachers, who deliver it to utterly non-knowledgeable students, who are then required to internalize it. The aim, then, is to persuade the students to accept this knowledge as quickly and easily as possible, and to apply it to their everyday practices.

This view is insulting to practising teachers and their students on two counts. First, the system represents an abiding commitment to epistemic injustice: a term,

coined by Miranda Fricker (2007), which stems from a view that some persons are incapable of acquiring or producing knowledge simply because of their heritage or cultural–social–historical positioning. People are too often positioned according to categorizations of gender, social status or race: see, for example, Gould's stories in *The Mismeasure of Man* (1992) about the horrendous injustices perpetrated on some very bright people by others who hold this view. Second, this autocratic approach to curriculum policy and its implied practices places it not too far from the days of Bobbitt (1918), who maintained that the curriculum should be seen as the delivery of specific knowledges, by identified knowers, with the aim of turning out citizens who would act together for what he saw as the common good. Nor is it too far away from the efficiency theories of Frederick Taylor, the great promoter of what Callahan (1962) called 'the cult of efficiency'. Further, Taylor held that the practice of curriculum should also be policed to ensure that the correct content and form were being delivered. This view is thoroughly critiqued today by more thoughtful researchers, such as Au (2012) and Apple (1993). Nevertheless, the aim still remains in many places, including the UK, of ensuring the achievement by students and teachers of policymakers' pre-specified objectives: the focus is still on the end point of achieving, rather than the ongoing experiences of participating (see also Gibson, 1993).

Status of curriculum

Higher education is deeply implicated in this view of curriculum and imbues it with respectability. Its policy recommendations draw on existing findings from those academics whose favourite epistemologies are those of technical rationality and whose forms of logic stem from a pursuit of end points, the fulfilment of articulated aims as outcomes, and the achievement of certainty: this is one of the most pernicious commitments of all. At the same time, little heed is paid to the everyday practical theories of teachers, nurses and other professionals in so-called 'workplaces' (as if Parliament and the university were not workplaces), who are deemed highly competent foxes in practical contexts, but not very much so in matters of theory generation.

This locates the enquiry squarely in the context of challenging what Dewey (1929) called 'the quest for certainty' and how this plays out in individual classrooms. Here, teachers are expected to 'deliver' a pre-specified curriculum, whose contents children and other learners are expected to accept unquestioningly and learn to reproduce. This was the experience of a young student of my acquaintance who reported that in a school art lesson he wanted to colour the leaves of a flower red, whereupon his teacher corrected him with: 'No, leaves are green.' She then took away all the non-green pens that were on the table: an example of the acquiescence of teachers who are dominated by a requirement to teach to the test, to stay at the level of telling what they know from the canon of existing knowledge, rather than communicating how learners can bring their own imagination and wonder to the action of creating knowledge and exploring it with others. Teachers are persuaded or frightened into abandoning their own love of enquiry in light of the fear of being revealed as an outsider or a threat; they comply, denying their own calling as educators, denying the idea of teaching as a rich values-based practice, and promoting instead a view of teaching as a technology. Rather than teach according to what students want to learn, and to what they wish to teach, teachers are required to abide by the given curriculum of official knowledges, and learners are required to learn and apply it (Apple, 1993): we are no further on from the days of colonization and the construction of empire. Back to the smooth ground of totalitarianism, but now, rather than do it to Julia, as the terrified Winston said in Orwell's *Nineteen Eighty-Four* (2000), we do it to children.

This view/approach is what countless other practising teachers and I disagree with, across the sectors of mainstream and further education, and in some corners of higher education. It is also the concern of academic authors such as Nixon (2008) and Reiss and White (2013) who maintain that schools and other institutions of learning should cater for the expressed needs of their students as well as those of elitist policymakers. But this also would mean an abandonment of the dominant policy's exclusive focus on achieving certainty, reinforced by dominant forms of research as produced by elitist-oriented researchers in higher education. It would mean, as well as embracing prescribed forms of technical knowledge, also embracing Polanyi's (1958) knowledge of personal understanding, a reflective level where teachers and students can say: 'I know what I am doing, and I can explain to you what I know, how I have come to know it, how I intend to use my knowledge and whose interests that knowledge might serve.' Further, this more reflective approach shifts the ground towards the moral considerations of curriculum theory and practice, and away from only the more technical aspects.

