Professional Enquiry: an ecological approach to developing teacher agency

Mark Priestley and Valerie Drew
University of Stirling

Abstract

It has become fashionable in recent years to discuss practitioner research, both in relation to the 'teacher-as-researcher' and a more general conception of the research-engaged teacher. Such discussion have taken on a sharper focus, with the advent since the turn of the millennium of new forms of national curricula that stress the active role of the teacher as a curriculum maker – and yet, this is problematic in terms of teachers' capacity to both engage with research and develop the curriculum. This chapter focuses on an initiative in Scotland, which sought to enhance teachers' capacity for curriculum making, utilising the methodology of Critical Collaborative Professional Enquiry. The chapter illustrates, using an ecological understanding of teacher agency, how teachers' agency in curriculum making increased as their confidence and professional knowledge grew, as they developed supportive and focused professional networks, and as their contexts for curriculum development were tailored to explicitly encourage sustainable innovation. The chapter draws upon qualitative data generated from three cohorts of participating teachers, including artefacts from the programme, programme evaluations and one-to-one interviews.

Key words

Professional learning; Curriculum development; Curriculum making; Collaborative professional enquiry; Practitioner research; Teacher agency

This chapter will:

- Identify two linked conceptions of the 'teacher-as-researcher': researcher into one's practice; and a more general conception of the research-engaged teacher.
- Describe an emerging landscape of curriculum policy and practice that requires more active engagement by teachers in curriculum making, than has been the case in recent years.
- Introduce and explain how curriculum making can be undertaken through Critical Collaborative Professional Enquiry (CCPE).
- Employ an ecological conception of teacher agency to analyse how CCPE enhances teachers' ability to engage proactively and constructively with new curriculum policy.

Introduction

It has become fashionable in recent years, resurrecting the ideas of Lawrence Stenhouse (1988), to discuss teacher (or practitioner) research (or enquiry[i]). The recent BERA-RSA inquiry into the role of research in teacher education (Furlong, 2014) identified two linked dimensions to this notion of, to use Stenhouse's expression, the 'teacher-as-researcher': researcher into one's practice; and a more general conception of the research-engaged teacher – someone who is research-literate, and who actively informs their practice through engaging with research. These discussions have taken on a sharper focus following a wave of curricular reforms, characterised as the 'new curriculum' (Priestley & Biesta, 2013), and evident in many national education systems[ii]. Following two decades of centralised direction of the content (and at times the methods) of the curriculum, there has been a shift to curricular models which emphasise local flexibility in curriculum making, positioning teachers as autonomous developers of the curriculum and hence agents of change. Yet, arguably, teachers in

many countries do not possess much of the professional knowledge necessary for school-based curriculum development. This is attributable to some extent to the prescriptive teacher proof curricula (Taylor 2013) of previous policy (input regulation), which has deprofessionalised teachers (Biesta, 2004, 2010) and socialised them as deliverers of policy, and also to the persistence of heavy-duty accountability mechanisms (output regulation) (Kuiper & Berkvens, 2013; Kneyber & Evers, 2015), which continue to run parallel to new more permissive curricula.

This paper focuses on an initiative in Scotland, which sought to enhance teachers' capacity for curriculum making, utilising the methodology of Critical Collaborative Professional Enquiry (CCPE). Through following a process of CCPE, teachers explicitly engaged with the big ideas (purposes and principles) of the Scottish *Curriculum for Excellence* (CfE), framing subsequent curriculum development in terms of fitness-for-purpose – that is fit-for-purpose knowledge content and fit-for-purpose pedagogies. This process involved both dimensions of 'teacher-as-researcher', as highlighted in the opening paragraph of the chapter; it was informed by participants reading research papers, and undertaking a form of research – termed enquiry – as they engaged in curriculum making in their schools. The teachers were supported by university researchers, acting as critical colleagues and providing access to pertinent cognitive resources, including research articles, as they engaged in challenging conversations about research, theories and practices, developing understanding and skills of enquiry. In this paper, we illustrate, using an ecological understanding of teacher agency (outlined later in the chapter, in the section titled Teacher Agency. Also see: Priestley, Biesta & Robinson, 2015), how teachers' agency in curriculum making increased as their confidence and professional knowledge grew, as they developed supportive and focused professional networks, and as their contexts for curriculum development were tailored to explicitly encourage sustainable innovation. The paper draws upon qualitative data generated from three cohorts of participating teachers, including artefacts from the programme, programme evaluations and one-to-one interviews.

The changing landscape of the curriculum

The 1990s saw the development of policy framed around the notion of input regulation (Kuiper & Berkvens, 2013), often featuring tightly prescribed content and even prescription of methods for teaching. The imperative behind such policy was a desire to ensure fidelity between policy and practice (Cuban, 1998) – to close a perceived 'implementation gap' (Supovitz & Weinbaum, 2008) – accompanied by a rhetoric of school failure that has served to 'create a sense of unease about teaching and justified subsequent government attempts to reconstruct teachers' work' (Helsby, 1999: 24). This fundamentally political drive to centralise policy has been widely viewed as nation states assuming control over education, as one of the few remaining levers of economic and political sovereignty in an increasing globalised world (for example: Green, 1999; Halsey et al, 1997). Scotland's curriculum policy during the 1990s broadly fitted with this general trend. The former 5-14 Curriculum, while less prescriptive than England's seminal 1989 National Curriculum, was framed around content expressed as learning outcomes, and came to be associated with highly structured and prescriptive schemes of work in schools (Priestley, 2013).

