What works in delivering school improvement through school-to-school support

May 2019

Prof David Greatbatch and Sue Tate

Contents

Executive summary

This review synthesises and critically evaluates recent evidence on the use of inter-school collaboration as a vehicle for school improvement. The review focuses primarily on the literature that has emerged since Armstrong's (2015) overview of the knowledge-base relating to the characteristics of effective collaboration between schools in England. The searches, which were undertaken between 7th August and 31st August 2018, were limited to studies published in the English language.

Methodology

Evidence was gathered by searching online bibliographic databases, reviewing the websites of relevant organisations and professional networks, and examining the reference sections of pertinent materials. Following the searches and subsequent analysis, 154 sources were identified and are used in this report, 87 of which were dated between 2015 and 2018.

Key Findings

Policy background

A self-improving school-led system (SISS) is based on the idea that clusters of schools working together can develop improvement strategies that meet localised challenges through the sharing of professional expertise and efficient pooling of resources (Hargreaves, 2010; 2012). There is a broad consensus in the literature that, since 2010 government has embraced this agenda which has informed the promotion of Multi-Academy Trusts (MATs), reduced local authority (LA) oversight of schools and led to the creation of school-to-school support models such as Teaching School Alliances (TSAs) (e.g. see Greany and Higham, 2018; Armstrong, 2015; Gilbert, 2017).

Bryant et al. (2015), following seminars with local leaders of education, found that those in the system were aware of challenges such as LAs' responsibility towards vulnerable pupils. They argued that new models and decision-making bodies were needed to enable schools, LAs and partners (such as TSAs) to work together on strategic priorities. Gilbert (2017) notes that such models are beginning to emerge. Although some LAs have scaled back their involvement in school improvement "to an absolute minimum", others have worked to support or create local improvement partnerships.

While driving school improvement is a key focus for both MATs and TSAs, emerging evidence suggests that there is considerable variation in their structures and reach. Moreover, at a time of expansion, a small-scale research study (Male, 2017) suggested

that some MATs may be currently more focused on governance structures, with school improvement taking something of a back seat. Additional evidence is needed to show whether an early focus on securing sound governance structures is a necessary prerequisite for driving school improvement. Nevertheless, the overwhelming majority of MATs see the opportunity to collaborate with other schools in their Trust as a key driver for becoming a MAT. They take opportunities to collaborate including making financial efficiencies through shared procurement, sharing of staff through moves and secondment, and learning from effective practice in other schools as well as, in the majority of cases, having formal relationships with schools outside their trust, such as through TSAs (Cirin, 2017).

There is an increasing recognition of the need to establish place-based school improvement networks to counter the variation in provision and improve social mobility in disadvantaged areas. These include establishing sub-regional boards, encouraging MAT leaders to work with local schools outside their Trust, the establishment of Opportunity Areas and a range of educational partnerships that include trading arms of LAs. Both Cruddas (2018) and Gilbert (2017) point to the risk of confusion and duplication and suggest the need for greater coordination of initiatives at a local level.

In interviews in four English localities, Greany and Higham (2018) noted that the responsibilities of RSCs and local government can result in tensions about priorities within local areas (Greany and Higham, 2018).

Structure of collaboration

Recent research confirms that the growth in the number of academy chains and TSAs has reconfigured the inter-school collaboration landscape (Greany and Higham, 2018; Hutchings and Francis, 2017; Gu et al., 2015). However, **there is relatively little systematic research on the various types of collaboration between schools and the extent to which they interleave and occur in hybrid forms.**[1] Moreover, recent evidence largely focuses on MATs, TSAs and school federations. There is very little evidence on either less formal structures of collaboration or the DfE's programmes to support system leadership through the designation of National Leaders of Education (NLEs), Local Leaders of Education (LLEs) and Specialist Leaders of Education (SLEs).

Few studies on the leadership models used in the context of inter-school collaboration have been conducted since Armstrong's (2015) review, but

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[1] At the time of this literature review there was also a DfE commissioned research study underway. This study ("Sustainable improvement in multi-school groups" by UCL, published December 2018) is not included in this review as it was not published until after the literature search was completed but it may fill some of the evidence gaps identified in this review.

those undertaken highlight leadership structures in formal collaborative arrangements (such as federations, MATs and TSAs) vary depending on the type, size and focus of these collaborations[2]. There is virtually no research on leadership in informal collaboration between schools.

Two recent studies of governance structures in MATs and TSAs indicate that **governance in MATs and, to a lesser extent TSAs, is becoming increasingly centralised due to external pressures and accountability** (Greany and Higham, 2018; Ehren and Godfrey, 2017).

Impact

A quasi-experimental study (Muijs, 2015), published in 2015 after the completion of Armstrong's (2015) review, found that **collaboration between high performing and low performing schools in school federations and, to a lesser extent, non-federated collaborations can lead to improvements in pupil attainment.** This study replicated previous research on school federations in the secondary phase (e.g. see Chapman and Muijs, 2014).

However, a series of more recent statistical research studies, using a range of methodologies, all suggest that **the expansion of MATs and TSAs is not yet leading to overall improvements in attainment, including for pupils in low performing schools.**

As noted above, in the case of MATs, there is some evidence to suggest that a number of **MATs are still mainly focussed on structure, growth and sustainability rather than inter-school collaboration (Male, 2017)**. It would, therefore, seem that the system needs a degree of maturity before opportunities for collaboration and school-to-school peer support can fully develop. Though against this there is emerging evidence that in some cases being part of a MAT is leading to increased collaboration between stronger and weaker schools. It is feasible, therefore, that **overall improvements in pupil outcomes in general, and in struggling schools in particular, could emerge over time**.

With regard to TSAs, research published in 2015 indicated that **inter-school collaboration was leading to change and improvement within TSAs in relation to sharing of practice, leadership development, teacher supply and quality, research and development and the development of professional relationships**. These

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[2] The UCL report, "Sustainable improvement in multi-school groups" contributes to filling this evidence gap.

developments may now be driving positive changes in pupil outcomes, but further research will be required to establish whether this is the case.

Evidence of variations in the reach of TSAs and high-performing MATs across the country, particularly those in areas of socio-economic disadvantage, has led to a recent focus on place-based school improvement. However, **some commentators are pointing to the risk that a plethora of local improvement partnerships and initiatives could lead to a complex and fragmented offer that inhibits success. It is too soon for evidence to emerge on whether such fears are being realised.**

Finally, whilst the last three years have witnessed the emergence of a substantial body of evidence on the performance of MATs, **the empirical evidence base for judging the impact of MATs lacks robustness**, due in part to the fact that national pupil assessment models and accountability measures have changed significantly. **The general lack of evidence on TSAs** (apart from an evaluation published in 2015)**, system leaders and less formal types of inter-school collaboration is also of concern.**

Formation of partnerships

Recent studies suggest that **the roll back of LAs' direct oversight of schools (Greany and Higham, 2018), together with the possibility of enforced academisation and/or being taken over by large national MATs, has encouraged some schools to access external support, including through school-to-school collaborations** such as 'local clusters' of schools, NLEs and, to a lesser extent, smaller-scale local MATs (Greany and Higham, 2018; Male, 2017). It is unclear how TSAs currently feature in these processes.

These studies also indicate that **there is a growing emphasis on the importance of trust between schools (Gu et al., 2015; Greany and Higham, 2018), and shared vision and values (Ginnis, 2017; Gu et al., 2015; Howland, 2014) as conditions for the formation and effective operation of inter-school collaborations.**

Section 1: Introduction

Background to the review

Inter-school collaborations have become increasingly used as a mechanism for raising standards in primary and secondary schools in England. This review pulls together the recent evidence on what works in delivering school improvement through school-to-school support.

Focus of the review

This review synthesises and critically evaluates evidence on the different forms of inter-school support/collaboration for school improvement, involving schools of different phases and types. In particular, it considers the evidence on how school-to-school support can work most effectively, and in what circumstances. The review pays specific attention to the effectiveness of partnerships and collaborations designed to bring about improvements in the performance of schools operating in challenging situations.

The review is primarily concerned with literature published since Armstrong's (2015) overview of the knowledge-base relating to the characteristics of effective inter-school collaboration and other forms of school-to-school partnership in the English school system. A search for relevant international studies was also undertaken but the literature revealed relatively few insights beyond those provided by studies of school-to-school support in England. In part, this is due to the fact that the English system is evolving in a distinctive direction and it is difficult to make direct comparisons between forms of school-to-school support.

Methodology

The evidence review was guided by a protocol that detailed the procedures to be followed in the review including: the search terms/keywords; the locations/sources to be searched; the screens each study passed through for inclusion in the review; and the processes for recording and storing references and summarising literature. This ensured consistency and transparency in the execution of the review.

Literature searches

Evidence was gathered through online searches, relevant bibliographic databases and reference searches, including:

- Academic online bibliographic databases (such as ERIC, Web of Knowledge, Education Research Abstracts Online, British Education Index, BERA Abstracts and JSTOR) and Open access databases (such as Google Scholar and the Directory of Open Access Journals).

- Relevant Journals including British Educational Research Journal, Cambridge Journal of Education, Oxford Review of Education, International Journal of Educational Research, Education Studies.

- Websites of organisations that publish relevant reports, research and information, including:

  o Research and policy organisations

  o Charitable foundations and trusts

  o Government departments, agencies and their predecessors

We also examined the reference sections of studies to identify other pertinent articles and reports.

The searches, which were undertaken between 7th August and 31st August 2018, were limited to studies published in the English language. Admissible literature included research studies (qualitative and quantitative) and relevant reports and articles from authoritative sources. Further details of the search terms used are provided in Appendix 1.

At the time of the literature review there was also a DfE commissioned research study on MATs underway ("Sustainable improvement in multi-school groups" by UCL, published December 2018). This study is not included in this review, as it was not published until after the literature search was completed but it may fill some of the evidence gaps identified in this review.

Study selection

Once studies had been identified, they were assessed for eligibility against the following inclusion criteria (using a three-stage approach to reviewing the title, abstract and full text):

- Includes reference to school-to-school partnerships or other forms of inter-school collaboration and support

- Published since 2010[3]

- Considers issues identified by the research questions.

As a result of the searches, 154 sources have been included in this review. Eighty-seven of these are dated between 2015 and 2018, including 25 publications in 2015, three of which were included in Armstrong's (2015) review.

Record of searches

Full text manuscripts were retrieved for those that met the inclusion criteria. Details of articles not meeting the inclusion criteria were set aside and saved, but not deleted. For excluded studies, the practical reasons for their non-consideration were noted. This permitted backtracking and re-evaluation of the inclusion criteria and protocol during the review.

On-going records were maintained, not only on the reference information of each publication but the date of retrieval and keywords that led to retrieval.

Synthesis and analysis

The findings from the individual studies were summarised, synthesised and critically evaluated under the key headings and research questions agreed with the DfE. This involved:

- Mapping the relations between studies in terms of the impact of school-to-school collaboration and the conditions for effective collaboration.

- Assessing the breadth, depth and robustness of the studies by considering the following issues: the appropriateness of the research design to meet the aims of the research; the rigour of data-collection and analysis; the use of an appropriate sampling strategy; the generalisability/transferability of the findings; and critiques by other researchers and authors.

