



Systemically oriented leadership: Leading multi-school organisations in England

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Abstract

This paper takes ecological systems theory as a conceptual basis for defining and examining the main aspects of ‘system leadership’ in a large-sized multi-school group, such as a multi-academy trust (MAT) in the context of England. The theory provides a sound framework for understanding the processes and interactions involved in this notion of leadership which is framed within an educational ecosystem as a complex set of interconnected elements. Such an approach focuses on MAT leadership strategies able to create and guide a holistic conception of educational change in the market-oriented and decentralised educational system of England. Data were drawn from interviews with eight MAT leaders and analysed alongside documentary evidence. The findings provide specific insight into the daily work of executive leaders acting as *system leaders* seeking to create and sustain achievement-centred and practice-focused systems MAT-wide. They demonstrate the social and developing as well as the organisational aspects of system leadership in MATs and the ways in which different elements of the environment influence executive leaders in thinking and acting systemically. This paper adds value to existing knowledge on MATs and the ways in which they are led by system players. It broadens the frame of reference of leadership beyond the individual school to consider features of the broader system and environment. Complexity and ecological perspectives provide essential tools to understand more deeply educational change and have the potential to analyse notions of leadership across multi-school groups.

Keywords Complexity · Ecological framework · Multi-academy trusts · System leadership · Systems thinking

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Introduction

Under the structural changes in the education policy environment over the last two decades, England has seen a growing trend of reforms including the introduction of academy schools and multi-school organisations taking over the schooling landscape (Eyles & Machin, 2019). Academies are state-funded schools that operate outside of local government oversight (i.e. Local Authority) and are directly accountable to the Department for Education (DfE). This means they have more freedom over their staffing, curriculum, budgeting, and admissions, but they are ultimately accountable for delivering against performance targets and being subject to either forced takeover or even closure in case of underperformance (West & Wolfe, 2019).

Grounded in free market approaches to education taking place at a global scale, the academy movement has now become a system-wide structural reform (Salokangas & Ainscow, 2017). These approaches focus on parental school choice and the notion of ‘autonomy’ as a major driving force to ‘freeing up’ public schools from direct top-down governance. Examples of such choice reforms, especially through market mechanisms, are often found in education systems under the logic that competition for student intake and academic outcomes would lead to system-wide effects (Wiborg, 2010; Wohlstetter et al., 2013). Referring to the concept of publicly funded quasi-autonomous schools as being a global trend, Salokangas and Ainscow (2017) argue that drawing surface-level policy comparisons between different education systems can be problematic. By briefly drawing on similar types of schools in international contexts such as the charter schools in the USA, the Swedish free schools, and the independent public schools in Australia linked to the English academies policy, they argue that country differences in selection processes and context are key features that should be taken into account when justifying national policies. Despite policymakers’ intentions that market-oriented school reforms and higher levels of accountability will raise standards and provide additional choice for parents, the related international literature to date suggests that, in reality, there are often negative unintended consequences for equity and social justice (Frankenberg et al., 2017; Scott & Holme, 2016; West & Wolfe, 2019). Particularly troubling in this regard is the emphasis on disadvantaged children in schools serving communities in challenging socio-economic conditions. Several studies in various international contexts have demonstrated that the quasi-autonomous nature of these public schools and their impact on closing ‘achievement gaps’ for disadvantaged students is inconclusive (Eyles & Machin, 2019; Hutchings & Francis, 2018; Östh et al., 2013; Swanson, 2017).

In England, the rapid expansion in the proportion of academy schools was a key element of the new policies that aimed to develop what the government has called a ‘self-improving, school-led system’ (DfE, 2010). In 2010, there were around 200 academies (out of 24,000 publicly funded schools), but by October 2021, more than a third of all primary schools and more than three quarters of all secondary schools were academies and educating about half of all pupils in

England (DfE, 2021). Consequently, the academies programme allowed for mass conversions, either voluntary or forced takeovers where schools were underperforming, irrespective of sector (Eyles & Machin, 2019). This trend also enabled the genesis of non-profit multi-school organisations, with the most dominant organisational arrangement to be that of multi-academy trusts (MATs) operating groups of academies at a local, regional, and/or national level and becoming accountable for their individual performance, centrally allocating funding, and monitoring expenditures (Constantinides, 2021; Greany & Higham, 2018). Education policy researchers refer to MATs as ‘middle tier’ institutions responsible for governance, management, and administration of education, working outside of the traditional local authority level (Greany, 2020; Simkins et al., 2018). A closer comparison to the organisational structure of MATs in England is the non-profit charter networks in the USA (Farrell et al., 2012; Miron et al., 2021). These multi-school networks co-exist with traditional school districts and other types of schools and organisational arrangements assuming operation and performance responsibilities for the schools they run (DiMartino, 2014; Roch & Sai, 2015).

The promotion of academisation and the encouragement by the government and the relevant DfE for schools to join a MAT also led to the creation of a wide range of executive leadership roles and therefore generated a growing interest for researchers to investigate the role and influence of these executives on different aspects of school improvement processes across groups of schools. The interest in the study discussed in this paper emanates from an appreciation of the complexities of leadership and the MAT model and the relative paucity of available research, guidance, and knowledge known about leadership in the context of English MATs.

