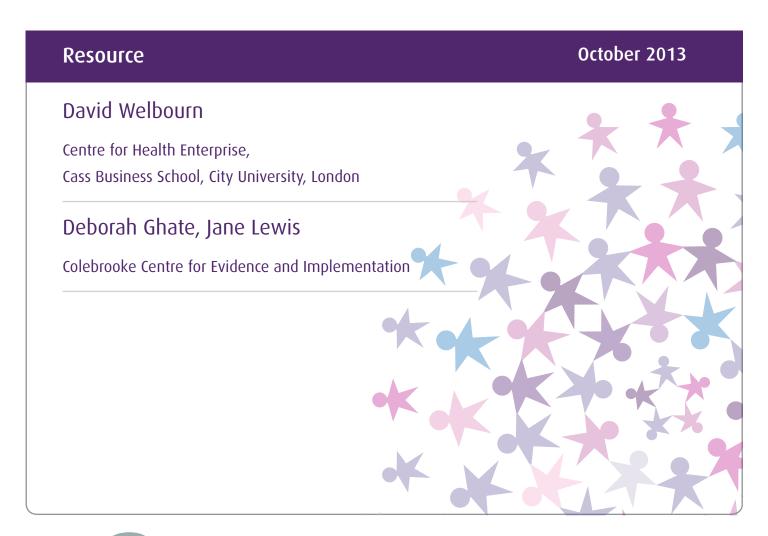




Systems Leadership: Exceptional leadership for exceptional times

Source Paper 1

Literature Review







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1. Introduction and background

This is one of a suite of papers from The Colebrooke Centre and Cass Business School research on systems leadership commissioned by the Virtual Staff College. It is intended to be read alongside other papers, particularly the <u>Synthesis Paper</u>¹. The project explores the meaning and practice of systems leadership and explains how it is emerging in both UK and international contexts. Other elements of the research project address the practical understanding of systems leadership through a series of interviews with systems leaders (Source Paper 2: The views of systems leaders²), and three case studies of leadership in specific UK-based multi-agency settings that have been characterised by whole systems working (<u>Source Paper 3</u>: UK leadership scenarios³). The project is further complemented by four small scale international studies seeking insight into systems leadership in other jurisdictions (Source Papers 4a-d).

1.1 Context for this work

This work reviews the published literature on systems leadership, seeking particularly to ascertain whether there is a clear agreement of how to define the subject of systems leadership and whether there is any consensus about the desirable characteristics for it to be effective. It seeks a specific emphasis in relation to children's services and, more generally, into wider public services. The search criteria for the review have been influenced (rather than directed) by this focus, and we have explored what learning can be drawn from the broad themes of systems leadership across all sectors.

This work builds on previous research into whole systems, published at the King's Fund leadership summit in May 2012¹, which sought to identify conditions for effective leadership across whole health ecosystems: i.e. what is the nature of leaders and leadership that can work effectively beyond traditional organisational boundaries. In this study, we targeted our search criteria on issues where stronger evidence would be especially helpful, particularly in relation to the context in which systems leadership is most likely to be in evidence, such as:

- systems leadership may require leaders to sit at the nexus of multiple systems with the prospect of important characteristics such as values and culture being in conflict
- the growing prevalence of scenarios in which turbulence, volatility, chaos and ambiguity contrive to create the "perfect storm" 7,8,9,10.

Research into any aspect of leadership is notoriously difficult – perhaps the most consistently agreed opinion is that there is very little credible evidence demonstrating a causal relationship between characteristics of leadership and reliable achievement of successful outcomes. In part, this reflects the relative levels of respect accorded to different types of evidence, with a tendency for limited trust in the outputs from the research displayed as:

- this suspicion of results is especially strong in areas which involve harder sciences such as health, but is found across public services
- a factor contributing to this scepticism is that there are widely differing levels of confidence in research methodologies – e.g. randomised control trials (RCT) are often viewed by medics as the only valid approach, whereas social science statistical research methods are mistrusted and use of case studies in organisational studies can be dismissed as unjustifiable anecdotal

Ghate, Lewis and Welbourn (2013) Systems Leadership: Exceptional leadership for exceptional times. Synthesis Paper

Lewis, Ghate and Welbourn (2013) Systems Leadership: Exceptional leadership for exceptional times. Source Paper 2: The views

Lewis, Welbourn and Ghate Systems Leadership: Exceptional leadership for exceptional times. Source Paper 3: UK leadership

the credibility of research output is compromised by what appears to be considerable variation in the quality of material published in the field of leadership – with results frequently generalised on an ill-founded basis.