The period since the start of the millennium has witnessed a curricular turn in many countries as a 'new curriculum' (Biesta & Priestley, 2013) has emerged, characterised by a number of common trends. These include: a shift from the specification of knowledge content as the basis for curriculum planning towards genericism (Young, 2008); an emphasis on the centrality of the learner, active forms of pedagogy and a view of teachers as facilitators of learning (Sinnema & Aitken, 2013); a notion of education as a product, expressed as modular courses and ladders of qualifications (Young, 2008); an articulation of curriculum as assessable outcomes, accompanied by increasingly pervasive regimes of accountability and cultures of performativity (Young, 2008); and (in apparent contradistinction to the

previous point) a [re]construction of teachers as agents of change and professional developers of the curriculum (Priestley, Biesta & Robinson, 2015). This evolution of curriculum policy appears to recognise that there need to be more nuanced ways of framing the role of teachers in curriculum making (although as will be made clear in the coming paragraphs of this paper, such understandings have not been necessarily accompanied by nuanced understandings of the contextual conditions necessary to foster this process). Scotland's CfE is a good example of the 'new curriculum'. For example, it strongly emphasises the key role of teachers in shaping curricular practices.

This curricular shift is a manifestation of a wider transnational discourse that 'teachers matter' (OECD 2005), characterised by talk of lifelong professional learning, teaching as a Master's level profession, teacher autonomy and teachers as agents of change. Again, Scotland's broader policy landscape manifests similar trends; the influential report *Teaching Scotland's Future* (TSF) (Donaldson 2010) positions practitioners as 'reflective and enquiring teachers who are engaged in continuous improvement' (p.15) and 'have the capacity to engage fully with the complexities of education and to be key actors in shaping and leading educational change' (p. 19).

This significant shift away from input regulation and teacher-proof curricula is to be welcomed in our view, as it potentially provides the opportunities for teachers to achieve and exercise agency in their professional lives. Nevertheless, currently such aspirations are not achievable for a number of reasons that continue to erode teacher agency. This has become evident in Scotland in the partial (at best) implementation of CfE, as evidenced by research studies (Priestley & Minty, 2013; Wallace & Priestley, 2017) and the recent OECD review of Scottish education (OECD, 2015). First, the pervasive output regulation of teachers' work (Nieveen & Kuiper, 2012; Kuiper & Berkvens, 2013; Leat, Livingston & Priestley, 2013) or outcomes steering (Biesta, 2004) arguably inhibits teacher agency more effectively than has been the case with input regulation. Accountability, surveillance, performance indicators and target setting, as well as governance by data (including attainment data) have been widely viewed as 'a shift from notions of partnership, collegiality, discretion and trust to increasing levels of managerialism, bureaucracy, standardization, assessment and performance review' (Evetts, 2011, p. 407). These factors clearly run counter to the political rhetoric expressed in policy about autonomy and agency. They have been linked to the development of cultures of performativity in professional settings, leading to diminished professional autonomy and instrumental decision-making (Gleeson & Husbands, 2001; Perryman, 2009; Keddie, Mills & Pendergast, 2011). Thus, curricular policy intentions are undermined and diminished by the effects of other policies and associated practices.

Second, the development of aspirational policy to promote teachers' professional agency has not been accompanied by a cultural/discursive environment that might foster such aspirations (Reeves & Drew, 2012). Part of this lies in the above-mentioned performativity; however, the problem is also situated in professional thinking about education and the professional language used to describe and define educational practice. A recent study on teacher agency (Priestley, Biesta & Robinson, 2015; Biesta, Priestley & Robinson, 2017) suggests that many teachers lack an educational language with which to engage critically with policy, and to develop their practice. The study suggests that, in Scotland at least, many teachers simply use the language of the latest policy. There is evidence, mirroring previous studies by scholars such as Cuban (1998) and Swann and Brown (1997) that curriculum change is often superficial, comprising little more than changing the terminology to re-label existing practices as being constitutive of new policy. Moreover, existing educational discourse remains problematic in its technocratic and often linear nature. We offer here two examples of this. The first is the ubiquitous use of 'uneducational' language to describe educational practices, a phenomenon described by Hood (1995, p.105) as 'new managerial catchwords', which have become so extensive that they constitute a 'new global vocabulary' (ibid). The metaphor of delivery is a notable example. One regularly hears

about 'delivery' of content, or worse still, 'delivery' of outcomes, or 'delivery' of literacy. This may seem like a trivial issue but it is in fact significant, in that the language and metaphors we use frame the way we think about and enact practice. The continued conceptualising of education as something to be delivered potentially inhibits the enactment of practices, by framing the development of the curriculum as simply the implementation of the curriculum as a product defined by someone else. This is, of course redolent of the sort of linear thinking that seeks to close implementation gaps and ensure fidelity between policy and practice. A second example lies in how we conceptualise the implementation gap. As illustrated above, this is invariably seen as being a gap between policy and practice. A more fruitful way of seeing this is as a gap between educational purposes/principles/values and educational practices. To take this view potentially changes the problematic of enacting policy; instead of being an implementation issue or, as it so often becomes, an issue framed as changing teachers' practices, it becomes an issue of critical engagement with educational principles (including a critical engagement with policy) and a constructive enactment of practice that is fit-for-purpose.