System leadership in England

English policymakers and other national reform supporters called for wider system-level improvements cultivating a reliance on *system leadership* and centrally designated roles to lead new groups and clusters of schools (Hargreaves, 2010, 2011; Hill, 2010). The development that has prompted this concept was championed by the OECD in 2008 based on the narrative of a global governance trend away from hierarchical central control towards self-regulation of a complex adaptive system (Hopkins, 2009; Pont et al., 2008). In a contemporary review of the evidence base on system leaders and leadership, Harris et al. (2021) provided country-specific examples of this loosely defined concept of leadership. They concluded that the practices of system leaders/ship remain ubiquitous and context-specific subject to each country’s educational reform agenda.

Within the English policy and schooling landscape, this concept loosely refers to leadership activity across groups of schools aiming to bring about change and improvement at a systemic level (Cousin, 2019; Higham et al., 2009). However, the range of system leadership roles, practices, and skills remains wide, including executive roles in MATs. The difficulty to conceptualise system leadership in MATs and lay the foundations for what its practices entail emerges from the complexity and uncertainty prevalent in leaders’ work, the substantial abilities needed to manage

MAT-wide learning and improvement, and, in some cases, educational professionals with little experience. Still, additional difficulty emerges from the environments in which these leaders operate. Beyond fragmentation and turbulence, this additional difficulty emerges from the unpredictable development of what Glazer and Peurach (2013) call ‘system-level infrastructure’. This includes the interdependent political, policy, private, and professional activity that motivates, enables, and constrains their strategies that are intended to influence key systemic changes in established practices, attributes, knowledge, and norms in schools (Peurach, 2016).

The central role played by executive leaders, acting as *system leaders* in MAT-wide instructional reform, goes beyond reform-via-programme adoption to deep engagement in the work of systemic, aspirational practice-focused improvement (Elmore, 2004; Fullan et al., 2015). They constitute an important source of productive organisational learning and MAT-wide improvement with increasing responsibilities such as: establishing and monitoring MAT-wide improvement strategies, improving individual and organisational capacity, managing effective resource and account management, and creating conditions conducive to a high-trust culture with value-added relationships with stakeholders and collaborators in the environment of the MAT (Constantinides, 2021; Greany & Higham, 2018).

Although the literature summarises scholarly attempts to give different yet interconnected meanings to the conceptual development of *system leadership*, there remains a need for examining and fielding systemic, practice-oriented strategies that refine and extend capabilities at multiple levels in response to local needs and environments. The preceding framework elaborates, refines, and extends the conceptualisations within the international evidence base (see Harris et al., 2021) to ground it more specifically in the leadership of English multi-school organisations.

Framing the educational ecosystem and system leadership

Informed by complex systems’ conceptual tools and Bronfenbrenner’s (1979) ecological framework for human development, this paper explores the various layers that affect systems thinking and leading in the English educational environment. This framework helps characterise the expansive and fragile nature of the English educational ecosystem, acknowledging the complex connections between the ecosystem elements, while extending the reasoning behind the enactment of leadership practices in line with the concept of system leadership.

The ecological model is used to examine interactions between the micro-, meso-, macro-, exo-, and chrono-systems as it recognises and explains the interconnected dynamic relationships that occur within and between the levels of system leadership activity. Therefore, it is important to contextualise the term ‘system leadership’ in reference to this paper and the English context as the work of the MAT executive leaders (i.e. chief executive officer and members of the central leadership team) and their role across groups of schools. For the purposes of this paper, the five layers of a socio-ecological framework are defined as follows:

The micro-system is defined as the pattern of activities, roles, and interpersonal relationships experienced by system leaders (i.e. MAT executive leaders). It is the

immediate proximal setting the person directly interacts with that invite, permit, or inhibit activity. In the context of this study, colleagues from multiple levels of the leadership structure (i.e. school and MAT-wide), teaching staff, students, and parents that a system leader works with are a part of the microsystem.

The meso-system is the centre of attention in the study and is defined as the wider context populated by (educational) professionals within which system leaders' experiences and relationships expand. As with Bronfenbrenner, the meso-system is associated with a more diverse and complex set of relationships beyond the immediacy of the microsystem. The meso-system refers to school and MAT organisational attributes such as institutional culture and profile, leadership practices, structural affordances, or barriers. Hence, the school's and MAT's organisational belief systems and values may influence the expectations endorsed by actors of a microsystem.

The exo-system is defined as any environmental setting which does not involve system leaders directly, but in which events take place that may have an impact on them. Thus, it represents indirect influences exerted by the peripheral actors of the educational ecosystem which are largely outside of individuals' control. Examples may include policy initiatives to reinforce accountability and autonomy, parental demands for school choice, commercial and research partners, networks, and higher education institutions.

The macro-system is shaped by the national or global trends for example the neo-liberal political and economic agenda and consists of the overarching beliefs and values that underpin education and schooling.

The chrono-system represents a time-based dimension that influences the operation of all levels of the ecological systems. The chrono-system refers to both short- and long-term time dimensions of the individual system leader over the course of a lifespan, as well as the socio-historical time dimension of the macrosystem in which the individual lives.

The key factors in the conceptual framework are summarised in Fig. 1:

Therefore, embracing the ecological systems perspective recognises the value of placing individuals, schools, and organisations within their larger environment by drawing on interrelationships within and across the systems. Hatch (2002, p.632) highlights that schools are part of an ecosystem in which "many different entities are trying to co-exist" and in which "changes are constantly underway". By extension, this paper argues that schools within MATs function in ecosystems that consist of elements with different degrees of connectedness and interdependence. In addition, MATs comprise units at different levels including individuals with complex relationship systems and different personal traits. As complex adaptive systems, schools and MATs are not capable of shaping the dynamics and leading the whole ecosystem independently from others (Kershner & McQuillan, 2016). Instead, systems are 'adaptive' in terms of responding to their environment.