These problems can be compounded by the over-use, and indeed misuse, of specialist technical language detracting from the clarity required to aid understanding, or expedite adoption of, the knowledge. Both the subject areas of leadership and systems thinking are particularly vulnerable to this tendency, causing a number of difficulties in interpretation. These are:

- similar concepts are given widely differing terminology creating the impression of a wider range of thought than is helpful
- lack of clear definition means that the same term is associated with widely different (and potentially contradictory) concepts
- there are instances where jargon appears to be used to mask the weakness of the underlying work
- the most significant problem for this work, revolves around the core term of "system" much work claiming to contribute to the body of knowledge about leadership of systems has only loose connection to genuine systems thought required for this work.

We have sought to address these limitations in the critical approach taken during the analysis and synthesis of the published works. Appendix 1 sets out the models we have used as the basis for constructing our research methodology and explains the methodology itself.

Despite these reservations, it is important to recognise that there is plenty of evidence showing that weak leadership is unlikely to yield good or repeatable outcomes. Equally, synthesis of the literature shows very clearly that certain attributes or characteristics of leadership are frequently found in successful systems, whilst another list of characteristics are repeatedly found to detract from success, or are commonly found as risk factors to be avoided. This work primarily seeks to offer insight into those leadership characteristics that increase the probability of achieving desirable outcomes.

We have identified an additional 300 papers with the potential to contribute to this work by strengthening previous arguments, challenging previous understanding, or expanding the scope or field of coverage. Around two thirds of these have merited more detailed study at first sift, and around one third of these have contributed significantly to our insight or provided further validation of our understanding of systems leadership.

Overview of key messages 1.2

In our analysis and collation of the evidence to create a basis for effective synthesis, we have encountered a number of themes which have inevitably shaped our approach to the literature.

These are:

- There is no magic bullet, but considerable material of dubious value or making spurious claims
- There are some good pointers most of which revolve around self awareness, propensity for reflection and self-challenge/willingness to reinvent oneself, and openness to new insight
- There is a very strong message that leadership is becoming increasingly complex with a growing need to deal confidently with volatility, uncertainty, chaos and ambiguity (VUCA)
- Conflicting ideas and paradox are often found as part of this complexity, explaining why there are no magic solutions – by definition paradox does not yield to the kind of logical analysis from which any conventional solution might be derived

- Systems leadership becomes increasingly more relevant in areas of VUCA, paradox and "wicked issues" 124
- Instead of resolving conflict through compromise, there is considerable value to be gained by working with conflict as an ally to generate new insight and create deeper meaning and shared understanding
- Effective leadership requires short term agility to navigate through the maze of ambiguity, combined with long term purpose – narrative, engagement and connectivity are fundamental
- Distributing the leadership both wide and deep into the organisation increases both agility and resilience provided that there is a strong golden thread of both purpose and values throughout the organisation
- There is much confusion about systems thinking and what exactly it means a significant number of papers appear to latch onto this as a topic of the time, without offering any value. The material which has relevance to this work is that which relates to complex adaptive systems
- There is a reasonably useful body of evidence that talks about helpful characteristics, traits and behaviours in leadership – divided into enablers and restrainers – those which need to be encouraged and those which need to be discouraged
- Effective systems leadership appears to be linked much more strongly with behaviours and relationships than with competence – expressed more as "being" than "doing", or as a "mindset" rather than a "thingy", stretching to the concept of a "heart-set" in some instances
- Approaches to recruitment (and appraisal/performance management) remain tied to conventional wisdom about leadership styles and haven't caught up with the realities of the emerging understanding of what seems to be important in systems leadership
- There is a strong body of evidence identifying that good leadership links theory/concept/aims with practical implementation – (knowledge to action), and leadership teams become more effective when there is a shared language of theory as well as practice
- The quality of the scarce material seeking to link leadership with outcomes appears to contain a larger proportion either lacking in credibility or implying validity beyond the scope supported by the work itself
- There are several attempts at profiling leadership characteristics quantitatively, but these are of dubious value as they rely on large numbers (sometimes more than 20) of subtly distinct variables to establish correlation – one paper notes no meaningful relationship at all between emotional intelligence and leadership outcomes
- There is an interesting alignment between servant leadership, leading through others, humility, and some aspects of personal spirituality – at its extreme talking about sacrificial leadership
- There is an emerging strand of evidence linking neuroscience to leadership. This has interesting potential to generate new insight, based on observation of which parts of the brain are involved in leadership decisions and interventions - but raises a new strand of ethical issues.

