Teacher learning in a shifting school landscape

The implications of academisation for professional development in primary mathematics

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Abstract

Alongside new models for government-funded professional development, England’s academisation policy has significantly changed access, provision and responsibilities for teacher learning. This article reviews this impact on professional learning in primary mathematics, pointing to increased variability for teachers in the development they experience, increased responsibility for many school-based subject leaders and disrupted flow of professional knowledge around the school system. The article concludes by predicting the challenges for teacher learning in mathematics if a full academisation policy agenda is pursued.

Keywords: professional development; teacher development; primary school; mathematics; academies; multi-academy trusts; school system

Introduction

Recently, we have been involved in studying teacher professional learning in mathematics in primary schools in a number of localities in England. All primary teachers require personalised, career-long, subject-specific professional learning in mathematics. We have gained some insight into the nature of the professional learning that teachers are experiencing within the current shifting school landscape. It is clear to us that there is not a straightforward divide between academies and local authority (LA) maintained schools within this landscape. We notice that the size, region, type, history, key players and links between schools are all factors in how professional learning operates in individual schools, but that academisation has produced particular challenges and variability in the professional learning that teachers experience. In this article, we provide three examples of different school types in the shifting landscape to demonstrate how quality and equity in teacher professional learning in primary mathematics is being affected by academisation. They illustrate the challenges that face teachers and maths leads (a teacher tasked with leading mathematics curriculum and pedagogy development in the school) in accessing and engaging with opportunities to develop primary mathematics teaching.
This article begins by briefly summarising the academisation context in England, arguing that this process of fragmentation and reformation has dismantled and destabilised some of the key structures for supporting in-service teacher development in primary mathematics. We consider the current national hubs model for supporting teacher professional learning, signalling the tensions between this place-based model and school academisation into geographically unbounded MATs (multi-academy trusts). We demonstrate how these policies are playing out for teacher professional learning in primaries by providing three representative – albeit fictional – example schools: an academy in a small local MAT, one in a large geographically spread MAT and an LA-maintained school. We submit that academisation is leading to increased variability between teachers in the development activities they access, increased responsibility for most maths leads and disrupted flow of professional knowledge around the system. From this, we draw conclusions about teacher professional learning in primary mathematics which raise questions about how full academisation can be achieved without risking teacher development.

The shifting school landscape

Academies are schools funded directly by the central Department for Education (DfE) that are independent from the LA, meaning they have autonomy over curriculum, school improvement, recruitment and term-timetabling. Historically, LAs were a key mechanism for providing teacher professional development, so academising endows schools with increased freedom and responsibility for the development of their teaching staff. There are three different types of academy: converter, sponsored and free schools. ‘Converters’ are former LA-maintained schools that have opted to become academies, ‘sponsored’ academies are schools previously deemed inadequate by Ofsted and legally required to academise, and ‘free schools’ are new schools which are purpose built to meet a need for ‘good schools’ in an area. Rates and patterns of academisation vary considerably between localities in England. The combination of forced academisation (with MAT membership) for schools deemed underperforming and school choice for all other schools (to academise and join/form MATs) has resulted in a mixed, varied and constantly shifting school landscape.

Academisation has been a key policy direction of the last 12 years, bringing substantial change to the English educational landscape since the catalytic White Paper of 2010, ‘The Importance of Teaching’. The drive from the-then coalition government (Conservative/Liberal Democrat) was to afford greater autonomy to schools and move educational control to ‘the frontline’ of teaching. The 2010 White Paper outlined the government’s intent to create a self-improving, evidence-based ‘schools-led education system’. It followed the ‘Academies Act’ which enabled all publicly funded schools to
become academies or alliances. To date, 39 per cent of primary schools in England are academies, compared to 80 per cent of secondary schools and the numbers are increasing. Prior to this, under the Labour government, academisation had been a much more limited vehicle for replacing failing schools, typically sponsored by businesses, charities, faith groups or educational institutions. At that time, inter-school partnerships had also been encouraged via the invention of federated schools (with shared executive leadership) and academy chains (multiple academy schools formally connected). With the 2010 extension of the academisation policy to all schools, MATs became core to the academisation agenda. These trust organisations lead multiple schools with clearly defined leadership and accountability structures, including for teacher professional learning. Over 1200 MATs now operate with considerable variation in their size (between two and 50+ schools), geographical reach, organisational structure and approach to shared working. In combination with the changed responsibilities for teacher learning that greater autonomy brings, diversity in England's MATs (partially shaped by size, location and maturity) creates substantially varied approaches to the provision of teacher professional development.