- Exploring the potential implications of the findings for developing and supporting school improvement through school-to-school support.

- Identifying gaps in the literature and areas where further research was required.

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[3] This is the year the coalition government took power and the consequent shift from LAs having responsibility for school improvement towards a school-led system.

Section 2: Policy context

Summary

Several studies suggest that since 2010, government has embraced a self-improving school-led system (SISS) agenda. This has informed the promotion of Multi-Academy Trusts (MATs), reduced LA oversight of schools and led to the creation of school-to-school support models such as Teaching School Alliances (TSAs). While driving school improvement is a key focus for both MATs and TSAs, emerging evidence suggests that there is considerable variation in their structures and reach. At a time of expansion, a small-scale research study (Male, 2017) suggested that some MATs may be more focused on governance structures, with school improvement taking something of a back seat.

Findings

This section explores how policy and its implementation has changed since the Armstrong review of effective school partnerships and collaboration was conducted for the DfE in 2015.

Schools in England have collaborated in networks for many years even while, in many cases, also competing. Collaborative activity between schools has become more widespread and more significant since the 2010s (Greaney and Higham, 2018: 14). In exploring the types of collaboration, Armstrong (2015) noted that, since the turn of the millennium, there has been a significant increase in the number of schools working together in both formal and informal ways. These include:

- Government policy leading to the expansion of the academies programme; many academies are sponsored 'chains' or trusts operating under varying degrees of collaboration.

- The changing role of the local authority (LA) as more schools become academies.

- Federations becoming an increasingly common mechanism for inter-school collaboration. Such arrangements can range from joint committees and meetings to shared governing bodies, leadership, staff and resources (NCTL, 2014).

- A number of national initiatives which have invested public monies to drive school improvement, including through enhanced collaboration: Education Action Zones (EAZs), Beacon Schools, Excellence in Cities (EiC), Leadership Incentive Grants (LIG), Network Learning Communities (NLCs) and the City Challenges.

SISS is based on the idea that clusters of schools working together can develop improvement strategies that meet localised challenges through the sharing of professional expertise and efficient pooling of resources (Hargreaves, 2010; 2012). In Creating a Self-Improving School System (2010), Hargreaves argued for a step-change from the then current, relatively loose networks in which most schools were already engaged, towards a tighter 'family cluster' approach. Such a system reduces the need for top-down approaches to monitoring and improvement, with responsibility passing to schools themselves. In a second piece for NCSL, Hargreaves (2011) examined the potential role of teaching schools within a strategic alliance of schools, drawing on parallels from business.

The schools White Paper, The Importance of Teaching (Department for Education, 2010), signalled a shift towards school-led improvement instead of the previous top-down approach through advisors employed by national and local government and its agencies. New approaches included the designation of Teaching Schools, with responsibilities for supporting the raising of standards across their networks, and new roles for exceptional middle and senior school leaders, such as National, Specialist and Local Leaders of Education as well as enhanced opportunities for schools to achieve academy status and be free of LA control. The White Paper proposed to raise standards, improve the quality of teachers, and school leadership through school-to-school support and peer-to-peer learning.

Armstrong (2015) found that evidence relating to inter-school collaboration at that time largely stemmed from evaluations of central government initiatives with a lack of independent empirical research. Nonetheless, the available evidence pointed to a growing level of inter-school collaboration with the expansion of MATs and TSAs increasing the complexity of the landscape. Since then, a number of additional research papers, not all linked to government, have been published and these are considered in this report.

The DfE refer to any inter-school collaboration involving shared governance as a hard partnership of which they distinguish between two types: MATs and federations. A federation is defined in law as two or more maintained schools operating under the governance of a single governing body. The term 'federation' is now more commonly used to describe inter-school collaboration between schools that are still maintained by the LA (Armstrong, 2015). Governing bodies who decide to federate must now do so in accordance with The School Governance (Federations) (England) Regulations 2012 and follow a prescribed process set out in the regulations. Education policy under the coalition government shifted focus away from federations to academies and collaborative working through Multi-Academy Trusts (MATs). A number of longstanding federations chose to become MATs.

Schools may also choose to collaborate in 'soft federations' or partnerships where each school retains its own governing body but the federation has one or more joint governing bodies or committees with delegated powers.

Multi-Academy Trusts

MATs are groups of academies governed under a single board of trustees that are outside the maintained sector and therefore operate under a different legal framework to federations (NCTL, 2014). Academies and their Trust must follow the law and guidance on admissions, exclusions and special education needs and disabilities, but benefit from greater freedom. They can set pay and conditions for their staff, decide on how to deliver the curriculum and they have the ability to change the length of terms and set their own school hours (Ehren and Godfrey, 2017: 340). There is a great deal of variation in MAT structures, especially in the role that the central team plays which is often linked to the number of schools in the MAT and their geographical spread. However, the central team typically includes the employment of a Chief Executive Officer (CEO) and a finance officer (Male, 2017). CEOs are normally directors of the trust which has the Board of Directors (trustees) at the top of the organisational structure.

In 2014, eight Regional Schools Commissioners (RSCs) were appointed with responsibility for approving new academies and intervening to address underperformance in academies. From 2015, the RSCs also became responsible for approving the conversion of under-performing maintained schools to academies and deciding on sponsors.

In March 2016 the Education and Adoption Act received Royal Assent. Provisions included that any school deemed by Ofsted to be 'inadequate' – meaning it has serious weaknesses or requires special measures – must be issued with an academy order. These powers are exercised by RSCs on behalf of the Secretary of State. The Act also gave the Secretary of State, working through the Regional Schools Commissioners, the power to intervene in 'coasting schools'.

In March 2016 the then-government set out plans to require all remaining maintained schools in England to convert to academy status in a White Paper, Educational Excellence Everywhere (Department for Education, 2016a). The announcement to require all schools to become academies was highly controversial, and faced strong resistance in Parliament (Andrews, 2016). Consequently, in May 2016, the department announced that it would no longer seek to require all schools to become academies. It would instead take new legislative powers to trigger an area-wide conversion to academies if a LA is deemed to be under-performing or if it is no longer financially viable for the authority to run its own schools (because a critical mass has already converted to academy status).

In October 2016, the then Education Secretary, Justine Greening, said in a statement that while the government's ambition remained that all schools would have academy status, it would not introduce any wider education legislation in this parliamentary session. The focus would instead be on "building capacity in the system and encouraging schools to convert voluntarily". Nonetheless, the number of MATs is expected to continue to grow:

> "The number of schools forming and joining multi-academy trusts (MATs) has grown significantly over the last five years and the Government predicts that over the next five it will grow even further. The Government now expects that most schools which convert to academy status will join a MAT" (House of Commons Education Committee, 2017).

In 2018, the Secretary of State for Education confirmed plans to ensure that only schools that fail Ofsted inspections will face forced academy conversion. Nonetheless, Male (2017) found (in interviews with 34 CEOs, chairs of trusts and executive leaders of Church of England MATs) that for many schools the decision to establish a MAT has been defensive in order to retain control so that an outside agency does not force the decision upon them. As a result, according to Male (2017: 13), for some MATs the infrastructure is 'embryonic' with senior leaders focussing on establishing that at the expense of leading on school improvement.

In 2016, 30% of all academies were sponsor led academies with the other 70% being converters – set up under the model introduced in 2010 by the coalition government. This model streamlined the process of converting to an academy for schools judged good or outstanding and also allowed primary and special schools to become academies for the first time. The last coalition government also extended the sponsor-led model to primary and special schools with an aim of improving the performance of schools which could not become converter academies. The number of new converters has fallen in each year since 2011/12 with the growth in numbers coming from sponsor-led academies which, after an initial flurry of secondary academies in 2010/11 and 2011/12, has largely been in primary academies (Male, 2017).

In 2015, internal DfE statistics (quoted in Armstrong, 2015: 7) indicated that 54 per cent of those schools that were academies were members of a MAT with at least two schools. The most recent figures are 7,773 open academies of which 78 per cent were part of a trust with two or more schools (6,063 approximately). This suggests that, not only the total number of MATs has increased significantly since 2015, but also that a much higher number are now operating within Trusts with two or more schools, so enhancing collaborative opportunities.

The National School Commissioner classifies MATs using the following typology:

- System Leader Trusts (30+ academies)

- National Trusts (16-30 academies)

- Established Trusts (6-15 academies)

- Starter Trusts (1-5 academies)

In a quantitative analysis of the characteristics and performance of multi-academy trusts, the Education Policy Institute (2017) found that the vast majority of multi-academy trusts are starter trusts (571) and established trusts (550) trusts with only 40 national trusts and 13 system leader trusts.

NCTL (2014) found that the headteachers and chairs of governors interviewed, cited a strong sense of moral purpose and an aspiration to improve the quality of teaching and learning as key drivers for adopting a MAT model. Cirin (2017) found that 96 per cent of MATs believe that their structure has facilitated collaboration. The perceived benefits of collaboration included making financial savings and school improvement through additional support for teachers and school-to school support. Eighty two per cent of MATs felt the creation of new opportunities to collaborate contributed to the decision of their schools to become academies, with 4 in 10 MATs believing this was the main reason for their schools converting (Cirin, 2017).

In 2014, the DfE itself (not commissioned) conducted an on-line survey of academies to assess how they used their autonomy, including questions relating to their collaboration with other schools (DfE, 2014). The survey findings, from 720 responses, indicated that 87 per cent of academies supported other schools, with 72 per cent supporting schools that they did not support before becoming academies. The survey also indicated that 96 per cent of academies with 'outstanding' Ofsted ratings were supporting other schools. A similar survey in 2017 (Cirin) found similar results:

- The vast majority (87 per cent) of SATs (Single Academy Trusts) support other schools (identical to the 2014 survey results).

- The vast majority (96 per cent) of MATs with two or more academies believe that their structure has facilitated collaboration and that academies within their MAT regularly collaborate in a number of areas that lead to financial savings.

- Most MATs (83 per cent) stated that all or most of their academies have formal relationships with schools outside their trust.

Key benefits of collaboration, according to the MATs surveyed, related to school improvement, helping teachers, and school-to-school support. Most MATs collaborated regularly (81 per cent) or occasionally (15 per cent) to secure financial efficiencies

through central purchasing. Around three quarters of MATs second or move teachers or senior leaders between schools, with a third doing so regularly, providing opportunities for the sharing of expertise and supporting staff development, progression and retention (Cirin, 2017). However, Gilbert (2017) observes that "although MATs offer considerable potential for focused collaboration between schools, they do not all work in this way and nor do they guarantee improvement." Male (2017) attributes some of this variability to some MATs "exhibiting a number of growing pains in terms of establishing leadership structures and processes that allow focus on school improvement."

Cirin (2017) found that the vast majority of MATs responding to the survey had regular formal relationships with external bodies at senior level. Around 8 in 10 had links with TSAs, 70 per cent had links with local authorities and 70 per cent with other trusts showing that "MATs are not insular but rather engage with the wider school system". Gilbert (2017) argues that more needs to be done in this regard to create more coherence in a diverse system:

> "engaging schools beyond their MAT promises not only greater local and national coherence, but also levels of support, including challenge, that could prove motivating and productive."