Such an approach, as we shall illustrate in the remainder of this paper, seeks to avoid a situation where curriculum development is reduced to a process of ticking off of outcomes and the implementation of techniques, as teachers lose sight of the big ideas of the curriculum (Drew, Priestley & Michael, 2016). In the next section, we describe a project, *School-based Curriculum Development through Critical Collaborative Professional Enquiry,* which sought to break the mould of existing curriculum development practices.

Critical Collaborative Professional Enquiry

This project ran with yearly cohorts of around 25 teachers between 2012 and 2015, within a single Scottish Local Authority. Throughout the project, there was a strong focus on ensuring that values and beliefs pertaining to issues of social justice were surfaced, examined and challenged through 'asking critical questions of policies and practices' (General Teaching Council for Scotland, 2012). Each cohort comprised small groups of teachers (typically four to six) from early years, primary and secondary schools in the Authority, attending six workshops over the academic year.. From the outset, there was an expectation that each school should send a group of teachers, including at least one member of the senior leadership and management team.

There are many frameworks and/or models for similar methodologies of enquiry or action research (for example see: Coghlan & Brannick, 2014; Koshy, 2010). While authors tend to agree that there is no single or correct way of implementing this methodology, a review of 42 studies of collaborative inquiry by DeLuca et al. (2015) identified three principal interrelated structural elements: dialogic processes; taking action; and engaging in reflection. All three elements are embedded in the CCPE model, which comprises a two stage process:

- Stage 1: a conceptual engagement with the 'big ideas' of the curriculum[iii], considering fitness for purpose and addressing contextual conditions.

- Stage 2: undertaking CCPE

The aim of the first stage was to engage practitioners with the principles and purposes of current curricular policy in Scotland and relevant curriculum theory and processes, addressing the issue, highlighted by research, that many teachers have a poor understanding of these (Priestley & Minty, 2013). The emphasis at this stage is not on change *per se*, but on critical engagement. Underpinning this activity is an assumption that existing practices might be fit-for-purpose, but that participants do not necessarily know whether this is the case, unless they are critically evaluated against the CfE attributes and capabilities as well as broader educational purposes, principles and values. An

exploration of the principles and purposes or 'big ideas' of the curriculum is accompanied by consideration of fit-for-purpose knowledge/content (something that has been comparatively neglected in CfE; e.g. see: Priestley & Minty, 2013) and pedagogies. Participants are encouraged to think about barriers to and drivers for their planned innovation, stimulating discussion about how, for example, accountability practices and school systems might impede their plans.

This conceptual stage ensures that professional enquiry is rooted in consideration of educational purposes, principles and values. The CCPE stage involves three processes or phases: focusing, interrupting and sense-making (Drew, Priestley & Michael, 2016). During the first phase, the participants engage in professional dialogue about school-based curriculum development to identify an area of interest or concern in their practice related to pedagogy, content or assessment. Throughout this stage the participants develop the focus of the enquiry through engaging critically with ideas in research and academic readings, as they begin to form the enquiry question that will guide their innovation, and attend to principles of social justice and sustainability of practices, underpinned by their codes of professional ethics. By the end of this phase, the CCPE group generate and agree a broad 'critical' question for their enquiry and devise a collaborative plan for implementing the critical enquiry through interrupting practice. In Phase Two of CCPE, groups interrupt existing practices through implementing and trialling new approaches. They continue to critique and refine or modify their conceptual framework during this phase, through ongoing critical engagement with reading and professional dialogue, both within the CCPE group and with other members of the educational community including the University researchers and colleagues. The process of engaging in systematic generation and gathering of empirical data (both process and outcomes) takes place throughout all three stages but is perhaps most prevalent during this stage as the practitioners undertake the interruption in practices, and begin to notice changes in their knowledge, understanding and practices, as well as the impact on their students' learning experiences. In Phase Three there is a focus on collaborative sense-making through critical analysis of data and interpretation of evidence, as the CCPE group begin to evaluate the impact of the interruption and draft a 'report' for dissemination to their educational community. However, this sense-making process permeates all three phases, as participants invoke professional judgement to make sense of the data generated throughout the enquiry and use this to evidence their claims and assertions about the contribution of the process to: developing pupils' attributes and capabilities; enhancing their professional learning in relation to development of educational practices; and identifying messages for the wider school community.

Research design

The research was guided by the following research questions:

1. How did the project impact on educators' knowledge, understandings and practices in their settings?
2. In what ways did the project shape the agency achieved by teachers in their professional work?
3. In what ways did the project facilitate school-based curriculum development and affect practices in the participating schools?