2. What the literature tells us

Systems Leadership: what it is and why might it be important 2.1

Definitions of what a 'system' is and its implications for leaders vary considerably in the literature, but all have a shared core of recognising that the challenges of leadership do not stop at the boundaries of the organisation. Ronald Heifetz^{2,3}, one of the prominent writers on systems leadership adopts the metaphor of "standing on the balcony" to gain a vantage point from which to oversee the variety of acts and actors and William Tate⁴, who also writes extensively on systems leadership, describes it as 'looking at the fish tank and not the fish'. Gilmore⁵ describes the ability to span boundaries as a new competence.

For the purposes of this research we will distinguish between an organisation, with defined boundaries, and a system in the following terms¹:

At its simplest, an organisation could be defined as a self-contained entity where there is some degree of freedom insulating it from direct control from its external context. As we shall see, this definition quickly runs into choppy waters, though it suffices as a starting point. In contrast, a system is an interconnected and interdependent series of entities, where decisions and actions in one entity are consequential to other neighbouring entities.

It is quite common for systems thinking to be confused with the related, though distinct, field of complexity science. Jackson⁶ suggests that systems thinking amongst leaders arises as a 'reaction to the reductionism of traditional scientific method'. In reviewing recent literature on systems leadership, we are led to suggest that there is a body of work described as systems leadership which does not merit the attention it claims, whilst there is another body of work offering significant insight into systems leadership, invariably through a complexity lens.

The definition of complexity is equally variable, but here we adopt that defined in our previous work1:

A complex system is one in which even knowing everything there is to know about the system is not sufficient to predict precisely what will happen.

This definition frequently resonates with system leaders whose current experience is of an increasingly complex environment in which the climate of change is increasingly unpredictable and volatile. There is a growing body of work adopting the metaphor of the perfect storm 7-11 to reflect the coalescence of multiple factors impacting on leadership of systems. The term VUCA¹²⁻¹⁴ is beginning to take hold to describe the combination of Volatility, Uncertainty, Complexity and Ambiguity.

For a moment it is worth setting out a few characteristics of a system, particularly in relation to a more bounded organisation, so as to establish a context for a discussion on leadership. Characteristics of a system to achieve a wider societal good can include:

- a loose agreement of some form of goal expressed in qualitative terms, but is difficult to pin down in quantitative measures
- some clarity of a population or geography to which resources are to be focused, likely to interconnect with other groups and goals thus making the boundaries fuzzy, especially as they are prone to shift with time
- more than one agency working in a particular field raising issues about responsibility, accountability and control and allocation of resources.

This is not new, and Bathurst offers an interesting review of the groundbreaking work of Mary Parker Follett¹⁵. Although she used a different language to express the ideas, she advocated that soft issues played a significant role, and that the relationship between worker and business owner should include concepts of partnership. Bathurst argues that the insight she explored as a pioneer in treating management as a science requires greater respect, as it lies at the heart of current thinking. Other authors also provide helpful pictures of systems thinking by exploring how the concepts have emerged as "work-in-progress" to explain the dissonance between conventional leadership theories and practical experience. Wheatley provides a strong and well developed framework of thought in her book "Leadership and the New Science^{16"}, ideas which she develops further in many of her brief thought pieces^{17–24}. At the heart of her arguments, lies the helpful analogy that conventional understanding of leadership, organisational design and hierarchical structures all draws on a Newtonian view of the world which is highly ordered and deterministic. In stark contrast, living systems and organisms are distinctly non-linear and are able to exhibit adaptive and learning behaviours. She likens this to the paradigm of new science in which the governing principles appear occasionally to be diametrically opposed to the previous world of reason, whether that be quantum physics (at the extreme of microscopic scale) or relativity (at the extreme of high velocity), chaos theory (at the extreme of complexity) or evolutionary biology. By drawing on these multiple analogies of where the 19th century science of order and structure fail to provide models capable of explaining natural phenomena of the fuzziness of life or cosmology or field effects, Wheatley opens the window on fresh insights about systems. Drawing deeper into the physics, she suggests that consideration of organisational power and force become less useful, whereas ideas of organisational energy offer greater insight as it becomes obvious that control becomes impossible, but influence and nudge assume greater importance.