Using the metaphor of a biological ecosystem, the interest in the ecological approach also acknowledges the importance of seeing 'system leadership' occurring at the meso-level as operating on several elements within an interconnected ecosystem. From a complexity thinking perspective, system leadership does not occur as a series of isolated events but in unison with the activity of

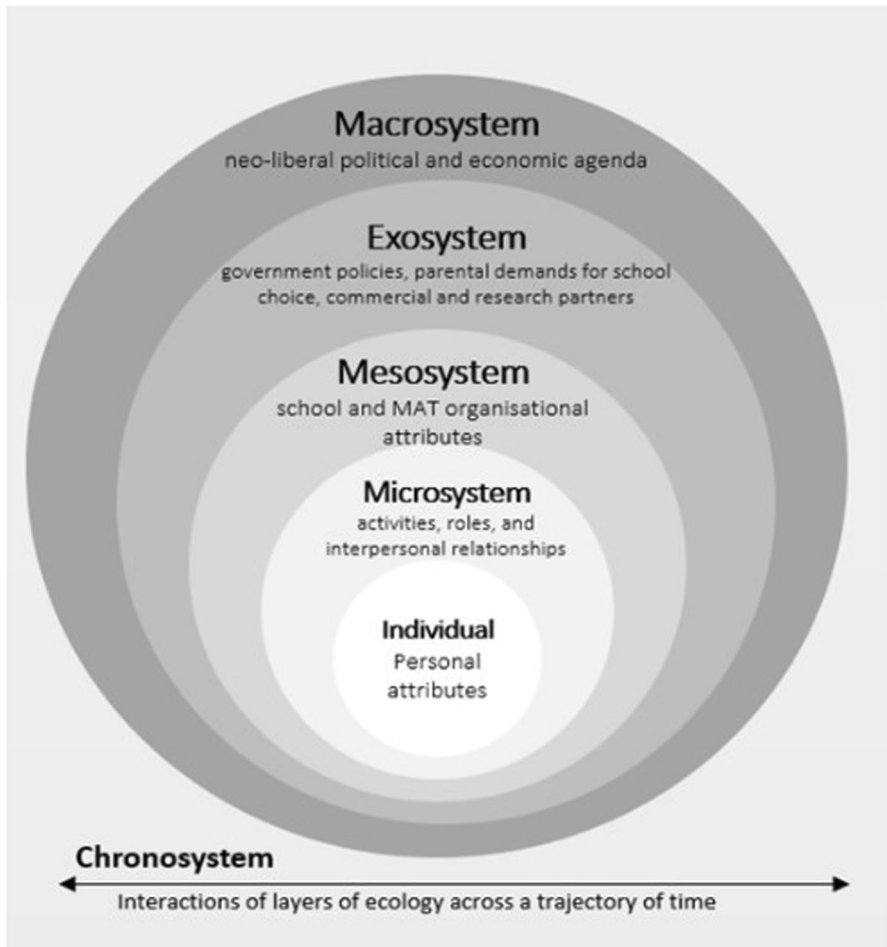


Fig. 1 Educational ecosystem framework-ecological influences underpinning system leadership practices (adapted from Bronfenbrenner, 1979)

autonomous entities (MAT executive leaders), collectives (school leaders and teachers), and systems and subsystems within grander unities (schools within MATs within socio-political educational contexts) (Senge et al., 2012; Shaked & Schechter, 2017). Consequently, to explain system leadership, one would need to take into account what sort of local knowledge, difficulties, routines, and aspirations shape and are shaped by individual practices, values, and beliefs (Constantinides, 2021). The active role of values, morals, and ethical purposes would therefore need to be acknowledged in decisions about which strategies to apply and how they should be combined, applied, and changed over time. These would collectively best lead to the building of organisational culture and actions involving all stakeholders through which educational reform may be more likely

to occur. Therefore, system leadership is construed as a complex process representing recursive interactions between levels of the ecosystem and elements that join together in ways that are unpredictable and uncertain (Constantinides, 2021).

System leadership as conceptualised in this paper does reflect most of the principles and practices found in current models of both instructional and transformational leadership (Day et al., 2016; Robinson et al., 2008). It focuses on the efforts of system leaders to improve the quality of teaching and learning in the MAT as a whole (the primary focus of instructional leadership model), as well as their efforts to create organisational conditions which would enable and support those improvement efforts (the primary focus of transformational leadership model). This conceptualisation is based on Fullan's terms of system leadership suggesting that leadership practice has a systemic orientation related to systems thinking (Fullan, 2005). Importantly, the complexity of executive leadership in MATs offers a way to revive systems thinking. Systems thinking offers a potential means to assist MAT leaders respond to growing organisational complexities and move leadership to a more adaptive model in their efforts to achieve system-wide reform. Systems thinking, as explored in this paper, refers to an approach that views systems as wholes rather than compilations of individual components and allows one to see the interconnectedness and interdependencies of agents within systems (Senge et al., 2012). Hence, it involves a broader view that creates a better understanding of the big picture. The application of systems thinking for initiating and coordinating change and improvement in schools has seen a growing interest from scholars across and within diverse international contexts (Constantinides, 2021; Gurr et al., 2020; Mette & Riegel, 2018; Norqvist & Årlestig, 2020; Shaked & Schechter, 2017).