The National Schools' Commissioner, David Carter, in a speech in 2018, concurred, telling school leaders that they should identify ways of sharing resources between MATs and consider themselves responsible for raising standards in the areas where their schools operate and not just within their trust:

> "I worry a bit about the collaboration across the system between MATs. We need to think about ways we can incentivise and change some of the leadership behaviours to enable a system brain – which is the CEOs who run the half a dozen MATs in a town or a city or a part of a region – to think about how they come together to look at the challenges that we need to resolve. Of course, you have an obligation to the children you educate, that is your core responsibility, that is what you are held to account for. But I think there is a new level of accountability. Which is how does your impact in your trust contribute to raising standard beyond your trust?"

Teaching schools

Another mechanism to facilitate school-led improvement has been the introduction of Teaching Schools, a concept underpinned by the idea that schools judged to be outstanding by Ofsted should support other schools (Armstrong, 2015). The first Teaching Schools opened in 2011 and it was then envisaged that there would be an established network of over 600 across the country by the start of the 2015–16 academic year.

The Teaching Schools Council is a national body made up of 20 members (with either a national or regional remit), who lead and shape the work of Teaching Schools. There are now more than 800 teaching schools and, to achieve the designation, schools must now be Good or Outstanding and have a proven track record of delivering Initial Teacher Training (ITT) and in supporting other schools.

All teaching schools form alliances between themselves, their partners and the schools they support. Partner organisations vary, but often include a higher education institution, other schools and LAs. TSAs originally had six core areas of responsibility for their work to focus on – these are commonly referred to as "the big six". These were:

1. School-led initial teacher training.

2. Continuous professional development (CPD).

3. Supporting other schools.

4. Identifying and developing leadership potential.

5. Specialist Leaders of Education (SLEs).

6. Research and development.

Currently, the remit of teaching schools has three aspects:

1. School-led Initial Teacher Training;

2. Professional and leadership development; and

3. School-to-school support.

However, Cruddas (2018) notes that there remains considerable variation in the system and that the legacy of the 'Big 6' remains strong, leading to a danger that teaching schools might "become simply the trading bodies of academy or multi-academy trusts." Gu *et al*. (2015: 51), also found, in a formal evaluation of Teaching Schools, that there is "considerable" regional variation and "a clear tendency that low reach areas are generally away from major cities". There is also a clear over-representation of secondary schools and schools with less deprived intakes in the Teaching School cohort as a whole (Greany and Higham, 2018: 79). Gu et al. also reported that:

> "The evidence suggests that there are considerable variations in how TSA membership is defined and perceived, what participation in an alliance means in terms of extent of engagement, how each TSA partnership operates, and how each TSA seeks to fulfil the assigned teaching school priorities" (2015: 180).

Armstrong (2015) noted that "it is now common practice within the DfE to consider Teaching Schools as a delivery mechanism for new policies". Cruddas (2018) takes this idea further, suggesting that, like teaching hospitals, "teaching schools could pilot specialist areas where we need to innovate", moving away from a role that was initially conceived as remediation for under-performing schools.

National and local leaders of education

NLEs are school leaders, who have experience of effectively supporting schools in challenging circumstances. NLEs work alongside teaching schools and other system leaders to provide high quality support to those who need it. If a senior leader is selected as an NLE, their school becomes a national support school (NSS). This is to recognise that their staff are likely to work alongside the NLE in any support they provide. NLEs usually work with schools identified as being in need of significant improvement by the Department for Education, Ofsted, a teaching school, a regional schools commissioner, LA or diocese. Their work with supported schools can involve a range of activities, including: working alongside the supported school's staff or staff from an NSS providing support under the direction of an NLE (DfE website[4]).

Local Leaders of Education (LLEs) provide a range of school-to-school support and coaching and mentoring for head teachers. In 2014 to 2015, DfE successfully piloted a more devolved and system-led approach to the LLE programme with teaching school alliances (TSAs) managing the programme (DfE website[5]). This led to the National College for Teaching and Leadership (NCTL)[6] no longer having the responsibility for designating LLEs, with teaching schools having the freedom to recruit and designate school leaders in this role as they already do with specialist leaders of education (SLEs).

Greany and Higham (2018: 13), based on a survey of nearly 700 school leaders and 47 school case studies across four localities chosen for their varying contexts, argue that school 'system leaders' (NLEs, TSA leaders and academy CEOs) are "increasingly at the epicentre of this evolving system, particularly in the secondary phase." According to Greany and Higham (2018), these leaders experience increasing demands from central government while simultaneously being regarded with suspicion by the peers who sometimes see them as a 'co-opted elite' who accrue a range of personal and organisational benefits as a result of their involvement (Greany and Higham, 2018).

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[4] National leaders of education - a guide for potential applicants Accessed September 2018
[5] Local leaders of education Accessed September 2018
[6] From 1 April 2018, the National College for Teaching Leadership was re-purposed to form the Teaching Regulation Agency. All NCTL functions except teacher regulation have been moved to the Department for Education.

Place-based school-led improvement

Cruddas (2018) argues that "we are increasingly seeing a move towards place-based improvement initiatives in the improvement space." These included:

- The opportunity areas and opportunity area boards

- Sub-regional improvement boards[7]

- Education partnerships and their boards

Opportunity Areas have been introduced to improve social mobility for disadvantaged children and young people which include opportunities for inter-school collaboration. Opportunity areas have significant sums of money (a share of £72 million plus £22 million through a new Essential Life Skills programme).[8] Each opportunity area has a local board and is required to publish a plan (Cruddas, 2018). The 12 opportunity areas are:

- West Somerset

- Norwich

- Blackpool

- North Yorkshire coast

- Derby

- Oldham

- Bradford

- Doncaster

- Fenland and East Cambridgeshire

- Hastings

- Ipswich

- Stoke-on-Trent

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[7] Sub-regional improvement boards are no longer in place – see page 21
[8] The amount per area is based on the needs identified in area plans.

The total funding available will be made available over three years, 2017- 18 to 2019-20. For the year, 2018-19, the government expect to make funds available to LAs in the form of quarterly, non-ring-fenced grants having made a first payment of £9.4m in May 2018. The payments to all 12 OAs take account of expenditure already made or committed, and proposed new activity outlined in the local delivery plans. The specific amounts are agreed with the DfE Head of Delivery in each OA, who works closely with local partners. A total of £9.45m was paid in August 2018 to the LAs listed above.

In setting out the Government's ambitions for improving social mobility through education (Unlocking Talent, Fulfilling Potential, (Department for Education,2017c)), the Secretary of State emphasised the importance of putting "a focus on 'place' and community at the heart of our approach, properly recognising that the benefits of our reforms have not yet been felt evenly." The government's plan acknowledged that core drivers of improvement such as Teaching Schools, NLEs and high-quality MATs were not evenly distributed throughout the country, particularly in more deprived areas. The plan announced:

- Prioritising the growth and coverage of high-quality MATs and Teaching Schools in challenging areas supported by a £53 million MAT Development and Improvement Fund for areas of weak capacity.

- Prioritising the growing coverage of Teaching Schools and NLEs in challenging areas, taking active steps to grow this network where it is most needed.

- Revised performance metrics for these key system leaders to ensure greater support is provided to underperforming schools.

- The provision of £300 million of targeted, evidence-based school improvement support for underperforming schools across the country embedding evidence-based practice at its heart.

- Investing £33 million to expand the Teaching for Mastery maths programme to 3,000 more primary and secondary schools, targeting take-up in more challenging areas and schools. This will include extending the successful Maths Hub network, creating up to 10 additional expert hubs where capacity is currently weakest.

- Instigating a £26 million national network of English Hubs, targeted in areas of weak early language and literacy development. (Department for Education, 2017c)

Teaching Schools operate across eight regions, matched to those of the Regional Schools Commissioner. Each region holds its own strategy board meetings attended by representatives of each LA area where key priorities for the Teaching Schools Council are shared, consulted on and discussed. These representatives meet in turn with other Teaching Schools from their sub-region to ensure there is engagement with all Teaching

Schools nationally (Teaching Schools Council website[9]). The purpose of the sub-regional improvement boards was to:

- stimulate and identify recommendations for prioritising the Strategic School Improvement Fund (SSIF) (£140 million a year over two years);

- support the monitoring of the impact of funded proposals within the area; and

- use the combined expertise of the different parts of the education system in the sub region to enable a strategic partnership forum for mapping, facilitating and communicating support available for access by all schools.

The boards were not decision-making but rather advisory. The Teaching School Council, LA, Diocesan Board of Education and Regional Schools Commissioner all had a role on the sub-regional improvement board. As no further SSIF funding will be available beyond the completion of current projects, it is assumed that the sub-regional improvement boards will be superseded.

Some local areas have set up (or are setting up) local education partnerships which can include traded school improvement services or more school-led and subscription-based services. Typically, they have local boards providing strategic direction and leadership (Cruddas, 2018). Gilbert (2017) argues that "these area-based partnerships want to minimise the dangers of fragmentation and isolation, not by gathering together for comfort but by generating energy and purpose to create a better local education system."

Cruddas (2018) argues that the plethora of place-based improvement initiatives – while acknowledging that roles are different – could lead to duplication of effort and, in a worst-case scenario, act as an inhibitor of improvement because of a lack of alignment, recommending that a single board is established at the sub-regional level to drive place-based improvement. Gilbert (2017) agrees that more needs to be done to "create coherence in a diverse system in order to realise its benefits rather than live with its disadvantages."

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[9] Teaching schools council website Accessed September 12 2018

Section 3: Structure of collaboration

Summary

The growth in the number of academy chains and TSAs has reconfigured the inter-school collaboration landscape in England. However, there is relatively little systematic research on the various types of collaboration between schools and the extent to which they interleave and occur in hybrid forms. The limited evidence on leadership and governance structures in formal collaborative arrangements (such as federations, MATs and TSAs) indicates that approaches to leadership vary, depending on the type, size and focus of these collaborations. It also suggests that governance in MATs and, to a lesser extent TSAs, is becoming increasingly centralised due to external pressures and accountability.

Findings

Types of collaboration

Greany and Higham's (2018) research on the 'self-improving school-led system' agenda in England offers the only attempt since 2015 to systematically describe the changing and increasingly complex landscape of inter-school collaboration in England. In addition to MATs, school federations and TSAs, they identify 'local clusters', as a widespread form of inter-school partnership in England. Local clusters[10] comprise a diverse range of collaborations, and, in their sample encompassed activities such as "joint extra-curricular provision, headteacher meetings, curriculum or subject leader networks, assessment and moderation groups, peer reviews, research projects and joint practice development or shared CPD" (Greany and Higham, 2018: 70-71). Despite this diversity, local clusters exhibited the following common features in the four localities in which Greany and Higham (2018: 71) conducted their research:

- Cluster membership was often voluntary and could be fluid, but was usually drawn from a distinct local area with neighbouring or partly neighbouring schools.

- Clusters rarely had formal governance structures, with shared decision-making usually sited informally within a cluster headteachers' group.

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[10] Greany and Higham (2018) state that they "employed the term 'local cluster' in the survey [of school leaders] as it was referred to regularly in our initial case study visits".

- Cluster origins often lay in previous local authority-led initiatives, but these had also commonly been overlain with other initiatives and aims over time.

Greany and Higham (2018) also refer to nonlocal partnerships between schools. They do not define these partnerships but it is likely that they display the same features as local clusters, with the exception of schools being geographically dispersed over larger distances.