Wheatley²² draws the analogy between the self-organisation of living systems and their ability to adapt; reorganising themselves to respond to disruption by eventually regaining order. They offer greater resilience than structural hierarchies and linear command chains; today, we don't seek to build stronger structures to withstand earthquakes, we incorporate mechanisms that absorb the energy and release it slowly. Established thinking about leadership is too ready to dismiss the opportunity to learn from these parallels. Organisations construct a world view for themselves of how they would like the world to be, and then go into denial when the complexity of the world threatens to spoil this view. In our ordered view of the world, we make assumptions based on a "pareto" principle that if we focus on the main-stream, we will be right most of the time. When chaos disrupts this central core on which assumptions have been grounded, the world of certainty disintegrates and leaders lose all semblance of control; command and control fails, and leadership is incapable of restoring order, no matter how loud the leader shouts.

Chaos theory teaches us that it is the miniscule perturbations in the system that win out over the long-term, becoming amplified by the adaptive feedback mechanisms. Those elements, often too small to consider, have disproportionate impact over time. Leaders who have built resilience by engaging and empowering, in a framework where purpose and values have been clearly shared and formed the heart of trusting relationships, will be rewarded by an uncanny ability to converge on a new stability through self organisation and adaptability. The problem for leaders is that they can't control what, and when, the reward will be; they can't determine whether they will still have power or influence, or how well it will still align with the outcomes and purpose they have defined.

Although coming from a radically different origin, this view offers a real parallel to Christensen's seminal work on "disruptive innovation"²⁵. At the same time, this analysis also demonstrates why social movements²⁶ can become so powerful a force in shaping leadership of the future - the linkage to the purpose or cause is what strengthens the resilience against any challenge. Wheatley also makes the rather disconcerting point that terrorist cells have a great affinity with the complex adaptive nature of living systems with all their beneficial resilience.

Laszlo²⁷ provides an alternative but, equally useful historical perspective of system thinking (as it emerged from several different centres of thought, including 1920s Gestalt psychology) as a coherent framework for organised complexity, though some roots go back to concepts of Heraclitus and various indigenous cultures with concepts of wholeness (holism). Laszlo describes systems thinking as a new way of seeing, describing a system view as more of a pattern than a thing, giving helpful insight that systems thinking merges both analysis and synthesis (i.e. both the reductionist elements of analysis, and the integrative elements of synthesis). This argument nicely echoes that of Wheatley, noting that this reductionist view draws from the prevailing approach to natural science. It is interesting to reflect that this argument also resonates with that put forward by Paul Corrigan²⁸ who frequently uses the picture of simultaneous fragmentation into increasing localism and convergent connectivity of globalisation. Corrigan describes this using the analogy of centripetal and centrifugal forces.

Laszlo takes the argument further; not only does it offer a new set of lenses through which to see the world, but also in describing the emotional engagement in which we can feel and experience differently with the holism of a systems perspective. She describes this as living a new consciousness or opening the gateway to Systems Being. She develops this theme into evolutionary leadership - leadership that embraces "mind-set", "skill-set" and "heart-set". The mind-set addressing the know-why, skill set the know-how and heart-set the care-why elements of both intrinsic motivation and the shared values of the collective society.

Along with many other authors, both Wheatley and Laszlo reflect a significant spiritual component of systems leadership with obvious potential to bridge between western and eastern thought. Nowhere is this more so, than amongst those pointing out the strong connections between Taoism and systems thinking²⁹. Grint³⁰ offers a fascinating reflection on the fact that the very origin of leadership is rooted etymologically in the sacred. He identifies three distinctive elements of leadership:

- the separation between leader and the group
- the sacrificial nature of the relationship; and,
- the role of leaders to quell the anxieties of their followers and to be the sense makers.

As Grint explores the profound consequences of how deeply embedded such concepts are anthropologically, he suggests that the challenge of moving away from the concept of a heroic leader towards a more equally distributed form of leadership will be more difficult than most observers would suggest. Frieze²⁴ (writing with Wheatley) offers a picture of systems leadership in which the concept of hero is replaced with one of the leader as host - creating the space within which there is implicit permission for information and opinions are shared, and appropriate decisions to be taken.

As we previously demonstrated¹, the threshold at which the effects of complexity begin to be important reduces under pressure. The step change in pace and intensity over the last few years means substantially more leaders find themselves facing challenges which require a systems approach. The question therefore follows: what does this mean and what are the implications for leadership?