When it comes to ecological leadership perspectives, Smith et al. (2017) explored how multiple factors have interacted with and influenced instructional teacher leadership in using conceptually based and student-centred practices. Similarly, Toh et al. (2014) highlighted the complexities of ecological leadership whose dimensions included a combination of systems thinking and system leadership that underpin collective capacities of multiple stakeholders within and across the different levels of the education ecology. While the literature linking leadership and systems thinking is thematically widely developed, empirical evidence of the application of systems thinking and leading framed within the multi-dimensional ecological approach is relatively limited. Framing this research within the English context and more specifically within MATs, this paper explores the main dimensions of leading systemically to provide a more nuanced picture of what 'system leadership' in MATs entails.

This paper addresses the following questions:

- In what ways do system leaders interact with the elements of their environment in their efforts to lead systemically?
- What are the aspects of a systems approach in guiding educational change initiatives?

Research approach

The paper follows a qualitative case study research approach which helps refine our understanding of how the context of one large-sized MAT and the environment around it affect what practices are enacted and in what ways they are implemented in order to lead systemically. The evidence-based socio-ecological framework was used to situate the analysis of system leadership practices by investigating the experiences, values, and responsibilities of MAT leaders. The interpretation of each layer of the model was based on the study context.

Data collection

The data used in this paper were collected as part of a larger study which explored the complexity of executive leadership in MATs and the ways leaders used their understandings of their practices and managed their environments to simultaneously pursue system-wide impact and improvement. The selection of this case study MAT was based on its size and projected growth, student intake and geographical proximity serving high-poverty urban metropolitan areas. This helped the study to explore how variations in the selected criteria might be related to variations in system leadership practices and the importance of their broader influence across different contexts of member schools.

Data were collected through interviews and documents. Interviews were a tool that helped the researcher to gather in-depth information about features, practices, values, and beliefs of the system leaders. Semi-structured interviews were conducted with 8 purposefully selected members of the MAT leadership team during visits in schools and the MAT central offices. Participants in the sample were identified based on the leadership position they held and included individuals with a wide range of strategic and operational responsibilities across the MAT holding roles such as the chief executive officer (CEO), director of school improvement, director of teaching and learning, and executive principal. In other words, they were selected on the basis that they are able to provide rich and in-depth information relevant to the topic of the study. Questions focused on educational change and improvement efforts, their understanding of leading a group of schools, and how changes in their environment influenced (or not) their values, beliefs, and practices. Questions for the central team were modified to reflect their role and day-to-day leadership practices and the ways in which their CEO contributes to the improvement of the MAT as whole. This brings the CEO, as the operational lead and accounting officer of the MAT, to the centre of attention. Interviews were audio-recorded with the permission of the interviewees, and quotes have been anonymised to protect participants' identities.

Documentary evidence was used to complement and triangulate interviews. Documents included corporate strategy reports, three-year development plans, external judgements of standards by Ofsted (the national inspectorate), as well as student attainment in national tests. For those documents gathered, apart from reviewing

their contents, for instance that of a MAT's development plan, particular attention was given to the ways, under what circumstances and by whom the documents were created. This allowed for supporting evidence relating to facets of the MAT's organisational culture and the current practices of executive leaders.

Data analysis

Embracing an inductive stance, data were coded and categorised into analytical matrices with the use of thematic analysis. Searching for themes was an iterative process in which categories and patterns emerged from the data and were later cross-checked (Miles & Huberman, 1994). Grounded theory coding elements were used with a focus on devising a framework for examining variations in the emerging categories stemming directly from the lived experiences of the participants. This approach to analysis integrated defining, comparing, and interpreting similarities and differences in the categories (Charmaz, 2014) and allowed for new insights of system leadership practices that create structural and ecological alignment across schools in the MAT. Through member checking and triangulation of the datasets, the emergent analysis allowed for a robust and comprehensive picture of the system leadership landscape. NVivo software was used to classify and cluster the data.

Context

Blue Mountains Trust was established in 2012 and currently is one of the largest MATs in the country in terms of number of academies. The strategic aim is to reach 40 in the long term. At the time of the study, it operated 20 academies in four geographical hubs with a mix of primary, secondary, special, and alternative provision. Almost all academies in the MAT are situated in areas of high deprivation and poverty with the level of socioeconomic disadvantage of the pupil intake (measured by Free School Meal proxy) to be 52% at the MAT level. The MAT serves nearly 5000 pupils, the majority of which come from White British backgrounds with English as their first spoken language. Two-thirds of the academies have joined the MAT within the first three years of its inception. More than half of its academies are converters, meaning they have chosen to convert to academy status based on their performance history. No academies declined in their performance, as judged by Ofsted grades upon their entry to the MAT with 10 of them maintaining their grade ('Good' or 'Outstanding') since conversion.

The MAT has central offices in a sub-urban area of a medium-sized city, which include a business and operations centre, finance, human resources, and payroll. It has developed a number of trading services (at-cost access) to complement the work of its academies. These are related to social care and mental health support for young people in schools, specialist support for pupils with additional needs, and an online supply staff agency. The central leadership team (CLT) includes the CEO and 12 other members most of whom have oversight of a range of academies with each academy having its own principal.

Findings

Bronfenbrenner's (1979) ecological model was drawn upon to present the emergent findings and the different layers of influence between the aspects of system leadership and the interrelationships between these. Positioning system leadership at the centre of the framework (see Fig. 1), the following sections consider the influence and interaction of personal (intrinsic) and environmental (extrinsic) features of a systems approach to leading educational change. A suite of social and developing as well as organisational aspects included interdependent responsibilities that enabled and/or challenged the leadership strategies of executive leaders in their MAT. These enablers and challenges were attuned to individual system leaders, the schools, and overarching MAT organisation, and extended to the broader environment.

