FORUM
Volume 62, Number 3, 2020
www.wwwords.co.uk/FORUM
http://dx.doi.org/10.15730/forum.2020.62.3.423

Neither Technicians nor Technocrats: pluralism and democratic accountability in schools

PETER KELLY

ABSTRACT Whether the relationship between policymaking and science has been affected by the coronavirus pandemic remains unclear. The success scientists have enjoyed in dealing with the virus and hopes they will develop a vaccine may increase the status of some experts whilst damaging populist anti-science sentiment. Some may call for increased technocracy, where experts run the state. However, the opposite is also possible, as science is exposed as a combination of evidence and opinion, and tarnished by its association with untrustworthy politicians using it to justify their policies. This, then, would seem like a good time to clarify the scope and limitations of science in developing public policy. The author's interest is in education, where managerial practices dominate whilst a new science modelled on evidence-informed medicine has emerged, which promises to find out 'what works' to raise student attainment. But evidence has limitations and politics often influences its selection and interpretation – concerns that could undermine public confidence and play into populist hands. Instead, decision-makers should acknowledge these difficulties, take a more pluralist stance to research-informed practice, and act transparently to allow public scrutiny and support democratic accountability.

I expect that I was not the only person with time to reflect on how the things I was interested in might change as the coronavirus crisis unfolded. For several years, I have watched as successive governments have promoted research engagement with leaders and teachers in schools. With science now at the centre of government policy and shaping all of our lives, I wondered what I could learn about its role in decision-making and the relationship of scientists with decision-makers. Shortly, I will focus on the place of evidence-informed practice in education and how it affects public trust in schools, but I begin by

outlining the evolving relationship between government, scientists and the general public during the pandemic lockdown.

Coronavirus, Populism and Public Trust in Science

From early spring 2020, the government used daily briefings, co-hosted by scientific advisors, to detail its response to the coronavirus. At first, these served not only to reassure, build consensus and provide guidance on the measures introduced, but also to construct a national story of dutiful and resilient citizens who were grateful to heroic key workers and, under Churchillian leadership, at war with an invisible enemy. But by the early summer, these had become opportunities to hold politicians to account, with media commentators testing the relationship between advisors and ministers, and trying to expose to public scrutiny the selection, interpretation and even veracity of the evidence used. When the national lockdown was introduced during the early days of the crisis, the government aligned itself closely to scientific advice – which it claimed to be led by – to justify illiberal policies that it would normally be against. However, over time, and as complications grew, this relationship became more distant, as politicians emphasised that although their decision-making was still informed by advice, they were also taking other factors into account.

Governments often use research to depoliticise debates by claiming that their positions are supported by apparently neutral evidence and rational argument. With public confidence in them low, politicians use research to signify their trustworthiness and commitment to the public good; people trust those they believe are acting in their best interests rather than seeking personal benefit, and who seek the welfare of all without privileging particular groups. However, their critics – particularly those with a populist orientation – often believe the opposite – that policymakers are actually politicising research by conscripting authority and expertise to defend their claims (Eatwell & Goodwin, 2018). Sceptics argue that research is used selectively and partially, over- or misinterpreted, and without reporting any objections or recognising any limitations. When, for example, it was asserted that face masks made little or no difference when worn in public spaces, some regarded this as an attempt to ensure that public demand did not exacerbate the shortage of such masks in health-care settings (Howard, 2020).

As a result, it is possible that government attempts to co-opt trust from highly regarded scientists actually lessen public confidence in science through its association with unpopular politicians. This is especially so when incumbents act to diminish public trust, whether through unclear decision-making and sudden changes in policy and guidance or by appearing to ignore their own advice (notoriously, in the case of the prime minister's chief advisor), understating uncertainties and debates between advisors, or openly using unreliable statistical data to defend their approach. In questioning expertise, populists appropriate a growing mistrust of some areas of science that predates their rise. Anti-vaccination movements, for example, have been gaining approval

in countries such as Italy, Poland and France for a number of years as the populist right has made advances (Boseley et al, 2018), and led protests against government restrictions that aimed to prevent the spread of the virus. Such conspiracy theories – another linked phone masts to the spread of the virus – are widespread at times of rapid social change in contexts where trust in social institutions and social cohesion is lacking, and driven by a sense of injustice, often originating in fair criticisms of abuses of authority by the powerful (Evans et al, 2018). In 2016, the term 'post-truth' was coined by establishment politicians, as they accused populists of giving their subjective opinions the same status as objective facts whilst ignoring debate about the nature of those opinions or facts (Davis, 2017). Yet some argue that this is simply an attempt to take the moral high ground, because all knowledge claims combine evidence with opinion (Fuller, 2018).

Whether the relationship between policymaking and science has been affected by the pandemic remains unclear (Aksoy et al, 2020). The success scientists have enjoyed in dealing with the virus, along with hopes they will develop a vaccine, may serve to increase the status of some experts whilst damaging populist anti-science sentiment. However, the opposite is also possible, as the messy uncertainties of science are exposed and the neutrality of scientists is questioned. This, then, would seem like a good time to clarify the scope and limitations of science in developing public policy. Here, I focus on the relationship between science and public trust in schools.