According to Wheatley²⁰, under these conditions of additional stress, when systems leadership becomes more important, even those leaders who had made great strides in participative management and were succeeding both financially and with innovation, were beginning to succumb to the growing pressures, quoting one: "forget about values, learning or participation, we just need to execute". Here was a powerful feedback mechanism forcing leaders to revert to more conventional thinking, promoted by:

- growing risks and fear precisely the stress conditions that increase the need to adopt behaviours of complex adaptive system thinking were acting to cause leaders to revert to command and control
- the combination of technology, globalisation and networked connectivity the tools making complex behaviours more intense were shortening timescales for action
- the compressed time reduced the space for learning and reflection; squeezing out the ability to adopt the behaviours that strengthen confidence required to navigate the complexity
- the increased use of technology reduces the bandwidth of communications remote messages, texts and tweets are the opposite of "social" media, eliminating, as they do, the soft relationship element of communications, eliminating the non-verbal signalling that softens the harshness of misinterpreted words
- at just the time when success is increasingly going to be delivered through sustained relationships, values and trust, we are narrowing our attention to tasks and easily measured superficial goals.

Each of these factors increases disengagement with polls showing that in the last decade, employee disengagement has risen from 33% to 70% in USA. Wheatley stresses that fearlessness is required to confront reality. Only those who are fearless will resist the temptation to rely on force of personal will, and instead, lead with the conviction of the values and purpose and authenticity of who they really are, re-echoing Laszlo's view of **System Being**.

This tendency to revert to command and control when under duress is symptomatic of assumptions that there is a direct linkage between cause and effect and that management decision and intervention directly drives results on the ground. However, systems studies demonstrate that efforts to establish linkages between cause and effect and command and control are seen as increasingly irrelevant and even destructive^{31,32}. John Seddon³³, an expert in public sector systems thinking, is highly critical of government efforts to establish firm control between central policy and the frontline practitioner in a mechanism called 'deliverology' - going so far as to suggest that attempts at such centralised control are dangerous and counter-productive. But that is not to say that we can live in a world where there is no policy or direction. We therefore have a contradiction, or paradox, between leadership control on the one hand and the various approaches to empowerment or distributing freedom and autonomy.

It could be argued that one of the biggest weaknesses inhibiting successful systems leadership is the emperor's clothes syndrome - the unwillingness to face this reality in which paradox and ambiguity play an increasing role, and for which, the perfect logical answer does not exist (the very definition of paradox). In reviewing the transformation of departments in Whitehall, Page et al³⁴ identify the gap between rhetoric and reality to be one of the dangers. Until reality is confronted, it is clearly impossible for leaders to create meaning and purpose, thereby losing one of the fundamental tools for harnessing commitment and aligning resources. Munn³⁵ describes the importance of establishing meaning, and Blomme³⁶ describes the critical role of the leader as a sense-maker. Garrow³⁷ reviews a systematic approach to increase leadership capacity for large scale change across the NHS, pointing to the need for a shared belief and alignment. Paul Corrigan⁴, a policy analyst and former ministerial adviser, attributes the difficulties associated with the passage of the Health and Social Care Bill through parliament to the absence of narrative.

private conversation

In summary, though the terminology is applied loosely, in the increasingly complex, interconnected and turbulent world, there is a growing need to deploy systems leadership involving:

- extending beyond traditional boundaries
- a dynamic, adaptive, learning approach capable of navigating through ambiguity
- new relationships built on shared vision and shared responsibilities embedded throughout the system.

Putting Systems Leadership into practice 2.2

The ability to recognise and embrace ambiguity and paradox is one of the characteristics which appears to single out those capable of leading systems. White³⁸ is explicit in stating how critical this is: "the real mark of a leader as confidence in dealing with uncertainty". Rooke³⁹ offers a particularly well developed differentiation of leadership styles, identifying that three of the seven styles analysed (amounting to fewer than 15% of leaders) exhibit behaviours which respond well to this level of constant reinvention. Such adaptability is always looking for new intelligence, new ideas and trying out fresh approaches⁴⁰⁻⁴⁴.

Stevenson^{45,46} stresses the importance of self-organisation as the basis for navigating through the ambiguities, quoting from earlier work "dis-equilibrium is essential for growth and sustainability". This work mirrors that of others who focus on the critical nature of reflexivity and a high sense of self-awareness this generates^{47–50}.