Social and developing aspects of system leadership

Social and developing aspects of system leadership focused on building organisational culture and nurturing relationships both within and beyond the MAT. Within the MAT, examples include building and embedding a system-wide vision, developing connections (bridges) in the communication of vision, and motivating staff and ensuring their commitment through professional development. Beyond the MAT, examples of social and developing responsibilities include creating and sustaining relationships with key constituencies in the environments of the organisation (e.g. Board of Trustees, parents, Local Authorities) acting as the public face of the organisation and as an advocate on behalf the MAT, its stakeholders, and its foundations.

Building and embedding a system-wide vision

Developing a system-wide vision was considered one of the critical strategies of MAT leaders as found in several examples from the study highlighted by their efforts to achieve 'buy-in', especially from the school principals. At its core, the vision-setting process aimed to provide shared understanding about the organisation's purpose; it defined the values that guided actions and decision making and it made public what the MAT is about.

The CEO had been in post for five years and joined the MAT as an executive principal when it had only one academy. Building on his professional background, he saw his role as an opportunity to realise a vision for education across multiple schools and communities.

As a principal, I had a very clear strategic vision, I was able to articulate that vision. I was able to create a very coherent culture within a school environment and managed that in the way I believed that values people, children and puts joy at the heart of educational experience. I was able to manage

stakeholders effectively, I had a good political insight and understanding, and skills and I was respected amongst peers. In terms of being a CEO, I think all of those things appertain and are still accurate.

The vision, values, and principles of the MAT were considered by all participants to be the building block on which the whole MAT was founded. These tended to be grounded in specific objectives aimed at enhancing student outcomes and improving the performance of schools. Attending to the historically low socio-economic background of the school communities he served, one of the executive principals responsible for five schools reported:

I want to achieve the very best outcomes, safety, and future for young people in my communities, where I work but I am also happy to support and influence other communities and wider. I am from the local area that my schools are sponsored. I know the area, the students, and the communities well (Executive Principal, five academies).

The process of co-constructing and co-designing the strategic vision appeared to be a collective effort owned by all involved parties with the CEO being the ‘engineer’, while the responsibility of the members of the CLT as well as the principals was to make sure the vision was embedded within their schools.

Vision and values were recognised by all participating system leaders as an integral part of transforming the member schools and improving student outcomes. Through their engagement in building a shared sense of direction for the MAT, a process that included many elements of strategic planning aiming at identifying ambitious outcomes for all students, they acknowledged that this was a component used as a lever for a whole MAT reform.

The strategic goals are much more about the growth and development of ethos and values of the MAT rather than individual schools (Director of Learning).

Developing connections (bridges) in the communication of vision

As an example of bridging strategies in system leadership efforts to steer their MAT through large-scale changes, the CLT, starting with the CEO and extending to other executive leaders, reported that communication with school leaders was central in supporting the implementation of a shared vision, mission, and values for all member schools. This strategic emphasis on timely, responsive communications was aimed to be part of a larger culture portrayed by elements of trust, and collaboration, especially between the CEO and school-level leaders which was mediated by the executive leadership team.

Our vision and values are at the centre of our message. We play a system leadership role by championing those values (Executive Principal, three academies).

Since the MAT was operating in four geographical hubs, distance between central offices and schools was often an issue for face-to-face meetings between MAT and

school leaders. One of the executive principals who was responsible for five academies reported that the MAT was using technology as an enabler to connect with her principals and “making sure there has been a real effort right from the outset, right from being one school to where we currently are, to knowing who people are, what they’re doing, what they need to do, how they’re providing feedback. You know who everybody is and that’s key”.

The complexity of the implementation process of the MAT’s vision and values highlights the important role of the executive team in recognising the complexities of schools and their contexts requiring them to adopt a holistic, and multifaceted perspective that directs attention not only to the organisation’s central offices but also to the interplays between the micro- and meso-elements of its environment. These interplays included supportive systems that would create elements of trust between the MAT leaders and school-level staff for creating standards of excellence.

There is a real passion for a moral compass being the same and you can feel that when you go to schools in the Trust. You can see we are all a bit special. It is that human element and determination to get it right for our children and to challenge national agendas by trying to redress the balance. To do that, we have to become a voice. It is about having a voice and in terms of each riven through every aspect of the Trust (Executive principal, two schools).

MAT leaders mentioned that trusting school principals with discretion regarding their schools’ alignment around a core vision and values would provide a motivational focus for their work.

If you trust principals to do what they do on a daily basis, then you don’t have to take decisions for them. I really try not to tell them how to do things. I run three different personalities and manage in different ways. I don’t want three clones of me (Executive principal, three academies).

The other thing that I’ve tried to promote is the two of them to work together without me. Part of the role of the executive principal is to make yourself as redundant as possible. They are getting really good at that now, looking at the problem together and they don’t need me tell them what to do. Every week we speak to each other, it is the only way I operate. If you don’t like it come and tell me. I don’t always get it my way and that’s fine. I don’t always know best (Executive principal, two academies).

The leadership pattern here is noteworthy. This trust-communication combination was expected to facilitate mutually constructive collaboration, which in turn would facilitate alignment with professional discretion. What system leaders appeared to be able to do was to create the conditions for the collaboration to happen, specifically through their ability to support the development of a shared and high-trust culture.