Almost all (98 per cent)[11] of the 699 school leaders who responded to their survey said they collaborated with other schools, although the regularity, depth, breadth and perceived strength of cluster ties varied substantially (Greany and Higham, 2018: 71).[12] Overall, the most common form of external support drawn upon in the previous year was reported to be a local cluster of schools (88 per cent overall: primary – 94 per cent; secondary – 75 per cent) (Greany and Higham, 2018: 47). Greany and Higham noted that both primary schools (67 per cent) and secondary schools (40 per cent) were most likely to describe their local cluster, as their strongest partnership, although around one in five secondary schools described their strongest partnership as a MAT (22 per cent) or TSA (20 per cent).

In their more detailed discussion of interschool-partnerships, Greany and Higham concentrate on local clusters, TSAs and MATs. While they (2018: 94-94) describe these forms of inter-school partnerships separately, they found that in practice the three models frequently overlapped and interweaved with each other. They also found that: "in general the direction of travel appeared to be from clusters to TSAs and MATs (Greany and Higham, 2018: 93). In the case of Teaching Schools, pressures to secure short-term improvement through 'school-to-school support' and the need to generate income had led many Teaching Schools in Greany and Higham's (2018: 15) sample to form MATs, as they saw this as offering greater financial security, clearer lines of accountability and hierarchical authority over other schools. This is consistent with the findings of Gu et al.'s (2015: 97) evaluation of TSAs, which indicated that a number of teaching schools in their study had established (or expanded) MATs "to drive school improvement and standards".

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[11] Greany and Higham (2018) asked **survey respondents** to identify how many schools their school collaborated with in a meaningful way. A similar number of ties was reported, with nine by primary and ten by secondary respondents (compared to 9 and 13 respectively above).

[12] Those respondents with at least one strong tie with another school (n-612) "were asked to identify – from a list of these types of interschool collaboration – which term best described their strongest partnership". Just over 60 per cent selected local cluster, just under 10 per cent selected nonlocal partnership, just under 10 per cent selected TSA, 10 per cent selected federation, , just over 10 per cent selected MAT and around 5 per cent selected a federation. (Greany and Higham, 2018: 70).

At the time of the evaluation, half of their 26 case study TSAs were also leaders of multi-academy trusts.

With regard to TSAs, Greany and Higham (2018:93) map three common trajectories that TSAs in their sample seemed to be adopting, often in combination and hybrid forms, "as they navigate the policy landscape, the real needs of other schools, and the requirement for financial viability":

- Hierarchical alliances, in which one or more lead school dominated developments and was seen by alliance members to be benefiting disproportionately.

- Exclusive alliances, in which a subset of higher performing schools had formed the network as a way of securing their own performance, providing relatively limited opportunities or support for schools more widely to engage.

- Marketised alliances, in which the lead school/s sold services in a transparent but transactional way, with limited commitment to ongoing partnership or reciprocity with 'client' schools' (Greany and Higham, 2018: 15).

Greany and Higham's (2018) description of inter-school collaborative activities captures the evolving landscape of inter-school collaboration and highlights changes that have emerged and intensified since Armstrong's (2015) review. However, the most widely cited form of partnership, local clusters, is under-researched and there is a need to clarify the diverse arrangements grouped together under this heading. More generally, there is a need for further research into the ways in which different forms of interschool partnerships and collaborations (both formal and informal) interact with each other and occur in hybrid forms.

Leadership

Few studies on the leadership models used in the context of inter-school collaboration have been conducted since Armstrong's (2015) review, but those undertaken indicate that that a variety of approaches are found in collaborations that involve formal arrangements such as MATs, TSAs and LA wide school partnerships. In the literature reviewed by Armstrong (2015: 3), differences were noted between the leadership approaches used in formal collaborative agreements (such as federations and MATs), which "can encompass shared leadership such as an executive headteacher operating across two or more schools" and informal collaboratives, which "often employ the traditional model of leadership with each school retaining their own headteacher". The more recent literature reviewed for this study primarily focuses on differences between the leadership approaches adopted within formal collaborations.

Preliminary research into the leadership of MATs (Male, 2017) - involving interviews with 34 CEOs, chairs of trusts and executive leaders of Church of England MATs - suggests that the role of CEOs of medium size MATs (defined as those with between five and 15 academies) varies depending on whether the growth of the MAT is driven by pragmatic need or strategic intent. Growth driven by pragmatic need leads to CEOs spending more time on establishing and securing the infrastructure of their MATs at the expense of being able to lead on school improvement processes (Male, 2017: 12).[13] Male (2017: 14) cautions, however, that further research will be required in order to substantiate or disprove these initial findings.

Greatbatch and Tate's (2018) study of the CPD needs of MAT CEOs included a small-scale analysis of CEO job descriptions. This revealed how the role of a CEO may vary depending on the size of a MAT in the following respects:

- Whereas financial sustainability was a concern for all but one of the eight smaller MATs (comprising four to nine academies) and five of the eight stipulated that CEOs would have a responsibility to identify and secure additional revenue, the two larger MATs (comprising 20 academies and 34 academies) did not list either of these as key responsibilities.

- Only one job description for the smaller MATs included a strategic responsibility for overseeing expansion, although both job descriptions for the larger MATs did so.

- Aspects of compliance and safeguarding features more heavily in the job descriptions of smaller MATs than in the larger ones.

- While the smaller Trusts were unanimous that CEOs should lead on school improvement across all the academies in the MAT and hold governing bodies and school leaders to account, these were responsibilities cited by only one of the two larger MATs". (Greatbatch and Tate, 2018: 24-25)

Differences in responsibilities with regard to school improvement between CEOs of different sized trusts are likely a reflection of more substantial central teams in larger trusts which may include a director with specific responsibility for this and/or executive heads leading on improvement in a cluster of schools within the trust.

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[13] This study was based on interviews with 38 executive leaders in MATs who had signed up to participate in leadership development programmes for medium size multi-academy trusts in England run by the UCL Institute of Education

In their evaluation of the first three cohorts of TSAs, Gu et al. (2015) found that, although TSA development was primarily led by the accountable teaching schools, in all 26 of their case study TSAs there were variations in the TSAs' structures of leadership. For example, in some TSAs the different strands of the Big 6 elements of the teaching school role were led (or co-led) by key senior leaders in the teaching school or in other strategic partner schools, whereas in others they were organised by working groups of associated partners (co-ordinated by the TSA Steering Group) (Gu et al., 2015: 76-77). Gu et al. (2015:79) also found "that leadership structures in more than half of the case study TSAs had been changed over time in order to adapt to changing circumstances. Changes in personnel in key senior leadership positions were also found to have impacted on the capacity and/or strategic direction of TSAs (Gu et al., 2015:80).

Variations in leadership structures were also reported in Hatcher's (2014) study of LA wide school partnerships. Hatcher (2014: 357-358) noted that in some headteacher-led LA wide partnerships, the LA had some share in the responsibility, whereas in other cases LA has handed over all responsibility for the strategic vision and leadership of education to the collective body of headteachers.

The recent research on leadership in school partnerships and other collaborations is sparse and does not provide a basis for robust conclusions. However, the evidence does highlight variations in the approaches to leadership based on the type, size and focus of formal collaborations between schools that require further investigation. There is virtually no research on leadership models used in the context of informal collaboration between schools. There is also little evidence on the operation of the DfE's programmes to support system leadership through the designation of National Leaders of Education (NLEs), Local Leaders of Education (LLEs) and Specialist Leaders of Education (SLEs).

Governance

While Armstrong's (2015) review found evidence that "models of shared governance are emerging to accommodate inter-school collaborative arrangements", two recent studies (Greany and Higham, 2018; Ehren and Godfrey, 2017) suggest that in MATs there is currently a movement away from these models to more centralised approaches.

Greany and Higham (2018: 86) found that the governance structures in several larger MATs in their study were becoming hierarchical and more prescriptive as they expand over time due to external pressure and accountability, promoted in part by the government requiring

> "tight vertical accountability, both within MATs and between MATs and the government" in response to cases of academy and whole MAT 'failure' and poor financial management (e.g. see Greany and Scott, 2015; Savage and Mansell, 2018)".

Ehren and Godfrey's (2017) in-depth, longitudinal case study of a large, nationally-organised MAT with a portfolio of primary and secondary schools, also found an increasing concentration of governance as a MAT grows and its external accountability increases. Their study shows that, over a period of five and a half years, as the case study MAT grew, its governance structure changed from shared and decentralised across its schools to increasingly centralised and brokered by the MAT's central staff. One of the headteachers interviewed for the study indicated that these changes were largely the result of the MAT following the recommendations in Ofsted reports and that other schools with good Ofsted grades also reinforce centralised control as the most effective improvement strategy for large, nationally organised MATs" (Ehren and Godfrey, 2017: 356).

Gu et al. (2015) research indicates that that looser, less centralised governance models may be more prominent in TSAs and suggest that a key challenge, for those TSAs involved in MATs, is navigating the distinction between the 'hard' governance arrangements in MATs and the relatively 'softer', 'looser' and more ad hoc governance arrangements in TSAs (p. 71).[14] As we have seen, there is a trend for TSA leads to seek to resolve this tension through the formation of MATs (Greany and Higham, 2018).

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[14] Another issue raised in the Gu et al.'s (2015) evaluation of TSAs was a perceived lack of external support and challenge on the senior governance bodies of some TSAs.

Section 4: Impact of collaboration

Summary

Several quantitative studies of the impact of inter-school collaboration on pupil outcomes were published between 2015 and 2018. These studies paint a mixed picture. While there is evidence of collaboration between high and low performing schools in single-phase school federations leading to improvements in pupil attainment, several statistical analyses, using national datasets, present a picture of wide variability in outcomes between different MATs, and relatively small differences between MAT academies and LA schools. Moreover, one recent study found that while pupils in small MATs (with 4-6 schools) and mid-sized MATs (with 7-15 schools) tended to perform better, on average, than their peers in equivalent standalone academies and maintained schools, pupils in larger MATs (with 16+ schools) tended to do worse, on average. The available evidence on TSAs is limited to a study published in 2015 which indicated that, while teaching schools were doing significantly better than comparator schools at both Key Stage 2 and Key Stage 4, this was not yet the case for alliance members and strategic partners.

Findings

In 2015, Armstrong reported that there was very limited evidence for a direct impact of inter-school collaboration on student performance and that the available evidence presented a mixed picture. Since the publication of Armstrong's (2015) review, several quantitative studies have emerged. This work spans across school federations, non-federated collaboration, TSAs, MATs and academy chains at both primary and secondary levels. These studies continue to present a mixed picture, but they do also throw some additional light on the conditions for effective inter-school collaboration in terms of pupil outcomes.[15]

School federations and non-federated collaborations

Muijs (2015) examined the impact of school-to-school collaboration as a vehicle for school improvement by looking at partnerships in the primary phase in which high performing schools acted as supporters to low performing partner schools, as part of a programme instigated by the school improvement service in an urban LA in England. The programme involved 20 schools being supported by 17 supporting schools (some supporting more than one). The supporting schools were all high performing relative to

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[15] Three of these studies were published in 2015 (Muijs, 2015; Gu et al., 2015; Chapman et al., 2015b) but were not included in Armstrong's (2015) review.

intake, with headteachers who had been designated as either a LLEs or NLEs (Muijs (2015: 567).