So why might we expect to achieve better outcomes by adopting systems leadership in which we distribute leadership both wide and deep. Fullan^{51,52} suggests that the answer to this lies in understanding motivation. Along with many others, he argues that the real test of leadership lies in the ability to effect change. But Fullan notes that the only thing that can cause people to change is their intrinsic motivation. This establishes the core challenge for leaders as their ability to generate such intrinsic motivation. Quoting Machiavelli, he notes that people are generally incredulous and don't trust new things unless they have experienced them, so it is essential that these two are combined to give people new experiences which are fulfilling; realised effectiveness generated by this fulfilling experience which is enhanced by intrinsic motivation. In stating this with such strength, he challenges approaches that rely on inspirational vision, moral exhortation or weight of irrefutable evidence, suggesting that this is why they frequently fail. For Fullan, tapping into intrinsic motivators is the way to build change, and in demonstrating this, he clearly justifies the importance of both values and clear purpose, coupled with trust and empowerment.

Georgellis⁵³ underpins this rationale as he explores the interaction between intrinsic and extrinsic motivation factors. In particular, he demonstrates that intrinsic motivation is particularly important in public sector roles, especially health and higher education, but that there is a risk of the benefits of intrinsic motivation being diminished by the presence of excessive external motivators. Dan Pink⁵⁴ has been instrumental in establishing a clear understanding of the nature of motivation, showing that an individual's sense of personal mastery, higher purpose, and autonomy achieve the greatest motivational impact, and that higher extrinsic rewards (performance bonuses) actually act as disincentives when the work has any significant degree of cognitive content. This evidence from behavioural psychology also supports the notion that leaders who create an empowering environment built on clear purpose and transparent values will outperform those who drive performance using a pace-setting style.

Research on the impact which leaders have on encouraging or inhibiting innovation⁵⁵ points to a leadership dilemma in the interplay between their own enthusiasm and the need for innovators to have the freedom and space to display their own autonomy and mastery⁵⁶.

In an attempt to "measure" leadership, much has been written about the attributes or characteristics of leadership, especially the desire to find ways of differentiating systems leadership. Alvesson⁴⁷ describes "functional stupidity" as the type of group think when leaders overly concentrate on their own organisations and fail to look beyond the boundaries. This is just one type of introspection that fails to identify and respond to threats, and Falk¹¹ reviews the financial system meltdown in 2009, identifying three other contributing characteristics: **hubris** of self belief carried too far; **hypocrisy** in the conflict between personal and organisational values and **hostility** that shuns peer relationships and co-operation. Falk also goes on to describe three other characteristics which can stimulate a more open approach to systems leadership – **honour** – the principled uprightness of character which does the right thing; **honesty** and integrity the most admired characteristic in leaders, and **humility**, the unwillingness to promote self interest over others.

In these positive attributes, Falk is leading into a strand of the leadership literature that focuses on a broad concept of "servant leadership" that links with our earlier exploration of the links between leadership and spirituality. This describes a range of behaviours that are more important in systems leadership than at an organisational or team level, and speak to the need to ensure that all the actors in the system are able to achieve a mutually attractive outcome: a win-win. Kerfoot⁵⁷, McKennon⁵⁸ and Ebener⁵⁹ each describe the importance of leadership being a role that makes space for others, in some instances emphasising that the servanthood should extend to sacrificial leadership if necessary. Gabrielle⁶⁰ adds to these characteristics by stressing the importance of ethics at the heart of leadership. Chopra⁶¹ specifically identifies the need for systems leaders to invest in nurturing the leaders of the future. Within this body of work on the need to work through others, Bolden⁶², amongst others, questions whether there is sufficient clarity between partnerships, collaborations and distributed leadership. Shekari⁶³ unites these strands by identifying empowerment, team building, participation and development of the service ethic as aspects demanding investment of leaders' energies. Rietsema⁶⁴ takes this a step further by challenging whether leadership, as a concept, is out-dated, because of our tendency to describe it as a competence. Instead, Rietsema prefers to see leadership as a way of being, both individually and as the organisation/system, rather than a way of doing - in this sense, leadership is all pervasive and describes the way decisions come about.

In a study of the nature of leadership in innovation, Shavinina⁶⁵ explores individual contributions from those we have described elsewhere as heroic leaders. She draws across a wide range of disciplines in both leadership and innovation, combining these with biographical studies of successful individuals, but concentrates on the psychological understanding of higher order giftedness – arguing that those individuals who are exceptional at leading innovation provide the exemplary model. The study identifies three levels at which innovation leadership manifests itself. The first focuses on intellectual and creative abilities – the raw ingredients of innovation that need to be present at a high level of cognitive functioning. The second level focuses on metacognitive abilities – perhaps best described as self-awareness of the cognitive processes and a willingness to reflect on and challenge these. The third level, or extracognitive abilities, takes this to a further level of abstraction to integrate concepts such as feelings, beliefs, instinct and intuition into a harmonious relationship between the core cognitive states and the self-reflection upon these.