From all these perspectives, traditionalist approaches to scholarship and curriculum research do not serve us well, focused as they are on providing answers and solutions, rather than on asking questions or engaging with dilemmas. They focus on instrumental forms of knowledge – 'know that' and 'know how', as set out by Ryle (1949). These are the views of Berlin's hedgehogs: they do not accommodate views of personal knowledge (Polanyi, 1958), an understanding of what we need to know to find our way creatively and dialogically around a world full of others from different contexts and with different traditions. The aim is to achieve certainty and finality; the method is to make statements about causes and effects. And these approaches continue to be espoused, including dominant approaches to curriculum theory, even though their horizons are limited on several counts, including the fact that they adopt for curriculum studies what Collingwood (2013) calls 'a scissors and paste' approach. By this, he refers to historians who first 'decide what we want to know about and then go in search of statements about it, oral or written, purporting to be made by actors in the events concerned' (ibid.: 257). Rather, in Collingwood's view, the study of history (and, in this article, the study and practice of curriculum) should be about asking the right questions. Instead of aiming for 'a logic of propositions' (that is, statements of fact), a search for truth should take the form of 'a complex consisting of questions and answers' (ibid.: 36–7). Polanyi (1983) thought similarly: in his *The Tacit Dimension*, he challenged a view of the implementation of centrally planned policy as leading to specific outcomes, claiming instead that freedom to think was a prerequisite of academic freedom and the right to plan futures imaginatively and according to the needs of persons.

This entire situation was well described by Donald Schön (1983: 42), in his metaphor of the topography of professional practice landscapes, where, he says:

> There is a high, hard ground where practitioners can make effective use of research-based theory and technique, and there is a swampy lowland where situations are confusing 'messes' incapable of technical solution. The difficulty is that the problems of the high ground, however great their technical interest, are often relatively unimportant to clients or to the larger society, while in the swamp are the problems of greatest human concern.

> The question then is: should teachers and other practitioners stay on the high ground, dealing with matters of theory, which are relatively unimportant for dealing with everyday matters of importance (but are

not seen as theory-related), or should they choose to work in the swampy lowlands, where the main issues are to do with working with today's problems and finding workable solutions.

These points are, sadly, matters of fact for today's reality. However, it is time to adopt a more critical perspective, as is the commitment at the heart of action research: if a situation leaves something to be desired, other options are needed about how to change it. It is then apt to link Schön's metaphor of the hard high ground and the swampy lowlands with one from Wittgenstein, who spoke about the smooth and rough ground of practices: while the smooth ground might be found on Schön's high ground, the swampy lowlands represent something rougher. And for Wittgenstein (2009: 46), staying too long on the smooth surface of the high ground is threatening and makes one lose their purchase on reality:

> We have got on to slippery ice where there is no friction and so in a certain sense the conditions are ideal but also, just because of that, we are unable to walk. We want to walk: so we need *friction*. Back to the rough ground!

But returning to the rough ground also brings challenges and decisions. The task now becomes to check one's own commitments towards the current situation and decide whether, if any element is unsatisfactory, what to do about it. It is to highlight the need to follow Latour's (2004) advice and turn matters of fact into matters of concern and ask, 'How can an unsatisfactory situation be changed?'

But returning to the rough ground means wearing practical, theory-lined boots because it is littered with stories from experience (see Dunne, 1993). It is then the task of educators to listen to the voices of experience and learn about what curriculum means for others. Box 1 presents a story from experience to show how and why this should be the case.