Qualitative data were generated from the project. These included data emerging from activities associated with the project, as well as follow-up research, for example:

- Formal semi-structured telephone interviews with 6 participants, including school leaders.
- Programme evaluation questionnaires.

Priestley, M. & Drew, V. (2019). Professional Enquiry: an ecological approach to developing teacher agency. In D. Godfrey, & C. Brown (Eds.), *An eco-system for research-engaged schools. Reforming education through research*. London: Routledge.

- Field notes from participant observation in project workshops
- Artefacts generated by cohorts through various pedagogical activities
- Mid/end of programme feedback from participants
- Artefacts generated for group presentations.

Drawing in this way from multiple data sources allowed the research team to construct a rich picture of the context being researched. Interview data and other written transcripts (for example field notes) were coded following an interpretivist approach (Corbin and Holt 2005), which allowed for both a process of open coding of data and the subsequent application of theoretical framings (for example the ecological approach to teacher agency (Priestley, Biesta & Robinson, 2015).

To protect participants, we have sought to minimise the risk of identification by referring to them by role only (e.g. EYCT = early years classroom teacher, PHT = primary head teacher, SDHT = secondary deputy head teacher, SCT = secondary classroom teacher, etc.). Schools are only identified by sector (primary/secondary). All participants are referred to as female, in order to further minimise risk of identification.
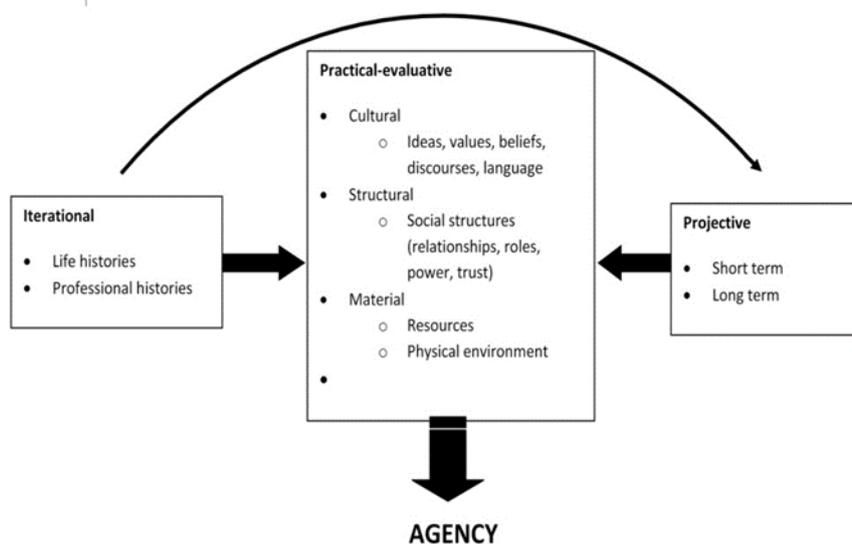
Teacher agency

The data generated by this project have been analysed using the conceptual framework provided by the ecological approach to understanding teacher agency (Priestley, Biesta & Robinson, 2015). It is important provide a brief overview of this approach here, as it differs from traditional sociological accounts of agency in significant ways. Foremost amongst these is the notion of agency <u>as an emergent phenomenon, rather than as a variable in social action</u>, as characterised in the longstanding structure/agency debate.

> [T]his concept of agency highlights that actors always act <u>by means</u> of their environment rather than simply in their environment [so that] the achievement of agency will always result from the <u>interplay of individual efforts, available resources and contextual and structural factors as they come together in particular and, in a sense, always unique situations.</u> (Biesta & Tedder, 2007, p. 137; emph. added).

Agency, in other words, is not something that people <u>have</u>; it is something that people <u>do</u> or, more precisely, something they <u>achieve</u> (Biesta & Tedder, 2006). It denotes a 'quality' of the engagement of actors with temporal-relational contexts-for-action, not a quality of the actors themselves.

This ecological understanding of agency draws heavily on the social theory of Emirbayer and Mische (1998), who have developed a theory of agency that encompasses the dynamic interplay between three temporal dimensions – influences from the past, orientations towards the future and engagement with the present – and which takes into consideration 'how this interplay varies within different structural contexts of action' (ibid., p.963). They refer to these three dimensions as the <u>iterational</u>, the <u>projective</u> and the <u>practical-evaluative</u>. All three dimensions play a role in social action, but the degree to which they contribute varies. This is why Emirbayer and Mische speak of a '<u>chordal triad</u> of agency within which all three dimensions resonate as separate but not always harmonious tones' (ibid., p.972; emphasis in original). Thus, they define agency as '<u>the temporally constructed engagement by actors of different structural environments – the temporal-relational contexts of action – which, through the interplay of habit, imagination, and judgement, both reproduces and transforms those structures in interactive response to the problems posed by changing historical situations</u>' (ibid., p.970; emph. in original). Agency thus appears as a 'temporally embedded process of social engagement, informed by the past (in its habitual aspect), oriented toward the future (as a capacity to imagine alternative possibilities) and 'acted out' in the present (as a capacity to contextualize past habits and future projects with the contingencies of the moment)' (ibid., p.963).