Using data from the National Pupil Database, Muijs (2015:583) conducted a quasi-experimental quantitative study to establish whether collaboration between high and low performing primary schools led to an improvement in pupil attainment in the LA. The quantitative analysis provided evidence of an increase in pupil attainment in both school federations and non-federated collaborative arrangements. The study provided replication in the primary sector of results previously obtained in a quasi-experimental study of school federations in the secondary phase conducted by Chapman and Muijs (2014).

As Muijs (2015) argued, his study was more robust than most previous work in this field which had generally not employed statistical matching to create comparison groups to study the relationships with pupil attainment. Consequently, his study provides strong evidence that collaboration can be a successful school improvement strategy, and that, in particular, collaboration between low and high performing schools can lead to improvements in attainment. With that said, the generalisability of the findings is limited by that fact that it was conducted in one particular LA. Muijs (Muijs, 2015: 583) recognised this and noted that "further replication will be necessary to test generalisability of these findings across the primary sector".[16]

Having found that collaboration between high and low performing primary schools can lead to an improvement in pupil attainment, Muijs (2015) conducted a follow up study to explore some of the activities and factors associated with successful partnerships. This part of his study involved qualitative case studies of 9 partnerships and 18 schools. It found that successful partnership requires intensive and sustained hands-on engagement with supporting schools across both leaders and classroom teachers, highlighting the importance of specific practices such as coaching and mentoring. It also revealed that this engagement needs to not only focus on factors identified in the literature on inter-school collaboration (such as leadership support, mutual trust and goals, teaching and learning and the development of capacity) but also factors that have more commonly been reported in literature on individual school improvement (such as the need to build in quick wins) (Muijs, 2015: 583-584).

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[16] Muijs (2015: 583) also recognised that: "Quasi-experimental research is imperfect in terms of providing causal evidence, the lack of true randomisation leaving open the possibility of alternative explanations for differences between intervention and comparison groups, such as prior differences in leadership capacity".

Teaching School Alliances

Muijs also conducted a statistical analysis of the impact of TSAs on pupil outcomes (reported in Gu et al. (2015) as part of their broader evaluation of the effectiveness and impact of the first three cohorts of 345 TSAs). This involved analysis of the National Pupil Database during the three-year period studied from 2012 to 2014. The study used propensity score matching (PSM) and multilevel modelling techniques to explore the relationship between being part of a TSA (as teaching schools, strategic partner schools and alliance schools) and pupil outcomes at Key Stages 2 and 4.

Muijs's statistical analysis showed that, whereas membership of a TSA benefited the teaching schools in terms of improved pupil performance, it did not do so in strategic partner and alliance schools. Muijs found that teaching schools significantly outperformed comparator schools in relation to pupil outcomes at both Key Stages 2 and 4 and in all three cohorts (cohorts 1-3). In contrast, there was no clear evidence that engagement with teaching schools as alliance members or strategic partners was associated with greater improvement in pupil outcomes at Key Stage 2 and Key Stage 4 compared with other similar schools that did not engage with TSAs.

Alongside Muijs's analyses, Gu et al.'s (2015) qualitative research found that, over a relatively short time period, inter-school collaboration had led to change and improvement in the professional practice of teachers and school leaders across the TSAs. This raises the possibility that these developments could now be driving positive changes in pupil outcomes, but further research will be required to establish whether this is the case.

Multi-Academy Trusts

A series of statistical studies published between 2015 and 2018 indicate that overall MATs do not currently impact positively on pupil outcomes compared with non-MAT academies and maintained schools (Bernardinelli et al., 2018; House of Commons, 2017; Hutchings and Francis, 2017; Andrews, 2016; DfE, 2015, 2016d, 2017b, 2018a).

The Sutton Trust's Chain Effects annual reports focus on the extent to which academy chains, and especially MATs, impact positively on the attainment of disadvantaged pupils and whether they are the best way of working to improve the performance of previously struggling schools. Building on three years of analysis (Hutchings et al, 2014; Hutchings

et al,2015; Hutchings et al, 2016), the fourth of these reports (Hutchings and Francis, 2017) is based on 2016 exam results.[17]

The most recent report reviews outcomes for disadvantaged secondary pupils across a range of measures including Progress 8[18] and Attainment 8[19], reflecting the changes in accountability at GCSE - comparing outcomes with previous years using both new and old measures (Hutchings and Francis, 2017).[20] The analysis reveals that "there is very significant variation in outcomes for disadvantaged pupils, both between and within academy chains" (Hutchings and Francis, 2017: 4-5). A small number of high-performing chains are continuing to achieve positive outcomes for their disadvantaged students against a range of measures, while a larger group of low-performing chains are achieving results that are not improving the prospects of their disadvantaged students. Longitudinal analysis over four years between 2013 and 2016 shows that the main picture is one of a lack of transformative change over the period, including a very slow growth in the number of those chains which are succeeding in the original aims of the sponsor academies programme (Hutchings and Francis, 2017: 5).

As Greany and Higham (2018) note, this picture of variability between academy chains is echoed in several quantitative analyses of student performance at KS2 and KS4, which also indicate that there is no conclusive evidence that schools in chains are performing better or worse than non-MAT academies and maintained schools.. For example, using KS4 attainment data for 2014, the DfE (2015) showed that the performance of academy chains was not substantially different from that of LAs and that there was significant variability between chains as well as between LAs. The DfE (2016d) analysis, which included both KS2 and KS4 attainment data for 2015, confirmed the broad variability between MATs, although it indicated a more positive picture for KS2 attainment than for KS4. Andrews's (2016) comparison of the performance of MATs and LAs at both KS2 and KS4, using the approach outlined in DfE (2015), also showed few differences

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[17] Hutchings and Francis (2017: executive summary) state that they "include chains in our analysis only if they had at least three academies in 2016, and at least two secondary (or three primary) sponsored academies for a three-year period from September 2013. Academies are only included if they have been with the same sponsor since September 2013, so that there has been time for the sponsor to have some impact on performance". As previously, the main focus is on sponsored secondary academies. However, for the first time the outcomes for disadvantaged pupils in converter and primary academies are also considered.

[18] Progress 8 is the headline indicator of school performance. It aims to capture the progress a pupil makes from the end of primary school to the end of key stage 4.

[19] Attainment 8 measures pupils' attainment across 8 qualifications including: maths (double weighted) and English (double weighted, if both English language and English literature are entered), 3 qualifications that count in the English Baccalaureate (EBacc) measure and 3 further qualifications that can be GCSE qualifications (including EBacc subjects) or technical awards from the DfE approved list. Secondary accountability measures August 2018

[20] At Key Stage 2 only reading and mathematics attainment and progress are considered, in light of concerns about the reliability of the writing assessment outcomes (Hutchings and Francis, 2017).

between MATs and LAs in aggregate, and wide variation between different MATs and different LAs.

The DfE (2017b) and (2018a) compared established MATs to all other state-funded mainstream schools, analysing pupil progress measures using 2017 data for schools that had been in a MAT for at least three years. The broad picture that emerged from the 2018 report was that primary MATs are performing more closely in line with the national average, while secondary MATs continue to perform below the national average overall.

Bernardinelli et al. (2018) provides a statistical analysis of MAT impact on pupil attainment, which is the first published analysis to compare schools in MATs with standalone academies and maintained schools with similar characteristics and levels of prior pupil attainment. The analysis uses 2013–15 attainment data and 2016 data on the composition of MATs and focuses on differences in pupil-level outcomes at Key Stage 2(KS2) and Key Stage 4 (KS4) over a three-year period (2013-2015). Bernardinelli (2018) found that overall, there is no significant impact from MAT status for pupils in either primary or secondary academies when compared to pupils in similar standalone academies. When compared to pupils in maintained schools, pupils in primary academies in MATs tended to perform better than pupils in comparable maintained primaries, while the difference for pupils in secondary academies was not statistically significant. Looking at pupil outcomes by type of academy:

- Pupils in converter academies in MATs were doing significantly better, statistically, than pupils in equivalent maintained schools at both primary and secondary level;

- However, pupils in converter academies in MATs were not doing significantly better or worse than pupils in equivalent standalone academies;

- Pupils in sponsor-led academies in MATs were not doing significantly better or worse than pupils in equivalent maintained schools or standalone academies, either at primary or secondary level (Bernardinelli et al., 2018: 8).

To date statistical analyses of MAT performance have been largely descriptive, using national datasets to compare between-MAT and MAT-LA performance. However, Bernardinelli et al. (2018) go further than this by exploring the relationships between MATs with different characteristics and levels of performance. They found that, within their overall findings, there were important differences between MATs of different sizes and across different phases. After controlling for other relevant characteristics, pupils in small MATs and mid-sized MATs (with 4–6 and 7–15 schools respectively) tended to perform better, on average, over the three-year period than their peers in equivalent standalone academies and maintained schools. Conversely, pupils in larger MATs (with

16+ schools) tended to do worse, on average[21] (Bernardinelli et al., 2018: 34). Bernardinelli et al. (2018: 34) argue that their findings "casts doubt on the educational arguments for MAT growth". However, as they recognise, their "analysis did not allow (them) to understand whether there were particular types of MAT that made a positive or negative impact within these size bands"

Another study that recently attempted to explore the relationship between the different characteristics of MATs and pupil outcomes found that there are few clear associations between either the geographic spread within a MAT or the phase mix (primary and secondary) within a trust (Ambition School Leadership and the Education Policy Institute, 2017).

When considering the statistical evidence in relation to MATs, It is important to bear in mind that the national pupil assessment models and accountability measures have changed significantly in recent years. As a result, the empirical evidence base for judging the impact of MATs lacks robustness.

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[21] However, Bernardinelli et al. (2018: 8) note that these differences were not always statistically significant, and there was some variability across phases of education.

Section 5: Formation of partnerships

Summary

Recent research (Cirin, 2017) highlights similar reasons for joining MATs to those identified in earlier evidence included in Armstrong's (2015) review. These include sharing resources, reducing costs, opportunities to collaborate with and support other schools, and working with schools that have a shared vision and ethos.

Two other studies suggest that the roll back of LAs' direct oversight of schools, together with the possibility of enforced academisation and/or incorporated by large national MATs, has encouraged some schools to access external support, including through school-to-school collaborations, such as 'local clusters' of schools, NLEs and, to a lesser extent, smaller-scale local MATs. It is unclear how TSAs currently feature in these processes (Greany and Higham's, 2018).

With regard to enablers and barriers to the effective formation of partnerships these studies confirm the importance of factors identified in Armstrong's review, they place more emphasis on the importance of trust between schools (Gu et al., 2015; Greany and Higham, 2017) and shared vision and values (Ginnis, 2017; Gu et al., 2015; Howland, 2014).

Findings

Key drivers

Armstrong's (2015: 25) review identified several drivers for collaboration between schools, including "sharing resources and taking advantage of economies of scale, participating in centrally driven initiatives involving inter-school collaboration, accessing educational and operational support, and expanding successful models of school improvement". In more recent research, Cirin (2017: 14) found that:

> "A number of different factors were highlighted and for a large number of trusts more than one reason was stated for academies joining. These included: a shared vision and ethos (82 per cent); to benefit from the support of other schools (73 per cent); geographical proximity (65 per cent); to realise procurement savings (64 per cent); and to support other schools (61 per cent). However, a shared vision and ethos (selected by half of the trusts who responded to the survey) was selected significantly more often than any other as the main reason for joining the trust".