Techno-rationalism, Technicism and Technocracy

In science, the language of mathematics – most often statistics – is used to describe and analyse material and social phenomena and relationships, giving us at least some confidence that we can predict future events. Medical science and its associated technologies have been hugely successful at this – think of the plethora of tests and treatments available now which were not around even a few years ago – so much so that the theatre director, physician and public intellectual Jonathan Miller (2002) complained that, as they become more reliant on technology, doctors draw less and less on their own diagnostic experiences and craft knowledge, and are less inclined to follow their professional intuitions. In this, he provides a contrast with another way of understanding the world – through the more hermeneutic lens of history, often using narratives, to look at how things have become the way that they are and how the past shapes the present. This is to recognise the value of health-care professionals' learning through a career-long active engagement in a manner that Donald Schön (1987) characterises as reflection in and on practice. For years, taking a history was central to the art of medical diagnosis, allowing doctors to place their patients' symptoms in the circumstances of their lives and the cultures that make these meaningful, form trusting relationships and make human connections. Interestingly, it is now nurses who are the profession most trusted by the public – more even than doctors (Ipsos MORI, 2017). Nurses are

trusted for their human qualities and not just their technical competence; they provide close care, often for extended periods, at times when patients feel vulnerable, and are regarded as dependable and honest.

These medical examples are significant because the same model is increasingly applied to teachers and schools. Nearly 25 years ago, David Hargreaves (1996) compared education to medicine to argue that educational research should attend more to gathering evidence of what works in what circumstances for use by teachers to improve student attainment. Since then, a new science of education has emerged (Furlong & Whitty, 2017), which imports methods taken from medicine into education, typically in the form of randomised controlled trials and systematic reviews. However, whilst most of its medical variants test treatments developed from disciplinary (often pathological) understandings, additionally, the particular coupling of randomised controlled trials with the view that effective school organisation, leadership and teaching emerges through the workings of an 'invisible hand' in the education marketplace has led policymakers to prioritise research identifying practical examples of best practice so as to uncover their most effective formulations. This 'evidence movement' (Hammersley, 2005) reduces its focus on theorisation to emphasise methodological rigour. A popular but less thorough approach is to compare countries depending on their aggregate international standardised student test scores, to allow the less successful to borrow policies from the more successful.

Still, the evidence movement does recognise theoretical research that is closely aligned with the assumptions and methods of science – disciplines like neurology and cognitive psychology, and statistical analyses that focus on education outcomes in ways that mirror epidemiological concerns with well-being. The second include school-effectiveness research, the area in which Daniel Muijs worked before he became head of research at Ofsted. All such work rests on the belief that science, using mathematics, can identify how the individual and the social world are structured in order to better anticipate the consequences of change. This is evident in the review of largely international educational-effectiveness research that accompanies Ofsted's (2019) latest inspection framework. One example claims:

> [student] achievement is likely to be maximised when teachers actively present material and structure it by: providing overviews and/or reviews of objectives, outlining the content to be covered and signalling transitions between different parts of the lesson, calling attention to main ideas and reviewing main ideas.
> (Ofsted, 2019, p. 12)

A critic might observe that the structure provided by teachers may well act to constrain students – whilst teachers are positioned as active deliverers of knowledge, students are passive recipients.

Accompanying this view is a belief in the power of technology – the application of science – to improve people's lives, specifically advocating that all

problems are solvable through rational and reductionist means. This techno-rationalist perspective recasts policymakers or leaders with research expertise as technocrats, whilst those who draw on research expertise to design solutions to specific problems are more like engineers. Teachers, whose practice follows protocols designed by others and based on principles derived from research, are technicians.

The rise of the evidence movement has taken place against a backdrop of market reform in education, with schools given greater autonomy and required to compete with each other for students and the money they bring. Parent choice is informed by limited data – largely aggregated student test scores and Ofsted grades – and there are often high stakes attached to these measures. As a result, managerialism has increased. Student test performance is too important to be left to chance, and so school leaders and teachers try to control this by narrowing the curriculum to those subjects tested, engaging in highly detailed lesson planning and prioritising teacher-led instruction focused on teaching to the test. Individuals or groups of students sharing similar characteristics are subject to regular monitoring and targeted interventions, as are teachers and teaching, whilst the performance of everyone – students and teachers alike – is regularly reviewed to plan for future improvement. Here, school autonomy does not mean professional or student autonomy. All is set in the assumption that every problem is solvable through technical, rational and reductionist means. In trying to ensure that there are no surprises, techno-rational management relies on statistics – the collection, analysis and interpretation of local data within schools for comparison with similar schools nationally. This is the mathematisation of schooling, with teachers less inclined to take account of and respond to the individual complexities of students, and more dependent on metrics.