Priestley, M. & Drew, V. (2019). Professional Enquiry: an ecological approach to developing teacher agency. In D. Godfrey, & C. Brown (Eds.), *An eco-system for research-engaged schools. Reforming education through research*. London: Routledge.

Figure 1: An ecological understanding of teacher agency

Source: Priestley, Biesta & Robinson, 2015

For a more detailed account of this conceptualisation of teacher agency, readers should refer to Priestley, Biesta & Robinson (2015).

CCPE and teacher agency

In this final section of the paper, we examine, through analysis of teachers' voices, the impact that participation in our CCPE project has exerted on teacher agency. We broadly frame this analysis in two areas: 1] the effects of CCPE on teachers' individual capacity to engage with curriculum policy (largely the iterational and projective dimensions, but playing out through teacher's judgements about what is possible in the present contexts of schooling); and 2] the ways in which this project has impacted upon the contexts which shape teachers' responses to curriculum policy (in effect the practical-evaluative dimension).

Teacher capacity to engage

As indicated previously, research (e.g. Priestley & Minty, 2013; Priestley, Biesta & Robinson, 2015) suggests an erosion of Scottish teachers' capacity to develop the curriculum in school. For example, it is evident that many teachers do not possess the professional knowledge required to engage in school-based curriculum development, their practices being limited by strong socialisation associated with previous curriculum policy (e.g. outcomes-based planning with the former 5-14 curriculum), assessment practices (e.g. the influence of subject specifications in examinations syllabi) and accountability practices (e.g. inspections). These influences seem to encourage a risk-averse and often instrumental approach to curriculum development (Priestley & Minty, 2013), and limit teachers' ability to envisage alternative futures and to manoeuvre between repertoires in their practice. In particular, there is evidence that many schools simply recycle old practices and ideas when addressing new curriculum development problematics (ibid).

CCPE appears to address some of these issues, by interrupting habitual ways of thinking, by introducing new ideas in a way which is relevant to practice, and by its emphasis on collaborative sense-making. As such, the process clearly enhanced teachers' professional knowledge. Of particular

value is the focus on external impetus, through the conversations with university academics and engagement with academic reading. The view of one Secondary Deputy Head illustrates sentiments more widely expressed by participants:

> *I led the group; I had a way I wanted to go, a set of rigid ideas of what I considered it to be… my vision was narrow; by reading and research and working with Val and Mark, that expanded our thinking… Read stuff I had never heard of before … it really helped me have a wider perspective - a key driver was research and reading.* (SDHT1)

Several teachers spoke about how the project allowed them to develop alternative ways of looking at the process of curriculum development, explaining how this opened up horizons and made new thinking and new practices possible. One secondary Deputy Head spoke of how the project challenged single-track thinking, which had become deeply embedded in her school:

> *Going back to the Four Capacities – refocus, coming back to broader sense of CfE and all the possibilities that are in there – makes you think gosh anything is possible; 'it opens it up again, you do get very entrenched with what you do on a daily basis.* (SDHT2)

Other teachers articulated similar sentiments:

> *It has reminded me not to simply accept 'the ways things are' within my classroom and to engage and reflect more critically upon things, which I feel are issues or problems, considering what I can do to improve this by engaging with literature of enquiry within my classroom.* (PCT8)

Interestingly, the process seemed to challenge, in some cases at least, the prevailing tradition in Scotland of looking at 'best practice' in other schools, identified within school inspections and often uncritically applied. Instead, the process encouraged a more reflexive approach to developing practice from first principles.

> *In terms of matching our interruption … to what we were doing, instead of how do we tick all the boxes, based on theory and the connections with critical approaches, rather than going with another school and see what they were doing or applying this because it is the latest initiative.* (PDHT2)

For many of these teachers, CCPE represented:

> *A change in seeing – it gave them time to see the impact of doing research based enquiry and the impact that professional reading can have directly in your classroom… it made them question each others' practice as well.* (PHT2)

In turn, this "allowed practitioners to be creative and innovative, which I believe has given my teachers the ability to do that and not be prescriptive and programmed for them" (PHT2).

In summary, the project appears to have developed teachers' professional knowledge by providing them with alternative ways of curriculum making. In turn, this has opened up new ways of thinking, and afforded opportunities for alternative practices and changes to often axiomatic and routinized ways of teaching. Crucially, it seems to have made participants more critical in their engagement with policy:

> *I found that the programme has helped me to be much more analytical about any changes to pedagogy. I think carefully and examine any comments which claim to evidence improvement in a much more detailed way, to ensure that they do provide the evidence which is claimed. In*

> *terms of any changes being made in our department, I find myself questioning the rationale more carefully before the process is changed.* (SCT1)

In terms of teacher agency, the individual capacity of teachers is clearly important. The project appears to have boosted this, leading to a greater ability in many cases to draw upon a wider repertoire for practice and to envisage alternative futures that had previously been unthinkable. In doing so, these teachers seem to have become less risk averse, more reflexive about their practice and enthused by a new curriculum that had previously often been a source of anxiety. Nevertheless, teacher agency is not just a matter of raising capacity; it is also important to address the structural and cultural constraints and affordances that help shape agency. In the next section of the paper we examine this issue.