The regional hubs approach to teacher professional learning

In tandem with academisation, the policy push for a 'schools-led education system' has also redirected responsibilities and funding for teacher professional learning from LAs to designated schools across England. Since the initiative launched in 2011, around 750 of these Ofsted-graded 'outstanding' schools became 'teaching schools' in order to 'train' underperforming schools, offer initial teacher education (ITE) and continuing professional development and learning (CPDL). Schools opted to participate in alliances led by teaching schools who established collaborations with strategic partners such as MATs, universities and private sector organisations. This retained participation from some organisations previously involved in professional learning, notably ITE where universities retained considerable involvement, but made substantial changes to CPDL by utilising a market-place model. Supported by centralised funding to cover operational costs (although the initial plan was to reduce and then remove this when established), teaching schools brokered and provided professional learning opportunities which schools bought or were funded to access. The goal of the market-based model was to provide autonomy over school improvement and in turn create a more outward-facing education system whereby schools could share 'what works'. However, the marketisation and push for a schools-led evidence base sometimes had the opposite effect, with some schools becoming territorial and gatekeeping knowledge for themselves or their partners. This inhibits the flow of knowledge and restricts progress; the antithesis of a self-improving school system.

The teaching schools programme has since been replaced by teaching school hubs,
with a much smaller number of centres (87) and a narrower remit of ITE and specific professional development qualifications (for new teachers and leadership). This brought teaching schools in line with school-led curriculum hubs, such as maths hubs, that provide professional learning for teachers within a geographic area. This move marked a substantive return to centrally determined CPDL but delivered through schools (designated hubs) rather than through LAs. In addition to the independence from LAs of academisation, reallocation of CPDL responsibilities from LAs to hubs has provided further change to CPDL processes and provision in an already shifting school landscape.

The hub model is currently the preferred mode for providing government-funded CPDL. Hubs have large geographic footprints (larger than LAs) which together cover all schools in England, are centrally funded and have a specific, often specialist, focus. They are hosted by schools, drawing upon teacher expertise in their locality, and work with a range of partners, including a strategic board of partner representatives. Programmes of work for hubs are set and evaluated centrally, meaning that they are key middle-tier levers in national education policy enactment. The hub model for providing professional learning support seems set to continue with new ‘early years stronger practice hubs’ this year. These will add to the already long list of hubs that schools can access for professional learning support: teaching schools, English, computing, music education and behaviour hubs as well as research schools, which are hubs for evidence-based practice development. Each has a different focus and geography, providing increased complexity for schools in understanding and managing communication about the CPDL offer available to them from a number of government-funded sources, in addition to the business and other offers that they might access.

The most mature of England’s hub networks is the maths hubs, which began in 2014 and now consists of 40 maths hubs, each led by an appointed school. Maths hub leadership is typically formed of teachers or leaders appointed, seconded or co-opted from local schools, with most doing this work on a part-time basis alongside working in school. Maths hubs are coordinated by the National Centre for Excellence in the Teaching of Mathematics, led by Tribal Education Ltd. In the spirit of increased autonomy, schools initially had the freedom to choose which maths hub they wanted to work with, and the CPDL offer from maths hubs was varied as they followed a remit to understand and meet local need for professional learning in mathematics. Regional responsibilities were later formalised so that each hub worked exclusively in their own area and schools only accessed the offer from their designated maths hub. With this, the CPDL support offered across the network became more uniform, so that schools could access the same key opportunities regardless of which hub region they fell into (although a small amount of funding was reserved for hub-developed CPDL). It provides a barrier to teachers accessing this government-funded mathematics CPDL when they work in MATs that span multiple maths hub areas or schools that are some distance.
from the maths hub host school. Maths hub leadership have to work hard to ensure that their CPDL offer is known and available to schools across a region, which is much larger than the LAs previously covered. Maths hubs now partially mitigate longer distances with strategically located, place-based hub middle leaders to work with local schools. This more localised approach stands in contrast to current academisation policy where schools in the same area can be in different MATs, sometimes based many miles away. There are clear policy tensions between a place-based hub model for CPDL provision and a model for school organisation where ‘no geographic monopolies’ are allowed.15