Whilst her analysis focuses on the individual superheroes of innovation leadership, her constructed model aligns strongly with all other aspects of systems leadership, and, therefore should serve usefully as a guide to systems leaders. Echoing key messages from other works, it is clear that high levels of intellectual capacity and nurture of cognitive processes are crucial ingredients. The need for strong metacognitive functioning translates into the need for diversity in the leadership team, exhibiting strong levels of reflexivity and challenge. At the highest level of her model, the extracognitive level of functioning is perhaps best interpreted as a theoretical justification for the importance of an organisational value system that creates an instinctive and all-pervasive sense of purpose and self-belief reinforcing the organisation's priorities and relentless focus on service outcomes.

Another area of contemporary interest, (the counterside of demands for leaders to be fearless) is the study of anxiety within organisations^{66,67}. Following the Francis Report⁶⁸ into the failings of the Mid Staffordshire NHS Trust it is likely that the issue of anxiety in healthcare will become a focus for research⁵ whose applicability is unlikely to be confined purely to the health sector.

As we engage in wider systems leadership many of the techniques to support the anxious leader become less and less applicable. The implication for leaders embracing this larger stage, one that operates under the rules of 'improvisation' and working into the unknown, rather than under the iron grip of a theatrical director, is profound and has implications for how one works with the issue of ambiguity on all levels. The issue of ambiguity featured strongly in the literature review. Of the ninety or so papers and books, the issue of ambiguity featured in over twenty of our more recent references^{31,36,38,45,50,69-81}.

As previously discussed, it has become clear that a response to increased anxiety along the lines of a greater number of targets and indicators is counter productive³³. But looking for a new tool, model or framework risks producing a 'solution' in the same mould as the problem it is trying to address and risks further exacerbating the problem, causing further anxiety. A framework or a model, after all, requires a degree of certainty and consistency of context that is present to a lesser and lesser extent in whole systems leadership.

2.3 Evidence for linkages between systems leadership and agreed outcomes

We have touched on the important role of the systems leader as both a sense-maker – essentially the mediator of the often mixed and complex messages originating throughout a system and the context within which the system is set. It could be argued that the foundations for this understanding were laid down by Mark Moore^{82,83} in his seminal work relating strategy with public value. In his work at the Kennedy School of Government he was seeking to identify how the valuable understanding developed at Harvard Business School about effective strategic leadership in commercial organisations could be applied to public organisations. In particular, he sought to identify what measures could be derived for activities of public administration to mirror a definition of success that could be substituted for the universally accepted currency of shareholder return. His resulting findings led to the creation of his strategic triangle model, in which he acknowledged that success requires three independent "forces":

- an authorising environment that provides a source of legitimacy
- a public value proposition focusing on the purpose and mission
- the operational capacity and capability to ensure that the desired outcomes are practically feasible.

This model provided groundbreaking understanding of the essential difference between the relative simplicity of market driving commercial organisations, and those organisations focused on delivering to the public agenda. In this model, he named and separated the two difficult challenges for public leaders – defining what constitutes value in relation to the broad range of public services (some of which are clearly beneficial to individual citizens, but some of which may pit the rights of individual citizens against those of the wider society), and underpinning this with an authorising mandate that has emerged from the wide diversity of vested and political interests. He argued that for commercial firms, there is little challenge to the notion that financial return dominates the value proposition, and investor decisions driving share valuation provide the only authorisation required.

Based upon 'grey/informal' knowledge of the authors.

Rhodes and Wanna^{84,85} were highly critical of this approach, claiming several weaknesses in the model, but specifically that it applied only to the political landscape in USA, where tensions between political forces, government executive action and citizen/society are embedded in the constitution. They claimed that in contrast, the Westminster style government found in UK, Canada and Australasia did not provide an adequate balance between the arms of the triangle to create the right democratic accountability between elected forces and executive powers. This challenge was widely rebutted as a misinterpretation^{86,87} of Moore's model, but the argument demonstrated the very difference that Moore was seeking to highlight. Indeed, the value of the model has been strengthened by Moore's own reflection that there is more for the commercial world to learn from the public sector than the other way round⁸⁸, especially in increasingly global markets, where citizen intervention on ethical and environmental grounds can seriously damage reputation as a precursor to damaging profitability. The concept of an authorising environment reflects a growing diversity of views in relation to regulatory bodies, environmental impact and ethical considerations.^{89,90} Similarly, discussion of how to define and measure public value continues to attract attention 91-94.