Motivating staff and ensuring their commitment through professional development

Understanding and developing people was a high priority for the system leaders in the study as they perceived themselves as enablers of organisational capacity building through leadership professional development. Operating at the meso-level, MAT leaders spoke of regular formal and informal meetings with school leaders in order to set objectives for professional development. For example, one of the executive principals responsible for three schools referred to a meeting with principals for the purposes of leadership professional development.

There is a lot of focus on sharing. I have been asked to be a facilitator in many activities and that makes me feel part of something bigger and part of the organisation. My principals do the 'moving forward' programme which is part of high development and I've got the offer to spend a week in a school and be part of their leadership team and meetings and being immersed into the environment.

Examples of principals' development of professional capacity often included coaching/mentoring and secondments which were facilitated by either the CEO or members of the CLT. The principal's role was viewed by several executive leaders as one of developing the human capital within their own school but also across schools in the MAT and creating the conditions necessary to support it. For example, one key role of executive leaders, and specifically the CEO in the MAT, was the need for them to create intentional pipelines to grow new leaders from within. This was a priority prior to initiate discussions for further expansion.

Part of the challenge that we have got right now is 20 academies with a pipeline of 3,4,5 nearly 30 soon. I think the Trust has a very comprehensive profile for leadership development in order to address this. The things discussed quite often is pipeline. When there is a blockage, do we have a steady flow through? How are we upscaling our team etc (CEO).

Acknowledging that having the professional experience of working towards continuous improvement was important to learn how to lead the MAT effectively, the CEO in the example above integrated a focus on leadership development into the MAT's strategy at the outset. Consequently, developing individual leaders' capacities as a way to broaden and deepen leadership within and across schools in the MAT was significant in system leadership efforts to select and endorse a strong continuity in leadership succession.

Creating and sustaining relationships with key constituencies in the environments of the organisation

The majority of MAT leaders were found to be working towards deepening the capacity of school-based staff, students, parents, and community members required

(according to their expectations) to engage in meaningful collaboration and shared power and decision making about equitable learning environments for every student including decisions about the vision and a development of a shared culture. Such leadership practices seek alignment of MAT improvement plans and reflect actions that construct leadership through the interactions of multiple roles, people, and contexts in the school and the MAT level and engages key constituencies from the micro- and meso-systems as partners around a shared collective vision.

We want our stakeholders to be clear that they contribute to the MAT culture. They are custodians of the culture. Our concept of autonomy devolves as much decision-making authority to school principals and local governing bodies as a legally responsible body can (Director of Learning).

The CEO stressed the need for positive relationships with the board of Trustees, who recognised his professional autonomy to make decisions within the boundaries of MAT policies.

I have a very good relationship with the board. From the outset we were clear together that our vision and philosophies were compatible and enjoyed a strong supportive relationship. The board has supported me to build the infrastructure in advance of the growth and has been challenging especially when taking on new academies (CEO).

Referring to the environment around the MAT, an executive principal responsible for two academies highlighted the nature of the MAT system's ties with Local Authorities (LAs) and the variations that exist.

We work at the moment in six LA regions. Every LA has its own culture and so the school system within every LA has its own culture. Some of those are quite collegial and collaborative, some of them are toxic. Our interaction with the wider system actually varies from area to area depending almost on the personality of that area.

Essentially, a productive stakeholder consultation interacting with different layers of the ecosystem appeared to recognise the importance of a collaborative culture and structure of the MAT as a whole.

Organisational aspects of system leadership

Organisational aspects of system leadership strategies focused on developing and monitoring the instructional improvement work, accountability, and issues of data. The following practices appeared to move the systems towards a more top-down structure which were informed by pressures from the macro-level socio, political, and professional contexts. For the MAT system predicated on the legitimacy of standards-based outcome measures, the pressure on system leaders to place the success of the organisation first, not only dominated interviews but became the response to most enquiries about instructional or curricular practices.

All executives claimed that standardised and aligned approaches in areas of teaching and learning (e.g. pedagogy, curriculum, assessment) allowed them and the MAT more broadly to monitor school performance and hold member schools into account through a what was perceived a coherent way.

The curriculum is the same, the way we deliver that curriculum is the same because all of it, it is designed to meet the needs of the children for whom learning is a challenge. All of it, it is fit for purpose across all of those contexts (Executive Principal, five academies).

We discuss the standards as leaders of the Trust. We come together. In my schools, we are writing our own curriculum so in terms of the CEO supporting that, he knows what we are doing (Executive Principal, two academies).

We use moderation across our schools. Different staff plan support so we can have consistency (Executive Principal, three academies).

In addition, organisational responsibilities included system leaders ensuring that allocation of time and available resources are used consistently with the school and MAT objectives. The notion of 'autonomy' in the management of resources at the school level was praised by the system leaders as a way to ensure an appropriate balance of support and challenge towards MAT effectiveness.

I have to allow my three leaders to make decisions on their own budget planning on a daily basis and about how they run their school, based on the information immediately in front of them at that time. I can't be sat in an office on one site and be running a site that is half an hour drive away. There has to be someone who can do that and do that through my eyes (Executive Principal, three academies).

Such an organisational approach and policy at the meso-level may have constrained school improvement efforts at the individual school level, with an orientation towards oversight and hierarchical patterns of bureaucratic control rather than instructional improvement.

As a result of exo- and macro-level influences, increased internal accountability infrastructures had intensified the work of leadership at the school and executive level in the MAT environment. Through the formal exercise of authority, one of the executive principals perceived trust and control as a kind of panacea for managing the organisational complexity.

My three principals, having worked with them for the shortest is 2 years. I know them really well. They are really clear about what they are accountable for. We have simple systems we share in that. My model is trust and check. I trust them to do it, and then I check they are doing it (Executive Principal, three academies).