Box 1: A story of personal experience

This is a story from my mainstream teaching in the secondary sector, a good many years ago. I had just returned to the UK from an advisory job abroad, enjoying accumulated leave and now thinking, though in a somewhat desultory fashion, about getting a job. However, because I had never liked kicking my heels, I decided to seek temporary employment in the local school system. At that time, it was easy to get a teaching job, and I was quickly hired to teach in a local comprehensive school. I was delegated to teach Class 1C (not the real name), comprising fourteen 11–12-year-olds, whose favourite game was 'Get rid of teacher' (probably most schools have a Class 1C). They were awful: full of bad language, stupid tricks, very intelligent and bored out of their minds. I couldn't believe they were serious and said so, but they paid no attention and continued to make life as miserable as possible for me. I was also very annoyed and told them this too, but it just continued.

I looked for a way to keep them at least entertained and contained, and hit on the idea of videotaping them, to appeal to their vanity. They were a vain little lot and boasted of their reputation as unteachable. It worked: as well as studying specified curriculum topics, we videoed ourselves as much as possible and, on those days when the video equipment was not available, used audio tape-recordings. We got into a regular routine that they would talk about anything and record it today, and we would listen to the tape tomorrow. They loved it.

A breakthrough happened one day when a key pack-member said, 'I don't like what I just said. Can I do it again?', an example, perhaps, of critical reflection. Yes, he could: and so we progressed and gradually started to take care about what was said.

They also wanted to do a project that would make them look special in the eyes of the school, so a month or so into working together, we decided to make a garden. We found a bit of waste ground outside one of the temporary huts that acted as a classroom and began. They were very conscientious about getting the tools from the school gardener: I made sure everything was returned, not quietly disappeared. They discussed what the garden would contain: this involved actually looking at books about flowers (exotic ones, according to a unanimous vote) and then discussing on site what would suit the ground and climate. They also discussed constructing an electric fence to keep off potential intruders from other classes; this involved consulting parents and neighbours about materials needed. Amazingly we managed to grow a few flowers before the enthusiasm ran out and we had to look for a new project.

What did I learn? I learned that some people refuse to be obedient to a given schedule; that it is vital to match the content and delivery to people, not the other way round; that independent-thinking people do not cope well with a regime of topics that do not meet their immediate needs or interests; that curriculum is emergent and needs to begin from where people are and work upwards, not begin with an abstract theory and work down. After that it becomes a Jacob's ladder experience of moving between high and low grounds. I learned that curriculum is polycentric in nature, as Polanyi (1983) says, as the focus shifted to each person as they took the limelight for ideas. I learned that people such as Class 1C tend to cultivate their ferocious reputation, so such situations are far from epistemically unjust, but suit their self-images. I learned, above all, that Class 1C were bright, irrepressible and thoroughly good people (except for one who I felt was deep-down nasty). I also began to develop many of the ideas that appear in this article, about how people decide that and what they want to learn; about the futility of imposing an unwanted structure on people's learning; about the poverty of the practice of leading horses to unwanted water, be that water ever so pure and sanitized. Class 1C were indeed awful, and I liked them enormously. And later study brought me into contact with those philosophers and theorists who endorsed this view, the theoretical and lived impulse behind the dominant quest for certainty and the need to abandon it.

Yet views about practice-based theory and person-centred curricula run on to a different kind of rough ground when they meet up with dominant views about what knowledge should be taught, how this might be done, and how the knowledge should be used. Donald Schön made this point, too, in 1995: he was referring to a 'scholarship of enquiry' or 'the new scholarship' found in Boyer (1990), which argued for a form of teaching that would encourage enquiry learning. A curriculum based on this view would involve:

- a 'scholarship of integration', the putting together of isolated facts across disciplines and putting them into a relevant context
- a 'scholarship of application', an understanding of how knowledge might be applied to relevant problems

- a 'scholarship of teaching', which begins with what the teacher knows, and means 'not only transmitting knowledge but transforming and extending it as well' (Schön, 1995: 27).