Contextual issues

The practical-evaluative dimension of agency is largely about two things: the practical constraints and affordances that inhibit agency or conversely make it possible; and the judgements by social actors, such as teachers, that likewise inhibit or afford agency. The achievement of teacher agency, in its orientations to the present, is often about the availability of resources – material, cultural and relational – or the lack thereof, and about judgements of risk made in situ by busy professionals. CCPE, as a structured intervention, subtly altered many of these dynamics, making possible new practices and enhancing teacher agency. The following examples illustrate this change.

First, CCPE seems to encourage the development of more collaborative and collegial cultures in schools. Several teachers spoke about the breakdown of hierarchies and the development of genuinely collegial working, for example:

> *It has made me more aware that non-promoted staff are able to bring about a change in the curriculum.* (PCT6)

This in turn opened up the availability of what might be called relational resources. There are several dimensions to this, including the development of a supportive and protective environment, where colleagues could experiment and share the risks and benefits of innovation.

> *It's a good way to gather a team together, working together, sharing research , sharing your understanding … planning changes, how you will look at success and how you will measure it and what changes you are going to make … a really good way of working together, working collegiately and joining together. [….] we had a shared goal, we had to work, research, evaluate, plan and present together. It was all a team effort; really positive to develop relationships in the staff between HT, DHT, new and existing teachers.* (PDHT2)

One effect of this way of working seems to be increased confidence by classroom teachers:

> *The process encouraged me to have a more questioning approach to all aspects of my job. This, along with the research approach, has given me a strong wish to ensure that any changes being asked of me are only implemented with carefully thought through reasoning. This has given me confidence to question carefully any claims which are made.* (SCT1)

A related effect was a reported increase in teachers' professional engagement in the development of the curriculum:

> *It has highlighted that we – as professionals – are able to make a change to our curriculum. It is not always something we are 'made to do' by management.* (PCT6)

In Scotland, this has not always been the case. Earlier changes to teachers' working conditions had specified that curriculum development was to be part of a teacher's professional remit, although this

has often been slow to develop in a hierarchical system where top-down practices have been widely prevalent.

CCPE appears to be promising in addressing some of the contextual issues. Because the insistence on senior management involvement in the programme, there appears to have been a substantial buy-in from school leaders to the methods and aims of the project, and increased support for resultant practices. This has provided a layer of protective mediation in respect of external demands relating to accountability. It has aided in the development of collaborative professional cultures and school systems, which in combination have enhanced the availability of relational resources in the schools. Moreover participation in the project has helped to change attitudes and boost staff confidence, meaning that many of the teachers have become likely to engage in different decision-making about curriculum development. This relates to the 'evaluative' aspect.

Concluding thoughts

Our research on CCPE in one Scottish local authority suggests that it is a powerful mechanism for engaging teachers with curriculum policy and breaking the mould of existing practices. The research suggests that this approach has enjoyed some success in enhancing teacher agency – through augmenting professional knowledge, challenging existing preconceptions and ways of working and through mitigating some of the cultural and structural barriers to curriculum development that currently exist in schools. Moreover, the data suggest (as we have reported elsewhere; see Drew, Priestley & Michael, 2016) that this has led in some cases to sustainable changes to practice in the participating schools.

There are also clear implications in relation to the importance of understanding the ecology within which – and by means of which – the curriculum is made in schools. Governments and other agencies concerned with developing educational policy and practice have tended to over-emphasise the importance of teachers as key actors within the system. For instance, the OECD (2005) has claimed that 'teachers matter'. While not denying the importance of good teachers and good teaching, recent research on teacher agency (Priestley, Biesta & Robinson, 2015) has pointed clearly to the vital significance of attending to structural and cultural dimensions of teachers' professional lives, as these can be highly influential shapers of teacher agency.

The CCPE approach is helpful, as it actively addresses these issues. This, and previous research, indicate clearly that the types of structures formed and reproduced in schools are important in shaping what is possible for teachers to do, as they engage with the curriculum (also see: Priestley, Biesta & Robinson, 2015). A key issue lies in the nature of relationships experienced by teachers in their professional contexts, and the relational resources afforded by such structures. CCPE actively addresses this dimension, in particular through facilitating the formation of strong professional ties, with the apparent effect of reducing the effects of hierarchy in schools. CCPE also addresses cultural issues in schools. It promulgates the dissemination of new ideas, through engagement with research and the actions of critical colleagues (in this case, university researchers), both of which can act to interrupt habitual thinking and practices.