Another executive principal was concerned about unintended consequences of the accountability infrastructure such as additional bureaucratic burdens and reduced organisational performance because of greater accountability demands.

As a member of the Trust, I want every other member of the Trust, a principal to be held accountable because if one of those aren't doing their jobs then my schools as a part of the family will be brought down (Executive Principal, two academies).

In their attempts to coordinate the work of building a system-wide instructional programme, system leaders were influenced by the macro-level external accountability infrastructures. This led to the centralisation and establishment of standards operating procedures for collecting, analysing, and reporting data. Formalised strategies for data use were established and supported by the system leaders since they wanted to reach all academies in the MAT.

We've got tonnes of data; schools are full of data. You can get so much from formal sort of systems through feedback and performance management (Director of Learning).

I oversee the assessment, making sure that the children are securing the progress that they need to and assisting the principals in facilitating that. It was our design, and I was kind of leading the system in creating one holistic approach to our education (Executive Principal, five academies).

The relationship between data use initiatives and accountability was also found to be intertwined with system leadership efforts to inform organisational decisions. A systemic strategy was implemented by the CEO where school principals could access each other's assessment results aiming for alignment across multiple levels.

We have some formal processes in terms of data collection and evaluation points of the year. We bring all our principals together for what is known as the academy development group meeting. They evaluate their own data against everybody else and they have an open dialogue about that, whether support is needed within the group, whether there are common challenges or whether successes come within the group (CEO).

This stresses the importance of involving educators at the school level who not only need support to develop the skills and knowledge for selection and analysis of results but also enough decision-making authority to make school-level decisions based on data.

Discussion

System leadership is conceptualised here as a multi-layered socio-ecological phenomenon influenced by individual, relational, and organisational factors within a broader social, cultural, political, and geographical landscape unique to the MAT setting. The research findings led to the emergence of a system leadership model that involves social and developing as well as organisational aspects as the most dominant dimensions. These dimensions are expressed simultaneously as features responsible for guiding educational change initiatives in the MAT.

Within the existing hierarchical reality of English MATs, it was difficult for the MAT to be able to be flexible or adaptive and especially support its leaders at school and organisational level to grow their capacity to lead in a complex environment (Fullan 2015). To become an adaptive system with capacity as a holistic concept (Stoll, 2009), system leaders in the study had to take charge of and initiate change. The purpose of capacity building, as found in the data at the executive leadership level, focused on developing knowledge, skills, and qualities of school leaders, who were expected to redesign and nurture their school cultures so that staff participation, collaboration, and a sense of individual and collective belonging and ownership of the MAT's strategic vision would be fostered. 'Capacity' in these examples was seen as a quality that allowed people, individually—personal capacity and collectively—schools and MAT, to learn from the environment around them and to apply this learning to new situations in order to achieve their objectives in an ever-changing context (Stoll, 2009). These objectives were oriented towards making a difference for all students and in all aspects of learning considering the multifaceted nature of capacity building. In a similar vein, drawing on motivation to understand a system's collective response to disequilibrium, McQuillan (2020) argues that without the capacity of system actors to adapt system interactions and outcomes, the status quo will likely endure. Examples of system leadership strategies in building the commitment and capabilities of leaders included the creation of systems to promote and grow leaders from within the organisation who demonstrate aptitude and passion for, as well as success in, leading continuous improvement efforts. These efforts align with studies on the transformation of educational systems towards continuous improvement and are likely to benefit the wider system by facilitating the sustainability and scaling up of effective leadership practices to build a kind of 'social infrastructure' (Peurach & Neumerski, 2015), while simultaneously building capacity in the leadership pipeline (Dinham & Crowther, 2011). This infrastructure typically operated as foundations on which (leadership) capacity was built through engagement in significant decision-making and the fostering of autonomy amongst staff members, therefore creating the conditions to build capacity and enact policy in line with their values. However, the varying levels of inconsistencies, especially relative to context-specific educational needs in these approaches and the discretionary nature of the activities, might not engage school leaders. Therefore, the complexity embedded in this process offers a means to conceptualise systems transformation that focuses on the iterative, interdependent, and unpredictable nature of systems transformation in which "a diversity of agents... interact with each other, mutually affect each other, and in so doing generate novel, emergent, behavior for the system as a whole" (Lewin, 1999, p.198).

Instruction was an important component of the MAT's explicitly and publicly stated strategy for improvement, and system leaders played a critical role with their efforts to provide an instructional guidance system. Working with school districts in Ontario, Canada, Leithwood and McCullough (2017) argue that when a district's curriculum standards and frameworks, instructional practices, professional development emphases, and assessment tools are all focused on achieving the district's mission, vision, and goals, the district is providing 'coherent instructional guidance' to its schools. Findings from this study suggest that degree of regulation, structure and

distribution of decision-making rights, and financial resources were organisational dimensions that affected the decisions made at the top levels of the MAT leadership structure. Findings also highlighted the need for system leaders to work through a change management process which would involve time, stakeholder buy-in, and control, in order to achieve the long-term and sustainable changes they pursued. The majority of system leaders relied not on being agents of change, but instead, on a consistent change management process, which stressed the difference between being an inspirational leader, an element of transformational leadership (see Leithwood & Sun, 2012), and also being an effective operational manager (see Spillane, 2017). All leaders discussed the elements inherent in a change management process such as understanding and communicating with people, identifying targets, and analysing and monitoring data to see if the change process was moving closer towards achieving the prescribed targets. Nonetheless, it was the designed or academic changes which dominated most of the discussions with the participants rather than the process of implementing changes themselves. System leaders were likely to influence systems when they stepped into the change processes that they expected others to make, and engaged in sustained interactivity with the key stakeholders, rather than distancing themselves by taking monitoring, evaluation, and accountability roles once the policies were created and implemented.