Two studies that have subsequently emerged highlight two additional key drivers for collaboration. The first is the reduction of support from LAs, which has led to schools becoming more proactive in identifying and addressing their own improvement priorities and, in so doing, establishing inter-school collaboration, especially in the secondary phase (Greany and Higham, 2018)[22].

The second driver identified in the recent literature is fear by some schools of being taken over by national MATs. Greany and Higham (2018: 90) found that, for schools that felt vulnerable to external intervention, these perspectives could drive a decision to form or join an alternative, ideally local, MAT, in order to pre-empt being pushed into a national one:

> "MAT developments were observed by many of our school-based interviewees with suspicion and sometimes fear. These concerns reflected a view that MATs are predatory and want to 'take over' schools by removing their autonomy and distinctive ethos through the imposition of hierarchical control. This view was often associated with larger, national MATs, but was also common among primary schools when discussing local secondary-led MATs. In the case of the larger national MATs, there was also a view that MATs would impose a narrow, instrumental curriculum and pedagogy geared towards improving Ofsted and exam results, to the exclusion of other student outcomes" (90).[23]

Greany and Higham's findings chime with those of Male's (2017) interview-based study involving 34 CEOs, chairs of trusts and executive leaders of Church of England MATs. As noted in Section 2, Male found that some schools decide to establish or join a MAT in order to retain control and avoid an outside agency forcing the decision upon them.

There is also evidence that inter-school collaboration may be geographically driven (Ginnis et al., 2017; Greany and Allen, 2014), built on pre-existing professional friendships (Greany and Allen, 2014) and/or driven by the relevance and commonality of key priorities (Greany and Allen, 2014; Ginnis et al., 2017). In addition, the evidence shows that, while informal partnerships and other collaborations remain important to schools, there are widely recognised motivations for formalising local clusters, including

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[22] Alongside various forms of inter-school collaboration, inter-school networks designed to communicate and interpret policy-related information and advice have become more prominent in response to the roll back of LAs, which had previously played a key role in this regard. Many schools involved in Greany and Higham's (2018: 33-34) study, for example, were relying on local or national networks, including some that they paid to join, such as PiXL, Challenge Partners or Whole Education, for information and implementation support (33-34). Some schools were also paying for information services, such as The Key.

[23] Greany and Higham (2018) note that several of the school leaders and teachers who expressed these views had direct experience of visiting or working in MATs, while others based their views on the experiences of colleagues, friends or family members who worked in MATs (Greany and Higham, 2018: 90).

austerity and funding cuts creating a desire to achieve savings through the sharing of resources and greater purchasing power (Greany and Higham, 2018).

Enablers and barriers to effective collaboration

Armstrong (2018: 4-5) noted the most commonly cited conditions that foster effective inter-school collaboration were "strong leadership; well-defined and robust structures and processes; a history of collaboration; clear communication; and a sensitivity to context". The studies that have emerged since the publication of Armstrong's (2015) review (Greany and Higham, 2018; Ginnis et al., 2017; Gu et al., 2015; Howland, 2014; Greany and Allen, 2014) confirm the importance of these factors but also emphasise the importance of trust between schools (Gu et al., 2015; Greany and Higham, 2017) and/or shared vision and values (Ginnis, 2017; Gu et al., 2015; Howland, 2014).

Trust between schools

Almost all TSAs in Gu et al.'s (2015) evaluation of the expansion of TSAs began with a core group of schools with which they had already developed 'solid' and trusting work relationships through their previous StSS and/or ITT work. According to Gu et al., (2015:92) such relationships provided important social and collaborative capital which enabled them to extend membership to a greater number of schools over time. This chimes with the findings of Greany and Higham's (2018: 77) study, which reports that trust between schools is an important influence on 'cluster' formation, especially among the secondary schools in their sample.

Shared vision and values

Ginnis et al.'s (2017) in-depth interviews with school leaders of schools and Cirin's (2017) survey of MATs found that, for those schools considering joining or creating a MAT, shared ethos and vision appeared as a primary consideration. Gu et al.'s (2015: 179) evaluation of TSAs also points to the importance of participant schools' values, noting that over time most of their case study TSAs had become less concerned about partners leaving the TSA and "more focussed upon retaining the commitment of those who share the same values, who have complementary expertise and capacity and, more importantly, who are willing to work together in the partnership to achieve the shared visions, values and goals". According to Gu et al. (2015), this has implications for the use of TSAs to drive school improvement across the system, as it seems that forming and developing alliance partnerships requires participant schools to have a willingness to engage and embrace similar values (Gu et al., 2015).

Ginnis et al.'s (2017) and Gu et al.'s findings are consistent with those of Howland's (2014) study, over a 3-year period, of the proposed development of an all-age hard federation of ten schools (across a market town in northern England). Howland

concluded that there is likely to be a greater chance of success where the schools concerned are united in terms of their vision and values (as well as their history, geography and demographics).

Other factors identified were as follows:

- Existing partnership histories - Gu et al. (2015) found that the extent to which teaching schools were able to engage and develop new partnerships was influenced by their previous partnership histories. When forming an alliance, strategic partners tended to be schools and institutions from existing collaborative partnerships who shared similar educational values and philosophies.

- Effectiveness and impact of partnerships - Gu et al. (2015) found that increases or decreases in membership of TSAs is directly related to concerns amongst alliance members/prospective members about the effectiveness and impact of TSAs (Gu et al., 2015:91).

- Credibility - Greany and Higham (2018) note that in commissioning external support, many secondary schools expressed a preference for drawing on serving and recent practitioners, rather than commercial providers, for this support, since they were seen as more credible.

- Positive relationships with local authorities - Most case study TSAs in Gu et al.'s (2015) research regarded these as important, particularly in relation to sharing data and intelligence for maintained schools and to commissioning support.

- Brokering support - Greany and Allen's (2014) evaluation of school improvement networks promoted by Coventry City Council reported that clear and readily available systems for brokering support for school improvement was seen as an important factor in relation to school's engaging with NLEs.

Section 6: Conclusions

A substantial body of evidence relating to the impact of inter-school partnerships on pupil outcomes has emerged since 2015. This has gone some way towards filling a gap in knowledge identified by Armstrong (2015), who noted that at the time of his review there was relatively little evidence concerning the direct impacts of the different forms of inter-school collaboration on pupil outcomes.

The more recent evidence includes a robust quasi-experimental study (Muijs, 2015) that demonstrates that partnerships involving high performing schools supporting low performing schools can lead to improvements in pupil outcomes in the context of both school federations and, to a lesser extent, non-federated collaborations in the primary phase (Muijs, 2015). This study replicated previous research on school federations in the secondary phase (e.g. see Chapman and Muijs, 2014) and indicates that hard governance structures can play an important role in promoting school improvement.

Research on MATs and academy chains has not found a clear overall association between membership of MATs and improved pupil outcomes. There is evidence to suggest, however, that while schools can see the benefits of MAT membership in enhanced opportunities for collaboration leading to improvement, some MATs may be at a stage where they are concentrating on developing and consolidating their infrastructures. In view of this, it is possible that pupil outcomes could improve if and when the focus in these MATs shifts to school improvement.

Statistical analyses of the impact of participation in the first three cohorts of TSAs between 2012 and 2014 also presents a mixed picture. They show that while the attainment of pupils in the teaching schools improved, those of the alliance schools and strategic partners did not do so. However, the associated qualitative evaluation of the TSA programme identified improvements in professional practice across TSAs. It is possible therefore that improvements in pupil outcomes have subsequently occurred. Further research is needed to establish whether this is the case.

There continues to be a paucity of evidence around informal inter-school collaborations, which recent evidence suggests are often seen by school leaders as significant collaborative arrangements. More generally, there is very little research relating to how different forms of inter-school partnership interact and overlap with each other. Research in this area is needed to better understand not only the landscape of inter-school collaboration but also the drivers for collaboration, the conditions for effective collaboration and the factors that lead to improvements in pupil outcomes.

Section 7: Evidence gaps

Although the published evidence base on school-to-school collaboration has grown considerably in the last three years, there are some significant evidence gaps. These can be summarised as follows:

- The less formal types of collaboration and local school clusters have attracted relatively little research in comparison to formal arrangements such as school federations, MATs and TSAs.

- While it is recognised that schools often participate in multiple collaborative activities with other schools involving varying degrees of formality/informality, apart from some research on the interleaving of MATs and TSAs, there is virtually no research on the question of what this entails and how the different collaborative activities are arranged in relation to each other.

- More research is needed on the role and impact of the NLE, LLE and SLE programmes and how these interleave with other forms of inter-school collaboration.

- Research-based evidence on leadership and governance in inter-school collaborations is limited and is primarily concerned with TSAs or MATs.

- There is a need for more research on the role of strategic partners in TSAs and how they feature in the offers of TSAs.

- Statistical analyses of pupil outcomes are needed to establish the extent to which involvement in TSAs is leading to improvements in school performance in alliance schools.

- There is limited evidence on the drivers for, and barriers to, effective inter-school collaboration. More research into the extent to which collaboration between schools is geographically driven, built on pre-existing professional friendships and/or driven by the relevance and commonality of key priorities would be especially useful.

- There is very little evidence on factors associated with the sustainability of inter-school collaborations.

- There are indications in the literature that LAs are developing new roles for themselves in brokering school-to-school support through trading arms, however there is limited evidence on this.

- Opportunity areas comprise another area for complexity in relation to school-to-school collaboration which will require consideration in terms of how different types of collaboration between schools operate and interact with each other and the extent to which they impact on pupil outcomes.

A study by UCL ("Sustainable improvement in multi-school groups"), which was published in December 2018 after the completion of this review, may go someway towards filling a number of these evidence gaps.