Maths hubs use a work group model for professional learning where CPDL is typically a year-long commitment with spaced events, online communities and practice-based tasks that work towards nationally defined outcomes.16 Schools in MATs which have already allocated teacher time to a trust-wide programme of CPDL, in keeping with the freedoms granted by academisation, are less likely to make this additional time commitment given that time is widely cited as a barrier to engagement with research and CPDL activities in general.17 It is challenging for maths hubs to meet government targets for CPDL where there are these systemic challenges to engagement and schools have the freedom to opt in or out. Despite arising from the same policy direction, academisation is not fully aligned with hub-based CPDL. Contradictions in the policy environment create high degrees of variability in teacher development experiences, with a mixed picture of access, provision and processes for CPDL that is continually shifting as academisation continues to advance.

Next, we explore how academisation can create this mixed picture using three fictional example schools.

**Primary mathematics CPDL in different types of schools**

Our three fictional schools consist of two that have academised but joined quite different MATs and one that continues to be maintained by the LA. These three do not represent the full range of schools that England currently has. Notably, single-academy trusts (individual academies that are a trust on their own) and free schools (newly created schools) are not represented, and there are no special or other schools types which each have their own opportunities and challenges for accessing CPDL in primary mathematics. The three example schools have been selected because they represent the most common school types in the current landscape. For reasons of brevity, we have not included details such as whether these might be faith schools, the size of the schools or whether they are in trusts which include secondary schools and colleges. But these – and many other – variables make the schooling landscape even more diverse and complex than we are able to present here. For each of the three, we explore the key providers, the typical modes of provision and the responsibilities for teacher CPDL in mathematics for the school.
**Affiliator Primary Academy** is in a MAT of six local schools. The school joined the MAT at its inception and the former headteacher was one of the local headteachers who had made the decision to academise together. The schools continued to work closely together and over time found mutually beneficial ways of collaborating to an even greater extent. The school maths lead has received no specialist training in mathematics but is enthusiastic about teaching the subject. They have only ever worked in this group of schools and have responsibility for the mathematics CPDL for all of the schools’ teachers. The trust’s network of maths leads work closely together and the school’s maths lead feels supported by these colleagues. They visit each other’s schools to support monitoring and CPDL. Most of the maths CPDL uses a coaching model where the maths lead works with individuals or pairs of teachers, team teaching, modelling and shared planning as needed to support individual practice development. The school is not connected to schools or organisations outside of the MAT so they do not access maths hub or other external CPDL provision and the maths lead has little knowledge of these. Overall, the maths lead has a heavy workload and significant responsibility for CPDL. They benefit from a highly supportive small network of maths leads which help with quality assurance, but the CPDL quality is wholly reliant on the existing expertise within these few individuals.

**Converter Primary Academy** is in a MAT of 30 schools across several county and city regions. It joined the MAT several years after it was set up and was the 26th school to do so. The maths lead is part of a large, stable network of primary maths leads who meet regularly for training sessions with the MAT’s director of mathematics. The school had previously worked with its local schools and the LA as well as having high levels of engagement with the maths hub, but now CPDL is provided exclusively within the trust using a cascade model. The director supports all maths leads, providing training in their role, including how they should support teachers to deliver the trust’s defined way of teaching mathematics. All teachers are provided with central mathematics training in addition to what the maths lead provides in school so there is strong alignment and use of common tools for CPDL. The maths lead is reliant upon the director to source and disseminate new ideas or approaches to teaching mathematics. The school is not connected to schools or organisations outside of the MAT so it does not draw upon external CPDL provision and the maths lead has little knowledge of outside provision. Overall, the maths lead has a manageable workload with low levels of responsibility but also low levels of autonomy, which could be more accurately described as subject management rather than subject leadership. They have the support of a director and a large network of maths leads, but this is to perform a translational role, focused on fidelity to the trust approach, with strong top-down quality assurance. The quality of the CPDL is reliant upon the maths director.
Resistor Primary School is an LA-maintained school. It previously worked closely with schools that are most local to it in an LA subgroup but five out of these six neighbours are now in MATs. They engage with the maths hub and LA, but find the LA offer much reduced compared to a few years ago so source and provide much of the CPDL for staff for themselves. The experienced maths lead does not have a network of maths leads for support but has some informal relationships with staff in local schools. They invest time and effort in using online as well as local connections to find curriculum and CPDL resources or offers to supplement and support what they design for themselves. The maths lead does not feel driven to engage in CPDL for themselves due to their level of experience but does participate in a maths hub work group on the recommendation of a colleague in a local school. They access external opportunities for their teachers if they identify a need or a good opportunity presents itself. Overall, the maths lead has a heavy workload and high levels of both responsibility and autonomy. Without a network of maths leads, there is little external knowledge to draw upon for support in determining the quality of external provision. The quality of the CPDL for teachers is reliant upon the expertise of the maths lead.