This, in turn, points to the crucial role played by school leaders. Early iterations of CCPE were less effective because they did not involve school leaders as active participants in the process. Innovations thus tended to wither on the vine in the absence of senior leadership understanding, enthusiasm and support. In our recent projects, we have insisted on the active engagement of school decision-makers in working groups, and they have tended to become active promoters for the projects in question, playing an important role as advocates for innovation, as protective mediators who shield teachers

Priestley, M. & Drew, V. (2019). Professional Enquiry: an ecological approach to developing teacher agency. In D. Godfrey, & C. Brown (Eds.), *An eco-system for research-engaged schools. Reforming education through research*. London: Routledge.

from external risks (e.g. those associated with accountability mechanisms), and as providers of resources to enable innovations to thrive.

Clearly further experimentation, and more research will be needed to test these claims; however, we would argue on the basis of existing evidence that CCPE is a promising approach with the potential to enhance teacher agency and ultimately to lead to more meaningful curriculum development in schools.

Implications for the research informed ecosystem:

- Curriculum making is a process that requires the active engagement – and agency – of teachers, as research-engaged and research-literate professionals. Critical Collaborative Professional Enquiry (CCPE) actively fosters these attributes.
- The development of sustainable practices in schools requires an understanding of the ecology of schools: while teachers are important, they can only achieve agency by means of the cultural, structural and material resources available to them. Educational policy and leadership which only focuses on the quality of the teacher, while neglecting the latter dimensions, is less likely to be effective.
- CCPE not only enhances the professional capacity of teachers; it also allows them to identify, navigate and mitigate contextual barriers to their professional engagement, and to actively develop contextual resources, through fostering better understandings of the ecologies of schools and their wider settings.

Acknowledgements

References

Biesta, G.J.J. (2004). Education, accountability and the ethical demand. Can the democratic potential of accountability be regained? *Educational Theory*, 54, 233-250.

Biesta, G.J.J. (2010). *Good Education in an Age of Measurement: Ethics, Politics, Democracy*. Boulder, Co: Paradigm Publishers.

Biesta, G., Priestley, M. & Robinson, S. (2017) Talking about education: the significance of teachers' talk for teacher agency. *Journal of Curriculum Studies*, 49, 38-54.

Biesta, G.J.J. & Tedder, M. (2006). *How is agency possible? Towards an ecological understanding of agency-as-achievement. Working paper 5*. Exeter: The Learning Lives project.

Biesta, G.J.J. & Tedder, M. (2007). Agency and learning in the lifecourse: towards an ecological perspective, *Studies in the Education of Adults*, 39, 132-149.

Coghlan, D. & Brannick, T. (2014). *Doing Action Research in your own organisation* (4th Ed.). London: Sage.

Corbin, J. & Holt, N.J. (2005). Grounded Theory. In B. Somekh and C. Lewin (Eds.), *Research Methods in the Social Sciences* (pp. 113-120). London: Sage.

Cuban, L. (1998). How schools change reforms: redefining reform success and failure. *Teachers College Record*, 99, 453-477.

DeLuca, C., Shulha, J., Luhanga, U., Shulha, L.M., Christou, T.M. & Klinger, D.A. (2015). Collaborative inquiry as a professional learning structure for educators: a scoping review. *Professional Development in Education*, 41, 640-670.

Priestley, M. & Drew, V. (2019). Professional Enquiry: an ecological approach to developing teacher agency. In D. Godfrey, & C. Brown (Eds.), *An eco-system for research-engaged schools. Reforming education through research*. London: Routledge.

Donaldson, G. (2010). *Teaching Scotland's Future: Report of a Review of Teacher Education in Scotland*. Edinburgh: Scottish Government.

Drew, V., Priestley, M. & Michael, M. (2016). Curriculum Development through Critical Collaborative Professional Enquiry. *Journal of Professional Capital and Community*, 1, 1-16.

Eady, S., Drew, V. & Smith, A. (2014). Doing action research in organizations: using communicative spaces to facilitate (transformative) professional learning. *Action Research*, 13, 105-122.

Emirbayer, M. & Mische, A. (1998). 'What is agency?' *The American Journal of Sociology*, 103, 962-1023.

Evetts, J. (2011). A new professionalism? Challenges and opportunities. *Current Sociology*, 59, 406-422.

Furlong, J. (2014). *Research and the Teaching Profession Building the capacity for a self-improving education system*. Final report of the BERA-RSA inquiry into the role of research in teacher education. London: BERA

General Teaching Council for Scotland (2012). *The GTCS Professional Standards*. Available: http://www.gtcs.org.uk/standards/standards.aspx. Accessed 04.09.2015.

Gleeson, D. & Husbands, C. (Eds.)(2001). *The Performing School: Managing, Teaching and Learning in a Performance Culture*. London: Routledge Falmer.

Green, A. (1999). Education and globalization in Europe and East Asia: convergent and divergent trends. *Journal of Education Policy*, 14, 55-71.

Halsey, A.H., Lauder, H., Brown, P. & Wells, A.S. (Eds.)(1997). *Education, Culture, Economy and Society*. Oxford: Oxford University Press.

Helsby, G. (1999). *Changing Teachers' Work*. Buckingham: Open University Press.

Hood, C. (1995). Contemporary Public management: a new global paradigm? *Public Policy and Administration*, 10, 104-117.