Bibliography

Abbott, I, Middlewood, D and Robinson, S (2014). 'Prospecting for support in a wild environment: investigating a school-to-school support system for primary school leaders', School Leadership & Management: Volume 34 (Issue 5): pages 439–453

Ainscow, M (2010). 'Achieving excellence and equity: reflections on the development of practices in one local district over 10 years', School Effectiveness and School Improvement: Volume 21 Number 1, pages 75-92

Ainscow, M (2015). 'Towards Self-Improving School Systems: Lessons from a City Challenge', London: Routledge

Ambition School Leadership/Education Policy Institute (2017). 'Quantitative Analysis of the Characteristics and Performance of Multi-academy Trusts' [Online]

Andrews, J (2016). 'School Performance in Multi-academy Trusts and Local Authorities-2015', London: Education Policy Institute

Andrews, J and Perera, N (2017). 'The Impact of Academies on Educational Outcomes' London: Education Policy Institute

Armstrong, P (2015). 'Effective School Partnerships and Collaboration for School Improvement: A Review of the Evidence' London: Department for Education

Association of School and College Leaders, National Governor's Association and Browne Jacobson (2015). 'MATs and Federations: Leading and Governing Groups of Schools' [online]

Aston, H, Easton, C, Sims, D, Smith, R, Walker, F, Crossley, D, Crossley-Holland, J and (2013). 'What Works in Enabling School Improvement? The role of the middle tier'. Slough: NFER

Baars, S, Bernardes, E, Elwick, A, Malortie, A, McAleavy, T, McInerney, L, Menzies, L, and Riggall, A, (2014). 'Lessons from London Schools: Investigating the Success', Reading: CfBT

Baars, S, Shaw, B, Mulcahy, E and Menzies, L (May 2018). 'School Cultures and Practices: Supporting the Attainment of Disadvantaged Pupils'. London: Department for Education

Bernardinelli, D, Rutt, S, Greany, T and Higham, R (2018). 'Multi-academy Trusts: Do They Make a Difference to Pupil Outcomes?' London: UCL IOE Press

Bryant, B, Davis, M, Farrar, M, and Rea, S (2015). 'Strategies for Transforming Local Education Systems', London: Education Development Trust and ISOS Partnership

Carlisle, K and Hughes, J (2013). 'The role of inter-school collaboration in promoting inter-group relations: The Northern Ireland Perspective.' In H. Biseth & H. B. Holmarsdottir (Eds.), Human Rights in the Field of Comparative Education. Rotterdam: Sense Publishers (pages 125 - 145)

Carr, C and Morris, M (2016). 'Evaluation of Schools Challenge Cymru: Implementation in Pathways to Success Schools (2014/15)' Cardiff: Welsh Government

Carr, C, Brown, S and Morris, M (2017). 'Assessing the Contribution of Schools Challenge Cymru to Outcomes Achieved by Pathways to Success schools' Cardiff: Welsh Government

Chapman, C (2008). 'Towards a framework for school-to-school networking in challenging circumstances', Educational Research: Volume 50, Issue 4, pages 403–420

Chapman, C, and Hadfield, M (2010). 'Realising the potential of school-based networks' Educational Research: Volume 52, Issue 3, pages 309 – 323

Chapman, C (2013). 'Academy federations, chains, and teaching schools in England: Reflections on leadership, policy and practice'. Journal of School Choice: Volume 7 Issue 3, pages 334 - 352

Chapman, C (2015). 'From one school to many: Reflections on the impact and nature of school federations and chains in England'. Educational Management, Administration and Leadership: Volume 43, Issue 1, pages 46-60

Chapman, C, Muijs, D, Sammons, P, Armstrong, P and Collins, A, (2009). 'The Impact of Federations on Student Outcomes', Nottingham: National College for Leadership of Schools and Children's Services

Chapman, C, Lindsay, G, Muijs, D, Harris, A, Arweck, E and Goodall, J (2010). 'Governance, leadership and management in federations of schools' School Effectiveness and School Improvement: Volume 21, Issue 1, pages 53-74

Chapman, C, Muijs, D and MacAllister, J (2011a). 'A Study of the Impact of School Federation on Student Outcomes' Nottingham: National College for School Leadership.

Chapman, C, and Muijs, D (2013). 'Collaborative school turnaround: A study of the impact of school federations on student outcomes' Leadership and Policy in Schools: Volume 12, Issue 3, pages 200–226

Chapman, C, and Muijs, D (2014). 'Does school-to-school collaboration promote school improvement? A study of the impact of school federations on students outcomes' School Effectiveness and School Improvement: Volume 25, Issue 3, pages 351–393

Chapman, C, Lowden, K, Chestnutt, H, Hall, S, McKinney, S, and Hulme, M (2014). 'Research on the Impact of the School Improvement Partnership Programme: Interim Report' Livingston: Education Scotland

Chapman, C, Lowden, K, Chestnutt, H, Hall, S, McKinney, S, Hulme, M and Friel, N (2015a). 'The School Improvement Partnership Programme: Using Collaboration and Enquiry to Tackle Educational Inequity' Livingston: Education Scotland

Chapman, C, Muijs, D, Reynolds, D, Sammons, P & Teddlie, C (2015b). 'The International Handbook of Educational Effectiveness and Improvement' London: Taylor & Francis

Chapman, C Lowden, K Chestnutt, H Hall, S McKinney, S and Friel, N (2016a). 'The School Improvement Partnership Programme: Sustaining collaboration and Enquiry to Tackle Educational Inequity' Livingston: Education Scotland

Chapman, C, Chestnutt, H, Friel, N, Hall, S and Lowden, K (2016b). 'Professional capital and collaborative inquiry networks for educational equity and improvement' Journal of Professional Capital and Community: Volume 1, Issue 3, pages 178–197

Cirin, R (2017). 'Academy trust survey' London: Department for Education

Coleman, A (2011). 'The significance of trust in school-based collaborative leadership' International Journal of Leadership in Education: Theory and Practice: Volume 15, Issue 1, pages 79-106

Cousin, S (2018). 'System leaders in England: Leaders of a profession, or instruments of government?' Educational Management Administration and Leadership: January 2018

Crossley, D (2015). 'An education worth having: The aspirations and the development of the Whole Education Network in England' European Journal of Education: Volume 50, Issue 2, pages 184-195

Cruddas, L (2018). 'Where next for the self-improving school system? Getting system Governance Right' FASNA

Department for Education (2010). 'The Importance of Teaching: The Schools White Paper 2010' London: DfE

Department for Education (2014). 'Do academies make use of their autonomy?' London: DfE

Department for Education (2014). 'The Government's response to the Select Committee report on school partnerships and collaboration' London: DfE

Department for Education (2015). 'Measuring the Performance of Schools within Academies and Local Authorities (Statistical Working Paper SFR 09/2015)' London: DfE

Department for Education (2016a). 'Educational Excellence Everywhere: White Paper, Cm 9230' London: DfE

Department for Education (2016b). 'Schools National Funding Formula: Government consultation- Stage One' London: DfE.

Department for Education (DfE) (2016c). 'Written evidence submitted by the Department for Education' London: DfE

Department for Education (2016d). Multi-Academy Trust Performance Measures: England 2014 to 2015 (Statistical Working Paper SFR 32/2016). London: DfE [Online]

Department for Education (2016e). 'Briefing Paper Number 07549, Every School an Academy: The White Paper Proposals 29 April 2016' London: DfE

Department for Education press notice, 6 May 2016. 'Next steps to spread educational excellence everywhere announced'. London: DfE

Department for Education (DfE) (2017a). 'Governance Handbook. For academies, multi-academy trusts and maintained schools' London: DfE

Department for Education (2017b). 'Experimental Statistics: Multi-academy trust performance measures: England, 2015 to 2016' London: DfE

Department for Education (2017c). 'Unlocking Talent, Fulfilling Potential' London: DfE

Department for Education (2018a). 'Official Statistics: Multi-academy Trust Performance Measures: England, 2016 to 2017' London: DfE

Department for Education (2018b). 'Schools, Pupils and their Characteristics in Statistics: School and Pupil Numbers' London: DfE

Díaz, J, Civís, M, Daly, A J, Longás, J and Riera, J (2016). 'Networked leadership in educational collaborative networks' Educational Management Administration & Leadership: Volume 45, Issue 6, pages 1040-1059

Duffy, G and Gallagher, T (2014). 'Sustaining school partnerships: the context of cross-sectoral collaboration between schools in a separate education system in Northern Ireland' Review of Education, Volume 2, Issue 2, pages 189–210

Dunford, J, Hill, R, Parish, N, and Sandals, L, (2013). 'Establishing and Leading New Types of School: Challenges and Opportunities for Leaders and Leadership' Nottingham: National College for School Leadership

Earley, P and Greany, T (2017). 'School Leadership and Education System Reform' London: Bloomsbury

Ehren, M C M and Godfrey, D (2017). 'External accountability of collaborative arrangements; a case study of a Multi Academy Trust in England' Educational Assessment, Evaluation and Accountability: Volume 29, pages 339–362

Ehren, M C M (2017). 'Seminar presentation: Accountability of educational networks: what, why and how?' London: UCL Institute of Education [online]

Ehren, M C M, Janssens, F J G, Brown, M, McNamara, G, O'Hara, J and Shevlin, O (2017). 'Evaluation and decentralised governance: Examples of inspections in polycentric education systems' Journal of Educational Change: Volume 18 pages 365–383

Estyn (2015). 'School-to-school support and collaboration' Cardiff: Estyn

Feys, E and Davos, G (2014). 'What comes out of incentivized collaboration: A qualitative analysis of eight Flemish school networks' Educational Management Administration & Leadership: Volume 43, Issue 5, pages 738-754

Gee, G, Worth, J and Sims, D (2015). 'Academies and Maintained Schools: What do we know?' Slough: NfER

Gilbert, C (2012). 'Towards a Self-improving School System: School Accountability' Nottingham: National College for School Leadership

Gilbert, C (2017). 'Optimism of the Will: The Development of Local Area-based Education Partnerships' London: London Centre for Leadership in Learning.

Gilbert, C, Husbands, C, Wigdortz, B and Francis, B (2013). 'Unleashing Greatness: Getting the Best from an Academised System – the report of the academies commission' London: RSA/Pearson.

Ginnis, S, Mollidor, C and Zwolinski, F (2017). 'Academies Insight Project: understanding system capacity' London: DfE.

Glover, T, Hannan, S, and Warburton, K, (2014). 'Sustainable Business Models for Teaching Schools' Nottingham: National College for Teaching and Leadership/DfE

Greany, T (2014). 'Are we Nearly There Yet? Progress, issues and possible next steps for a self-improving school system' London: Institute of Education Press

Greany, T (2015a). 'The Self-improving System in England: A Review of Evidence and Thinking' Leicester: Association of School and College Leaders

Greany, T (2015b). 'More fragmented, and yet more networked: analysing the responses of two local authorities in England to the coalition's 'self-improving school-led system' reforms' London Review of Education: Volume13, Issue 2, pages 125–143

Greany, T. (2016), 'Collaboration, Partnerships and System Leadership across Schools'. In Earley, P. and Greany, T. (eds) (2016) School Leadership and School System Reform. London: Bloomsbury

Greany, T and Allen, T (2014). 'School Improvement Networks and System Leadership in Coventry: Evaluating progress, areas for development and possible next steps' London: London Centre for Leadership in Learning, IOE

Greany T and Scott, J (2014). 'Conflicts of Interest in Academy Sponsorship Arrangements' London: House of Commons Education Select Committee

Greany, T and Ehren, M (2016). 'Written evidence to the House of Commons Education Committee. Multi-academy Trusts: Seventh Report of Session 2016-2017' London: The Stationery Office

Greany, T (2017). 'Collaboration, partnerships and system leadership across schools' In Peter Earley and Toby Greany (eds.), School Leadership and Education System Reform. London: Bloomsbury Publishing

Greany, T and Higham, R (2018), 'Hierarchy, Markets, Networks and Leadership: Understanding the 'Self-improving' School System Agenda in England' London: UCL IOE

Greatbatch, D and Tate, S (2018). 'MAT CEOs: Skills and Knowledge Requirements' London: DfE

Gu, Q, Rea, S, Smethem, L, Dunford, J, Varley, M and Sammons, P (2015). 'Teaching Schools Evaluation: Final Report' London: DfE

Hadfield, M and Jopling, M (2011). 'Networking and Collaboration in Urban Contexts in England: The Problems and Possibilities of Working Together to Improve Social Inclusion' Berlin: ECER.