According to Schön (ibid.), abiding by these criteria would involve teachers doing 'a form of action research, with norms of its own which will conflict with the norms of technical rationality', a form of knowledge that focuses on instrumental aspects. And given that technical rationality is still widely acknowledged as the preferred form of knowledge of the modern research university, and therefore by default permeates received theories of curriculum, it conflicts with what is widely held as teachers' practice-based knowledge. Schön said that this would lead to an epistemological battle, but it would be a: 'battle of snails', 'proceeding so slowly that you have to look very carefully to see it going on. But it is happening nonetheless' (ibid.: 32).

Yes, it is happening, with action research. It is usually held to have started in the 1940s, with the work of Kurt Lewin and others, working in the US (although it actually began much earlier than that with the work of scholars such as John Dewey in the US and Reg Revans in Wales); and then, in the UK, developed apace in the 1970s through the work of Lawrence Stenhouse and John Elliott. Their view was that teachers and students could research together in action how to improve what they were doing and use their knowledge for social benefit. The rationale for the work was throughout grounded in an enquiring approach, an attitude of not-knowing and wanting to find out. A key feature also was the idea of critique: if a situation was unsatisfactory, it could be changed. Both Stenhouse and Elliott encouraged teachers to find ways actively to use the power of critique for developing new ways of teaching to encourage learners to learn according to their own strengths. This in turn involved their teaching young people how to critique and to implement strategies for creating the kind of world in which they wished to live. The work was highly successful, and it had lasting implications for how curriculum might be theorized (Elliott, 1998) and for their ideas about teachers as researchers.

However, serious questions arise about the potential of action research for sustainable school and curriculum development. While the views of Stenhouse and Elliott about 'teachers as researchers' did prove highly influential at the time, and remain so to this day, it needs to be remembered that there is a big difference between content ('the what') and process ('the how'). Although, at the time, action research was shown to be powerful as a process, especially for those in direct contact with learning contexts, it was never mainstreamed by policymakers as an equal partner, simply because dominant approaches maintained control over the content of curriculum and promoted it as a set of approved knowledges, which itself required a specific objectives-focused form of teaching. Further, the 1980s saw the establishment of a systematic policy of increasing control on schools and curriculum and form of research, by the then and later governments, including key members of the intelligentsia. And action research itself became a casualty in this drive: it is well documented how, since the 1980s, it was co-opted and mainstreamed in a form that suits dominant policy orientations (Herr and Anderson, 2005; McNiff, 2014). Thus, a nascent revolution in terms of establishing teachers' freedom to consult with their learners about what they wished to learn for their own imagined futures was put down by officialdom; all things curriculum remained firmly under the control of officially legitimized knowers. Back to the sure smooth ground: back to the certainty of a closed form of thinking.

What can be done about it?

Notwithstanding, experience shows that it is possible to challenge officialdom and get away with it, if certain strategies are developed: a core feature here is the idea of teachers doing action research together, with the aim of initiating systemic social change, but this in turn requires an understanding of processes of social change. A grounding point is that sustainable forms of systemic social change cannot be imposed from outside: it begins in the individual mind, in that people decide to change themselves: while short-term change might be imposed, as when we need to go on a crash diet to reduce weight for an important event, systemic change is that which is undertaken voluntarily and intentionally, not imposed, as when we decide to maintain a healthy diet for a durable life. Initiating sustainable systemic change then means working with like-minded colleagues and encouraging others to do the same. This sees the beginning of processes of exponential growth: one person can exercise influence in the thinking of another, to an *nth* degree, and they in turn do the same for others: the effects are potentially boundless. It is also an example of an open mentality that is grounded in people's adopting an enquiry approach, rejecting certainty and embracing the uncertainty of an unknowable future.

However, to achieve sustainable change, people themselves need to see the potentials of their research for taking politically oriented action for changing systems, with implications for systematized action research, where people are able to observe and change an objective matter of practice while also observing and changing the system of which they are a part – we simultaneously initiate a local process and thereby become part of what turns into a wider process: the whole becomes greater than the sum of its parts. This is what can happen when individuals work with others in doing action research: it becomes a norm, a sustainable culture based on a commitment to improve local practices for wider systemic influence. I learned this from local episodes such as with Class 1C, and later saw the same effect through initiating wider processes of sustainable social change in Ireland and South Africa (see McNiff *et al.*, 2000).