Keddie, A., Mills, M. & Pendergast, D. (2011). Fabricating an identity in neo-liberal times: performing schooling as 'number one'. *Oxford Review of Education*, 37, 75-92.

Kelly, A.V. (2004). *The Curriculum: theory and practice, 5th edition*. London: Sage.

Kneyber, R. & Evers, J. (Eds.)(2015), *Flip the System: Changing Education from the Bottom Up*. London: Routledge.

Koshy, V. (2010). *Action research for improving educational practice: A step-by-step guide*. 2nd ed., London: Sage.

Kuiper, W., & Berkvens, J. (Eds.)(2013). *Balancing Curriculum Regulation and Freedom across Europe*. CIDREE Yearbook 2013. Enschede, the Netherlands: SLO.

Leat, D., Livingston, K. & Priestley, M. (2013). Curriculum deregulation in England and Scotland: different directions of travel? In W.Kuiper & J. Berkvens (Eds.), *Balancing Curriculum Regulation and Freedom across Europe, CIDREE Yearbook 2013* (pp. 229-248). Enschede, the Netherlands: SLO.

Nieveen, N., & Kuiper, W. (2012). Balancing curriculum freedom and regulation in the Netherlands. *European Educational Research Journal,* 11, 357-368.

OECD (2005). *Teachers Matter: Attracting, Developing and Retaining Effective Teachers.* Paris: OECD.

OECD (2015). *Improving Schools in Scotland: An OECD Perspective*. Paris: OECD.

Perryman, J. (2009). Inspection and the fabrication of professional and performative processes. *Journal of Education Policy*, 24, 611-631.

Priestley, M. (2013). The 3-18 Curriculum in Scottish Education. In: Bryce, T.G.K., Humes, W.M., Gillies, D., Kennedy, A. (Eds.), *Scottish Education: Referendum*, 4th edition (pp. 28-38). Edinburgh: Edinburgh University Press.

Priestley, M. & Biesta, G.J.J. (Eds.) (2013). *Reinventing the Curriculum: New Trends in Curriculum Policy and Practice*. London: Bloomsbury Academic.

Priestley, M. & Drew, V. (2019). Professional Enquiry: an ecological approach to developing teacher agency. In D. Godfrey, & C. Brown (Eds.), *An eco-system for research-engaged schools. Reforming education through research*. London: Routledge.

Priestley, M., Biesta, G.J.J. & Robinson, S. (2015). *Teacher Agency: An Ecological Approach*. London: Bloomsbury Academic.

Priestley, M. & Minty, S. (2013). "Curriculum for Excellence: 'A brilliant idea, but..'", *Scottish Educational Review*, 45, 39-52.

Reeves, J. & Drew, V., (2012). Relays and relations: tracking a policy initiative for improving teacher professionalism. *Journal of Education Policy*, 27, 711-730.

Sinnema, C. & Aitken, G. (2013). Trends in International Curriculum Development. In M. Priestley & G. J. J. Biesta (Eds.), *Reinventing the curriculum: New trends in curriculum policy and practice* (pp. 141-164). London: Bloomsbury.

Stenhouse, L. (1988). Artistry and teaching: The teacher as a focus of research and development. *Journal of Curriculum and Supervision*, 4, 43-51.

Supovitz, J.A. & Weinbaum, E.H. (2008). Reform Implementation Revisited. In J.A. Supovitz and E.H. Weinbaum (Eds.), *The Implementation gap: understanding reform in high schools* (pp. 1-21) New York: Teachers College Press.

Swann, J. & Brown, S. (1997). The implementation of a national curriculum and teachers' classroom thinking. *Research papers in Education: Policy and Practice*, 12, 91-114.

Taylor, M. W. (2013). Replacing the "teacher-proof" curriculum with the "curriculum-proof" teacher: Toward more effective interactions with mathematics textbooks. *Journal of Curriculum Studies*, 45, 295-321.

Wallace, C. & Priestley, M. (2017). Secondary Science Teachers as Curriculum Makers: Mapping and Designing Scotland's New Curriculum for Excellence. *Journal of Research in Science Teaching*, 54, 324-349.

Young, M. (2008). From Constructivism to Realism in the Sociology of the Curriculum. *Review of Research in Education*, 32, 1-28.

---

[i] We use the Scottish spelling 'enquiry' throughout the chapter, in preference to the more commonplace 'inquiry'.

[ii] First generation new curriculum reforms include the Czech Republic, Scotland and New Zealand. Subsequently, a second wave of countries has moved in similar directions, including the Netherlands, Wales, the Republic of Ireland.

[iii] In the case of CfE, these are set out in the Four Capacities – the key competencies that form the front-end purposes of the curriculum. They have become a sort of mantra, widely visible as slogans on posters in schools, but often stripped of meaning. In fact, they form a useful starting point for curriculum planning, being broken down into a set of key competences known as attributes and capabilities, which define the skills and knowledge to be acquired by an educated person. See: http://www.educationscotland.gov.uk/learningandteaching/thecurriculum/whatiscurriculumforexcellence/thepurposeofthecurriculum/index.asp