Hargreaves, D (2010). 'Creating a Self-improving School System' Nottingham: NCSL.

Hargreaves, D (2011). 'Leading a Self-improving System' Nottingham: NCSL

Hargreaves, D (2012). 'A Self-improving School System: Towards Maturity' Nottingham: NCSL

Hatcher, R (2014). 'Local authorities and the school system: The new authority-wide partnerships' Educational Management, Administration and Leadership: Volume 42, Issue 3, pages 355-371

Hattie, J (2015a). 'What Doesn't Work in Education: The Politics of Distraction' London: Pearson

Hattie, J (2015b). 'What works Best in Education: The Politics of Collaborative Expertise' London: Pearson

Higham, R and Earley, P (2013). 'School autonomy and government control: School leaders' views on a changing policy landscape in England' Educational Management, Administration and Leadership: Volume 41, Issue 6, pages 701-717

Hill, R and Matthews, P (2008). 'Schools Leading Schools: The Power and Potential of National Leaders of Education' Nottingham: National College for School Leadership

Hill, R and Matthews, P (2010). 'Schools Leading Schools II: The Growing Impact of National Leaders of Education' Nottingham: National College for School Leadership

Hill, R, Dunford, J, Parish, N, Rea, S and Sandals, L (2012). 'The Growth of Academy Chains: Implications for Leaders and Leadership' Nottingham: National College for School Leadership

Hillary, J, Bamford, S, Bernardinelli, D and Gee, G (2017).' A Tale of Eight Regions. Part 2: Challenge and Support Across the Regional Schools Commissioner Areas' Slough: NFER

Hopkins, D, Stringfield, S, Harris, A, Stoll, L, & Mackay, T (2014). 'School and system improvement: A state of the art review' School Effectiveness and School Improvement: Volume 25, pages 257–281

House of Commons Education Committee (2013). 'School Partnerships and Cooperation: Fourth Report of Session 2013-14' Volume 1. London: The Stationery Office

House of Commons Education Select Committee (2015). 'Academies and Free schools: Fourth report of session 2014-15, HC 58' London: The Stationery Office

House of Commons Education Committee (2017). 'Multi-academy trusts: Seventh Report of Session 2016-2017' London: The Stationery Office

Howland, G (2014). 'Structural reform: The experience of ten schools driving the development of an all-age hard federation across a market town in northern England' Management in Education: Volume 29, Issue 1, pages 25-30

Hutchings, M, Greenwood, C, Hollingworth, S, Mansaray, A, Rose, A with Minty, S and Glass, K (2012). 'Evaluation of the City Challenge Programme' London: London Metropolitan University/Coffey International Development for the Department for Education

Hutchings, M, Francis, B and De Vries, R (2014). 'Chain Effects: The Impact of Academy Chains on Low Income Students' London: Sutton Trust.

Hutchings, M, Francis, B and Kirby, P (2015). 'Chain Effects 2015: The Impact of Academy Chains on Low Income Students' London: Sutton Trust

Hutchings, M, Francis, B and Kirby, P (2016). 'Chain Effects 2016: The Impact of Academy Chains on Low Income Students' London: Sutton Trust

Hutchings, M and Francis, B (2017). 'Chain Effects 2017: The Impact of Academy Chains on Low Income Students' London: Sutton Trust

Ingham, A (2014). 'Recent Developments in the Leadership of Schools in England' Report sponsored by Itaú Social Foundation (Brazil) and supported by the British Council (São Paulo)

Janssens, F J G and Ehren, M C M (2016). 'Towards a model of school inspections in a polycentric system' Evaluation and Program Planning: Volume 56, pages 88-98

Jopling, M and Hadfield, M (2015). 'From fragmentation to multiplexity: decentralisation, localism and support for school collaboration in England and Wales' Journal for Educational Research Online: Volume 7, Issue 1, pages 49–67

Keddie, A (2015). 'School autonomy, accountability and collaboration: a critical review' Journal of Educational Administration and History: Issue 47 Issue 1, pages 1-17

Kendrick, A, Close, P and Outhwaite, D (2017). 'What are system leaders in England learning about school-to-school support in a 'self-improving' system'?' British Educational Leadership, Management and Administration Society (BELMAS) conference, 7-9 July 2017, Stratford-upon-Avon, UK

Kershaw, C (2016). 'Schools are not islands' in R Blatchford & R Clark (eds), Self-Improving Schools: The Journey to Excellence. Melton: John Catt Educational Ltd

Jopling, M and Hadfield, M (2015). 'From fragmentation to multiplexity: decentralisation, localism and support for school collaboration in England and Wales'. Journal for Educational Research Online: Volume 7, Issue 1, pages 49–67

Male, T (2017). 'Leadership in multi-academy trusts' Paper presented at International Conference on Educational Leadership & Management ILEA-J, Kingston, Jamaica – March 2017

Matthews, P, and Berwick, G, (2013). 'Teaching Schools: First Among Equals?' Nottingham, National College for Teaching and Leadership

Matthews, P and Headon, M (2015). 'Multiple Gains: An Independent Evaluation of Challenge Partners' Peer Reviews of Schools' London: UCL IOE

Macleod, S, Sharp, C, Bernardinelli, D, Skipp, A and Higgins, S (2015). 'Supporting the Attainment of Disadvantaged Pupils: Articulating Success and Good Practice' London: DfE

Savage, M and Mansell, W (2018). 'Dozens of academy schools need bailouts from taxpayers'. Guardian [Online]

McCrory, J (2015). 'Developing Collaborative Networks in a Local Authority' SCEL Fellowship Programme Area of Enquiry

Mourshed, M, Chijioke, C, and Barber, M, (2010). 'How the World's Most Improved School Systems Keep Getting Better' London: McKinsey & Company

Moore, T A and Rutherford, D (2011). 'Primary strategy learning networks: A local study of a National Initiative' Educational Management Administration & Leadership: Volume 40 Issue 1, pages 69–83

Muijs, D, West, M and Ainscow, M (2010). 'Why network? Theoretical perspectives on networking' School Effectiveness and School Improvement: Volume 21, Issue 1, pages 5–26

Muijs, D, Ainscow, M, Chapman, C and West, M (2011). 'Collaboration and Networking in Education' London: Springer

Muijs, D (2015). 'Collaboration and networking among rural schools: Can It work and when? Evidence from England' Peabody Journal of Education: Volume 90, Issue 2, pages 294–305

Muijs, D. (2015). 'Improving schools through collaboration: a mixed methods study of school-to-school partnerships in the primary sector' Oxford Review of Education: Volume 41, Issue 5, pages 563–586

Munby, S and Fullan, M (2016). 'Inside-out and Downside-up: How Leading From the Middle has the Power to Transform Education Systems' London: Education Development Trust and Motion Leadership

National College for Teaching and Leadership (2014). 'Governance in Multi-academy Trusts' Nottingham: National College for Teaching and Leadership

National Foundation for Educational Research (2014). 'Mid-point Evaluation of the Lead and Emerging Practitioner School Tranche 1 Pathfinder Project' Cardiff: Welsh Government

National Foundation for Educational Research (March 2016). 'Evaluation of Tranche 2 of the Lead and Emerging Practitioner School Pathfinder Project' Cardiff: Welsh Government

OECD (2014). 'Improving Schools in Wales: An OECD perspective' Paris: OECD

Ofsted (2013). 'Unseen children: educational access and achievement 20 years on' Manchester: Ofsted

Poet, H & Kettlewell, K (2011). 'Evaluation of City Challenge Leadership Strategies: London Area Report' Slough: National Foundation for Educational Research

Popp, J, Milward, B, MacKean, G, Casebeer, A and Lindstrom, R (2014). 'Inter-organizational Networks: A Review of the Literature to Inform Practice' Washington, D.C.: IBM Center for the Business of Government

Rea, S, Hill, R and Sandals, L (2011). 'System Leadership: Does School-to-School Support Close the Gap?' Nottingham: National College for School Leadership

Rea, S, Hill, R and Dunford, J, (2013). 'Closing the Gap: How System Leaders and Schools Can Work Together' Nottingham: National College for Teaching and Leadership/Department for Education

Rea, S, Sandals, L, Parish, N, Hill, R and Gu, Q (2015). 'Leadership of Great Pedagogy in Teaching School Alliances: Final Report (Teaching schools R&D network national themes project 2012-14)' London: DfE

Rudd, P, Poet, H and Featherstone, G (2011). 'Evaluation of City Challenge Leadership Strategies: Overview Report' Slough: NFER

Salokangas, M and Chapman, C (2014). 'Exploring governance in chains of academy schools' Educational Management, Administration and Leadership: Volume 42, Issue 3, pages 372-386

Sandals, L and Bryant, B (2014). 'The Evolving Education System in England: A "Temperature Check"' London: DfE

School Improvement Partnership Programme (2015). 'Using Collaboration and Enquiry to Tackle Educational inequality: Summary report' Livingston: Education Scotland

Secretary of State for Education, 27 October 2016. 'Written Statement to Parliament, Technical and Further Education' HCWS223

Stoll, L (2015). 'Three Greats for a Self- improving School System: Pedagogy, Professional development and Leadership: Executive Summary (Teaching schools R&D network national themes project 2012-14)' London: DfE

TES, 15 May 2018. MATs 'must learn the art of persuasion'

Townsend, A (2015). 'Leading School Networks: Hybrid Leadership in Action?' Educational Management, Administration & Leadership: Volume 43, Issue 5, pages 719–737

Varga-Atkins, T, O'Brien, M, Burton, D, Campbell, A and Qualter, A (2010). 'The importance of interplay between school-based and new development: School professionals' experiences of inter-school collaborations in learning networks' Journal of Educational Change: Volume 11, Issue 3, pages 241-272

West, M (2010). 'School-to-school cooperation as a strategy for improving student outcomes in challenges contexts' School Effectiveness and School Improvement: Volume 21, Issue 1, pages 93–112

Wilkins, A (2016). 'Modernising School Governance: Corporate Planning and Expert Handling in State Education'. London: Routledge

Woods, C, Armstrong, P, Bragg, D, Collins, A, and Pearson, D (2010). 'School Business Manager Demonstration Project Evaluation Study: Final Report'. Nottingham: National College for School Leadership (NCSL)

Woods, C, Armstrong, P and Pearson, D (2013). 'Perfect Partners or Uneasy Bedfellows? Competing understandings of the place of business management within contemporary education partnerships'. Educational Leadership and Management: Volume 41, Issue 6, pages 751-767

Woods, P A and Simkins, T (2014). 'Understanding the local: Themes and Issues in the Experience of Structural Reform in England'. Educational Management and Leadership: Volume 42, Issue 3, pages 324-340

Appendix 1: Search terms

The following search terms (and variants thereof) were combined with "school to school support" or "school improvement" and/or different levels of education and/or subject areas:

- School partnerships

- Inter school collaboration

- Academy sponsors

- Academy chains

- Multi-academy Trusts

- Federations

- Maintained schools

- Teaching School Alliances

- National Leaders of Education

- Local Leaders of Education

- Specialist Leaders of Education

- National Leaders of Governance

- Leadership

- Governance

- Impact

- Effectiveness

- Sustainability

- Challenges

- Government policy

- Evaluation

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