System leaders were also challenged by the need to utilise leadership skills that would enable them to work with and through others. They had assumed responsibility for integrating principles of organisational learning into day-to-day practices (Redding et al., 2018; Schechter & Qadach, 2012; Senge et al., 2012; Silins et al., 2002). In the context of MAT system-wide improvement, organisational learning required more than just adhering to learning at the individual and school level but introducing learning in the routines and structures within the whole organisation. The operational model for this responsibility included working with and through others, most likely principals, and other stakeholders at the local and MAT level. Consequently, their individual and collective beliefs, values, and norms reflected the importance of building and nurturing a systems culture which would respond to the challenges and opportunities of its environment (Kools & Stoll, 2016).

In addition, their efforts to promote ‘environmental scanning’ as a way to proactively identify external opportunities and challenges may have influenced what the MAT was expected to achieve in the face of continuous macro- and exo-system influences such as social, political, and economic changes unfolding in society. Environmental scanning here refers to the activities of the schools and the MAT as a whole that contribute to widen the range of information, policy, theory, and practice which in turn would have a system-wide effect on the development and decision-making processes (Silins et al., 2002). Executive leaders referred to environmental scanning in their efforts to guide MAT processes through systems thinking, focusing on developing and communicating a shared strategic vision and objectives as well as in creating equitable learning environments through decision making at the local level. This systemic orientation offered direction to the system leaders in their efforts to transform their MAT into a “learning organisation” (Senge et al., 2012) as well as a “learning ecosystem” (OECD, 2015) helping to frame the multi-layered complexity of how learning occurs across different participants, settings, and times.

Their insights are consistent with a burgeoning body of literature that considers the aforementioned concepts as ideals for addressing the changing external environment, facilitating, and sustaining organisational and system learning and even associated with positive academic outcomes (Fullan, 2018; Kools & Stoll, 2016; Redding et al., 2018; Senge et al., 2012; Silins et al., 2002). As a system in its entirety, the MAT was seen in terms of multiple units (e.g. schools), levels (e.g. central leadership team, school leadership, and teaching staff), and dimensions (e.g. cultures, structures, relationships). These elements were perceived as interdependent parts forming a complex whole (Fullan, 2016).

Elmore (2004) argues that for reform to succeed and for a new system to emerge, not only structures must change but also leadership. Once leadership becomes an influence process that emerges through interactions at multiple levels across the organisation, then relationships among system agents will lead to greater adaptability and creativity (Goldstein et al., 2010). Nevertheless, the capacity of executive leaders to make changes beyond the surface level was at best difficult because eliciting underlying assumptions about the need to distribute authority and control was problematic. Consequently, re-structuring their MAT would be a time-consuming process involving alignments and convergences in the different ecological layers, influenced by the context in which reform initiatives take place.

Limitations

These findings are certainly not representative of the many and varied ways in which the development and implementation of MAT-wide reform initiatives are understood and taken up in all schools within and across the participating MAT. Accounts from the perspectives of school leaders would provide additional insights into the nature and perceived impact of system leadership practices in their school environment. Therefore, a deeper exploration of the specific practices enacted in a systems-oriented approach and how these are perceived by school leaders for improving systems-wide performance is required.

It is important to note that the complexity and ecological perspectives included in the framework of this paper, are not exhaustive. Instead, they are used as one of the many tools that have relevance for understanding more deeply educational change as well as various aspects of systems leadership as a complex multi-layered construct.

Concluding remarks

This study contributes to the wider literature on leading multi-school organisations highlighting the complexities of alignment and coordination of individuals, teams, and organisational units of leadership beyond an individual school. It acknowledges that ecological processes frame the context for emerging characteristics of thinking and acting systemically as critical elements of educational reform. While an understanding of such processes may emerge from context-specific research, the processes themselves may be adaptable to other contexts to address local conditions.

Findings from this study have important implications both for wider system leadership research and for educational policy. Similar investigations into leadership of multi-school organisations should be conducted acknowledging the importance of complexity approaches and emphasising the interconnections between the various system components. The combination of conceptual tools such as the ecological framework and complex systems can provide researchers with new insights into the dynamics of relationships that exist between various individual and environmental factors, such as personal, interpersonal, organisational, community, and societal contexts, which seem to reflect the complexity of system leadership. These complexity-oriented conceptual tools might also inform educational policy by illustrating that change is a multi-dimensional process through which efforts at systemic educational reform might follow a different path capturing the dynamics of complex educational systems.

As meso-system elements of a wider educational ecosystem, multi-school organisations can serve as a liaison between the school communities and macro-level policies and reform targets by providing room for flexibility in the implementation processes while spanning all facets and processes within the micro-systems of their schools and their environment. Eliminating barriers is essential but not sufficient for system-wide improvement to be successful: system leaders need to liaise across system tiers to address the needs of students in schools, within communities of schools, within the school system as part of the broader society. These elements are interdependent and reciprocally influential. If multi-school organisation and improvement are to be examined systemically, then executive leadership, too, should be examined systemically, across all levels of the multi-school organisation. This implies defining leadership as much by responsibilities and purpose as by roles. It means thinking about a system of leadership oriented towards seeing the big picture and not only its separate parts.

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