It is possible to initiate the same process in relation to curriculum, and so influence policy. At a local level, learners, teachers and interested others such as parents come together, on an equal footing, to negotiate, develop and test ideas about what learners need to learn in order to lead the kind of life they wish to live; teachers, parents and others do the same. They research their own situations, individually and collaboratively, and find ways of improving any unsatisfactory aspects, with a view to improving processes of education locally, and then, collectively, using their new knowledge to influence others, including policymakers. And people power really does exercise powerful influence: look at the examples of movements initiated by figures such as Jesus, Gandhi, Martin Luther King and Lewin, and of educators such as Freire, Dewey, Stenhouse and Elliott. All had a vision of what could be, and all were prepared to abandon the security of expecting a definitive outcome, having faith in an unknown future, and acknowledging the inevitable fallout in facing up to systems of power. If sufficient people shout their disapproval of current systems and insist on change, change will eventually happen (see also Arendt, 1990).

And it is happening, worldwide, as shown in multiple action research-oriented texts (for example, Meredith 2020, among others). However, it still needs to be developed further in the curriculum literatures, specifically in relation to the following points:

- A curriculum should be understood as a dynamic, negotiated process, with full acknowledgement that different participants come from different perspectives, and social and knowledge traditions, which must be respected and recognized (see also Berlin, 2012).
- Successful participation involves a willingness to try things out, anticipating that such efforts may or may not be possible or produce hoped-for results, and what might then be seen as the necessary conditions for its success.
- A view of research as a non-specialized everyday practice of finding out that which is not yet known, available to all and enabling anyone to be seen as a researcher in their own right (see also Appadurai, 2006).
- A willingness to listen to the other, and appreciate their perspectives, the inclusion of all, and the right of all to speak and be heard.

What might be the significance of this approach to curriculum studies?

Many of the ideas in this article are drawn from study in other mainstream fields, such as complexity theory, epistemology and philosophy, as well as from personal experience, as the example in Box 1 shows. What is not so prominent in the literatures – or, indeed, in public discourses about the 'best' form of knowledge that should be communicated and endorsed in formal organizational contexts – is the issue of what form the knowledge should take, what it should be used for and whose interests this might serve. At the moment, the form of knowledge most promoted is one of facts and figures, underpinned and informed by a myopic but arrow-straight aim for certainty. Yet this desire for certainty is what has got us into trouble throughout history. Some philosophers and theorists rail against its evils. Dewey (1929), for example, wished to abandon 'the quest for certainty', as did Popper (2002), who spoke about 'the poverty of historicism', an understanding that events will follow a predetermined course; also Isaiah Berlin – see his 'The pursuit of the ideal', reproduced in *The Crooked Timber of Humanity* (2013), and his 'Notes on prejudice', written in 1981 and reproduced in the *New York Review of Books* in 2001. All pieces contain dire warnings from history about the penalties of a commitment to an unshakeable belief that one particular way is the right way, whether that way takes the form of a creed, social commitment or obedience to a policy directive. Berlin (2001) writes, as part of a hurried note to a friend:

> Few things have done more harm than the belief on the part of individuals or groups (or tribes or states or nations or churches) that he or she or they are in sole possession of the truth: especially about how to live, what to be & do – & that those who differ from them are not merely mistaken, but wicked or mad: & need restraining or suppressing. It is a terrible and dangerous arrogance to believe that you alone are right: have a magical eye which sees the truth: & that others cannot be right if they disagree.

This commitment to certainty, he says, leads to persecution and totalitarianism, justified by a belief that one has the correct knowledge, and that it is one's responsibility to communicate it to others and enforce it where necessary.