This has given the preoccupations of the new science of education with what works a greater importance. But, as recent events have shown, ignoring the contested and ever-changing nature of scientific knowledge, and the ways in which this is used selectively by people representing particular value positions, is a sure way of unsettling public confidence. Nor, as Jonathan Miller (2002) pointed out, should we disregard other ways of understanding the social world, particularly those focusing on the importance of human relationships. For example, Vygotskian perspectives focus on the ways in which individuals are embedded in social and cultural networks, and these can help us understand why there is so much in teaching that is locally rather than universally applicable, and why the development of transferable knowledge in students is so difficult. Meanwhile, the critical analyses of theorists like Pierre Bourdieu explore how some people are in a better position to forward their own interests than others, and how, as a consequence, social institutions like schools often serve to reproduce existing educational inequalities.

Traditionally, the art and craft of teachers was evident in their planning and pedagogy. Whilst some were better at this than others, at its best, this allowed teachers to engage in a creative dialogue with their practice for the

benefit of their students. This dialogue took account of students' differing needs and the freedoms and constraints offered by context, culture and circumstance. Nowadays, busy teachers rely more and more on commercial resources that translate research into practice and are often marketed on the basis that they provide some competitive advantage. A number of them are based on their own research, whilst others provide interpretations of education research – Ark's (n.d.) Mathematics Mastery, for instance, is broadly based on approaches used in successful countries as measured by comparative international student surveys. All claim to help teachers improve student test scores. It is no surprise that such resources are popular, as they exploit the insecurities of school leaders and teachers by offering them ready-made but expensive solutions. No doubt some of these materials are helpful and offer benefits to both teachers and students, but inevitably they privilege singular, universal visions of educational purpose and the nature of knowledge, teaching and learning, and position teachers as technicians who are required to follow the detailed schedules and activities provided.

At the other extreme, school leaders and teachers are increasingly encouraged to become expert at using research to improve professional practice. There are various research evidence repositories available, each curated by intermediaries. The Education Endowment Foundation's (n.d.) Teaching and Learning Toolkit is perhaps the most popular, but others, such as the Evidence for Policy and Practice Information Centre, also produce summaries. Numerous organisations, from the Chartered College of Teaching [1], the professional body for the teaching profession, to the Royal Society (Royal Society & British Academy, 2018), implore practitioners to learn from this evidence to inform their practice. This represents a technocratic view of the teaching profession, where the experts are also the decision-makers. No bad thing, you might say. But what if their expertise is shaped by the assumptions of intermediaries and restricted by their prejudices? What if they, too, privilege singular, universal visions of educational purpose and the nature of knowledge, teaching and learning?

Whether we view education professionals as technicians or technocrats, both are problematic. Instead, perhaps we can clarify the relationship between school leaders, teachers and researchers by learning from the sometimes difficult collaboration between politicians, public administrators and scientists during the coronavirus crisis.

Pluralism, Democratic Accountability and Public Trust in Schools

Throughout the spring of 2020, many leaned from windows or stood outside their homes for a few minutes on Thursday evenings, shouting and clapping in genuine appreciation of essential workers. This was not to recognise technical competence, important though this is. Nor was it to celebrate their managers' relentless pursuit of efficiency and effectiveness, important though this is too.

Rather, it was in gratitude for something now regarded as a little old-fashioned: their commitment as public servants to provide for the welfare of all. They served the public good despite personal concerns, some sacrificing time with their families to do so, and gained people's trust because they clearly put the interests of others before their own.

Needless to say, we should not simply take for granted the trustworthiness of school leaders and teachers, and it is fair to ask those paid from the public purse to account for their work. Nor is there harm in allowing educational enterprise to be rewarded when students benefit. And it is reasonable for education professionals to be open to the insights and challenges of researchers and other experts. But a line should be drawn when overzealous accountability, commercial interests or a single viewpoint distract or even prevent school leaders and teachers from serving the public good, especially as this would also lead to a loss of trust in the profession. To follow this principle calls into question, amongst other things, the use of accountability measures which distort practice in ways that are more in the managerial interests of school leaders and teachers than of students. Indeed, such measures may damage some students. It calls into question the reliance of school leaders and teachers on expensive resources that exploit research for commercial gain, or on the use of inspection protocols set in contestable assumptions and informed by a partial and selective literature.

So, how can educators draw on research to ensure the primacy of public service and thereby maintain public trust? To begin with, decision-makers – be they politicians, administrators, inspectors, researchers, school leaders or teachers – should balance an account of the benefits of mathematising education with a recognition of its limitations. This should be coupled with an understanding that there is no one way of capturing the complexities schools and teachers face, and that it is best to engage with a plurality of viewpoints, each bringing different insights. Bearing this in mind, it is important that significant decision-making at all levels involves professional dialogues that draw on multiple perspectives whilst keeping human values centre stage. And to maintain public trust, this process should be open and transparent to allow public scrutiny and support democratic accountability. This may seem a daunting list, but it is clearly important for state institutions to secure public confidence in uncertain times. The risks of not doing so are great.

Note

[1] See https://chartered.college/

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PETER KELLY is a Reader in Comparative Education at the University of Plymouth. Dr Kelly's research explores the working lives of school leaders and teachers in Europe. C*orrespondence*: peter.kelly@plymouth.ac.uk