Implications of academisation for primary mathematics CPDL

With increased variation amongst schools due to academisation, we have increased variation in the access and provision of CPDL for England’s primary teachers. Teacher access to government-funded CPDL for maths via maths hubs is varied, and less likely where place-based or MAT autonomy act as barriers. For all schools, accessing and navigating knowledge of the complex, multi-source CPDL offer is a challenge. With communication issues and a reduced offer (e.g. from the LA) from external sources of CPDL, school maths leads often provide more of the CPDL for their teachers internally than ever before. The school maths lead (sometimes MAT maths director) is responsible for CPDL quality, determining the source, mode and focus of mathematics CPDL provision for teachers. They do this crucial CPDL work with highly variable levels of autonomy and support, and only some benefit from a functioning network of fellow maths leads. It is a mixed picture but what is clear is that access to high-quality teacher CPDL in mathematics is insecure across the shifting school landscape.

Fragmentation in the system, complexity in government-funded CPDL provision, the formation of MATs (using their autonomy to set their own priorities and systems) and the reduction of opportunities for LA schools mean that there is less external and more internal sharing of practice. All of this restricts and inhibits knowledge exchange between schools leading to the disrupted flow of professional knowledge around the system. Access to external challenge and development opportunities is reduced for all schools through either an inward focus or a reduction of external opportunities, or
both. Whilst sometimes distributed, the responsibility for the quality of CPDL can rest with one individual (maths lead or director). This is most risky when there are weaker mechanisms for that individual to communicate routinely with others with mathematics teaching expertise or to enhance their professional learning.

It seems that the autonomy that academisation promises can be reduced rather than increased for teachers and maths leads involved in mathematics CPDL; a phenomenon labelled ‘coercive autonomy’ by Greany and Higham.\textsuperscript{18} In this sense, autonomy can mean training in a highly specific approach and ensuring consistency (such as at Converter Primary). Alternatively, autonomy can mean uncoupling from external networks or opportunities and increased responsibility for colleagues’ professional learning (as at Resistor and Affiliator Primaries).

**Future directions**

Despite the challenges, including in teacher professional learning, the government in England is forging ahead with full academisation, aiming for every school to join an academy trust by 2030.\textsuperscript{17,19} The White Paper that outlines this vision makes it clear that the policy will be for larger MATs, which brings into question the viability of maths and other curriculum hubs where each of these ‘strong MATs’ could have their own CPDL provision and are quite likely to be geographically spread. Regardless, the hidden costs for professional learning need to be factored into any moves towards full academisation.

For an academised school system to provide the subject-specific mathematics CPDL that teachers need, significant support for school mathematics leads and local infrastructure is required.

First, the mixed offering of maths CPDL needs independent coordination at local level to avoid confusion or lack of awareness of opportunities. A single point of access for regionally available CPDL opportunities would remove investigative labour for busy schools who are not sure where to turn, risking teachers missing out on valuable opportunities to develop their mathematics practice. Alongside this, greater collaboration between MATs would enable sharing, or even pooling, of knowledge and expertise which could lead to enhanced innovation and challenge in mathematics teaching within the system.

Second, further clarity and substantially more support for the maths lead role are needed. This will require significant investment in maths leads to enable them to manage their increased responsibilities. It will also require ensuring that they have the flexibility and agency to innovate and provide CPDL of the type and focus appropriate to their teachers’ needs. Within an academisation policy agenda, maths leads require increased time and support to do their role, access to stable maths lead networks, access to knowledge about CPDL opportunities in the locality and opportunities for their own...
expertise development. There are increased costs to this, and no guarantee of success in a highly varied, complex and shifting academised school landscape.

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