This rightness of an attitude towards certainty is widespread in educational policy documents across the developed world. It is also critiqued in contemporary critical literatures, by, for example, Foucault (2002) and Chomsky (2000); in educational policy literatures, such as by Ball (2012); and in cognate disciplines such as critical discourse analysis (Gee, 2005). All have, in their own way, raised sceptical questions about a

commitment to an epistemology of certainty. However, the idea has not yet been developed in the literatures of curriculum study or in action research. One of the reasons could be that, although many scholarly articles are written by theorists who have taken uncertainty as their epistemological base – a commitment to pluralism and inclusion that colours their entire world view – others have not, and these include traditionalist academics and curriculum theorists, such as those who advocate randomized control trials in education, who tend to choose to revolve their moral universe around the idea of certainty itself. Further, these days, given the systematic drive by neo-liberal governments to merchandise and therefore corporatize education, and the resolve of many universities to stay on the right side of those governments, these traditionalist academics are now in the majority. Theirs remains the dominant view that informs legitimized forms of curriculum, in spite of the fact that a road to certainty usually leads to nowhere, without any purchase on reality. And what might it take to accept that routes often lead into the rough swampy lowlands of practice, where just as much of value is to be learned as on the high grounds of abstract knowledge? What price curriculum, if it gives us information but does not serve us well in understanding how to hold our knowledge lightly? And, above all, learn to say, like Cromwell in his letter to the General Assembly of the Kirk of Scotland, who refused to accept his authority: 'I beseech you, in the bowels of Christ, think it possible you may be mistaken.'

To the best of my knowledge, not too many literatures are available to show the processes involved when people come together to undertake collective politically oriented action research in relation to influencing policy in terms of what should count as a curriculum that could shape the future, and are then prepared to make their findings public – with perhaps some notable exceptions. One is Margaret Meredith (2020), working with educators around the globe, with abundant evidence to show the processes involved. Another is in the work of Claire Collins, in a further education context, who develops projects whereby teachers, learners and policymakers come together to decide matters of the nature, form and content of curriculum, also with abundant evidence (see McNiff, 2020). There must be thousands more. These need to be understood as a coherent body of literatures with a clear social intent: to break free from the constraints of certainty and explore the potentials of developing an unbounded approach to politically oriented action research for curriculum development. Nothing less will do.

Notes on the contributor

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References

Appadurai, A. (2006) 'The right to research'. *Globalisation, Societies and Education*, 4 (2), 167–77. Online. https://doi.org/10.1080/14767720600750696.

Apple, M. (1993) *Official Knowledge*. London: Routledge.

Arendt, H. (1990) *On Revolution*. London: Penguin.

Au, W. (2012) *Critical Curriculum Studies*. New York: Routledge.

Ball, S.J. (2012) *Global Education Inc*. London: Routledge.

Berlin, I. (2001) 'Notes on prejudice'. *New York Review of Books,* 18 October. Online. www.nybooks.com/articles/2001/10/18/notes-on-prejudice/ (accessed 1 March 2020).

Berlin, I. (2012) 'The hedgehog and the fox'. In Hardy, H. (ed.) *The Proper Study of Mankind*. London: Pimlico, 436–98.

Berlin, I. (2013) 'The pursuit of the ideal'. In Hardy, H. (ed.) *The Crooked Timber of Humanity*. London: Pimlico, 1–20.

Bertoft, H. (1996) *The Wholeness of Nature*. Edinburgh: Floris Books.

Bobbitt, F. (1918) *The Curriculum*. Boston: Houghton Mifflin.

Bohm, D. (1985) *Unfolding Meaning*. London: Ark.

Boyer, E. (1990) *Scholarship Reconsidered: Priorities of the professoriate*. Princeton: Carnegie Foundation for the Advancement of Teaching.

Callahan, R. (1962) *Education and the Cult of Efficiency*. Chicago: University of Chicago Press.

Chomsky, N. (1986) *Knowledge of Language*. New York: Praeger.

Chomsky, N. (2000) *Chomsky on MisEducation*. Lanham, MD: Rowman and Littlefield.

Collingwood, R.G. (2013) *An Autobiography*. In Boucher, D. and Smith, T. (eds) *R.G. Collingwood: An Autobiography and other writings*. Oxford: Oxford University Press.

Dewey, J. (1929) *The Quest for Certainty*. New York: Minton, Balch and Company.

DfE (Department for Education) (2014) 'National Curriculum in England: Framework for key stages 1 to 4'. Online. www.gov.uk/government/publications/national-curriculum-in-england-framework-for-key-stages-1-to-4/the-national-curriculum-in-england-framework-for-key-stages-1-to-4 (accessed 18 June 2020).

Dunne, J. (1993) *Back to the Rough Ground*. Notre Dame, IN: University of Notre Dame Press.

Elliott, J. (1998) *The Curriculum Experiment*. Buckingham: Open University Press.

Foucault, M. (2002) 'Governmentality'. In Faubion, J.D (ed.) *Michel Foucault: Essential works of Foucault 1954–1984, Volume 3: Power*. London: Penguin, 201–22.

Fricker, M. (2007) *Epistemic Injustice: Power and the ethics of knowing*. Oxford: Oxford University Press.

Gee, J.P. (2005) *An Introduction to Discourse Analysis: Theory and method*. 2nd ed. New York: Routledge.

Gibson, J. (1993) *Performance versus Results*. Albany: State University of New York Press.

Goethe, W. (1957) *Goethes Werke in zwei Bänden: Erster Band*. Munich: Th. Knaur.

Gould, S.J. (1992) *The Mismeasure of Man*. London: Penguin.

Herr, K. and Anderson, G. (2005) *The Action Research Dissertation*. Thousand Oaks, CA: SAGE Publications.

Latour, B. (2004) 'Why has critique run out of steam? From matters of fact to matters of concern'. *Critical Inquiry*, 30 (2), 225–48. Online. https://doi.org/10.1086/421123.

Lippman, W. (1922) *Public Opinion*. New York: Harcourt, Brace and Company. Online. https://archive.org/stream/publicopinion00lippgoog#page/n6/mode/2up (accessed 18 June 2020).

McNiff, J. (2014) *Writing and Doing Action Research*. London: SAGE Publications.

McNiff, J. (2020) 'Evaluation'. In *A Summary of Projects in the OTLA Phase 6 (English) Programme*. London: ccConsultancy on behalf of the Education and Training Foundation, 19–22.

McNiff, J., McNamara, G. and Leonard, D. (eds) (2000) *Action Research in Ireland*. Poole: September Books.

Meredith, M. (2020) 'Creating Spaces of Dialogical Action towards Epistemic Justice in Higher Education'. PhD thesis, York St John University.

Nixon, J. (2008) *The Virtuous University*. London: Routledge.

Orwell, G. (2000) *Nineteen Eighty-Four*. London: Penguin.

Polanyi, M. (1958) *Personal Knowledge*. London: Routledge and Kegan Paul.

Polanyi, M. (1983) *The Tacit Dimension*. Gloucester, MA: Peter Smith.

Popper, K. (2002) *The Poverty of Historicism*. London: Routledge.

Reiss, M. and White, J. (2013) *An Aims-Based Curriculum*. London: Institute of Education Press.

Ryle, G. (1949) *The Concept of Mind*. London: Hutchinson.

Said, E. (1997) *Beginnings: Intention and method*. London: Granta.

Schön, D. (1983) *The Reflective Practitioner*. New York: Basic Books.

Schön, D. (1995) 'Knowing-in-action: The new scholarship requires a new epistemology'. *Change: The Magazine of Higher Learning*, 27 (6), 27–34. Online. https://doi.org/10.1080/00091383.1995.10544673.

Sowell, T. (1987) *A Conflict of Visions*. New York: William Morrow.

Toulmin, S. (1990) *Cosmopolis*. New York: Free Press.

Wittgenstein, L. (2009) *Philosophical Investigations*. Trans. Anscombe, G.E.M. 4th ed. Oxford: Basil Blackwell.