Moore's work has generally been applied to illuminate traditional models of leadership within public service organisations. As we study the challenges of systems leadership, it is clear that Moore's strategic triangle continues to offer fresh insight. Arguably, Moore only intended the model to apply to the top tier of hierarchical organisations. For everyone else in the organisation, these leaders and their governance structures define the authorising environment for everyone else. The measures they define in their scorecards determine the value proposition to which everyone else will be held. But as we have seen, the authorising environment is just as crucial to workers in complex systems, but is no longer provided according to the positional authority of a hierarchy. Now, the lack of conventional order in the system means that legitimacy emerges from a mix of chaotic power sources – formal and informal, and is in constant flux. Similarly, in a multi-agency complex system, a value is much more contextual and can be defined in different ways by different actors. We have seen that the uniting purpose within complex systems is more likely to emerge around clearly espoused values, attitudes, behaviours and beliefs. So, Moore's strategic triangle speaks to the difficulty of articulating just how the value proposition will be quantified, but enables the public value to be redefined as a series of agreed (often qualitative) outcomes, or more powerfully still, as a state of being – a new order of "how things are". Seddon³³ goes so far as to suggest that conventional performance targets are counterproductive in this context.

As we seek to establish a more credible approach to the value proposition, we recognise that there are generally two strands of thought relating leadership to outcomes. One body of work focuses on the performance management and incentive structures aimed at measuring and driving the right outcomes. The second focuses on organisational development (OD) – investment in change designed to reorientate the culture and structures around the desired outcomes. In practice, there is little of practical help in the performance management category, as this sits too close to command rather than influence – an approach that singularly fails across systems.

Cady⁹⁵ sees two complementary components of systems leadership: - inspiration and implementation – the first providing the direction and creating the uniting force to be supported by rigorous attention in the implementation itself. This approach is supported by work described as knowledge into action ⁹⁶ that looks at the conditions for implementing evidence-informed policy.

Burnes⁹⁷ provides a historical perspective across organisational development (OD) demonstrating that there is a critical gap between academic rigour of research and practical relevance, offering some hope that these two are beginning to converge. It should be said that the focus of OD is generally on a single organisation, rather than the wider system. That said, some effort has been made to demonstrate connection between leadership and effect ^{70,98}. Here they alight on the word 'evaluation', but not without problems, in one paper defining it as 'assessing the value, worth or merit of an intervention, programme or project^{'98}. This is a broad definition that could include practically anything, the consequence being that it makes it harder to evaluate actions in any concrete terms. The approach of many practitioners is to focus on both qualitative and quantitative factors 98,99 but in the context of the actual project and what is immediately 'seeable', as opposed to the entire span of the intervention. Notions of linkages between leadership and outcome are scattered in qualitative and qualitative terms that defy aggregation which could appear on a balance sheet.

This should not come as a surprise. If, as we have discussed, there are less tangible linkages in a system, as opposed to a bounded organisation, this should also extend to the question of the association between systems leadership and outcomes.

In reframing the notion of evaluation one interviewee with a practitioner stated 'instead of using words "measurement" and "evaluation", the word "learning" may be preferable98. This is telling, and features in the literature more widely 70,99. Linkages and evaluation are seen in the context of wider organisational learning, not only of those actively 'orchestrating' any change process, but also those subject to the activities. It therefore stresses the emergent properties of the process and how individuals and groups react and learn. The issue of reflexivity is therefore critical. Reflexivity can be thought of as a deeper form of reflection; a form of thinking about experience and how this comes to further affect actions and behaviour, and how this, in turn, affects further thought. The importance of reflexivity, particularly in a more complex and ambiguous world, has recently attracted the attention of practitioners and academics alike 41,50,62,71,78,100-102.

A number of authors seek to atomise aspects of leadership behaviour, competence and knowledge, in order to achieve the holy grail of a formula for success. We have found little or no discussion about the achievability of this that adequately takes account of the reality that evidence takes very different forms in organisational studies (largely case studies), social research (largely survey based) and "hard" sciences (largely randomised control trial based). Hoffman¹⁰³ for example identifies a 25 attribute leadership model, claiming reasonable correlation; Packard¹⁰⁴ is unconvincing with his attribution against 28 characteristics whereas Weinberger¹⁰⁵ states that there is no link between outcomes and emotional intelligence measures. Attempts to work at a much more general level, identifying broad characteristics found amongst successful systems leaders appear much more promising^{38,39,63}.

A number of authors have sought to establish relationships between aspects of leadership and their own sector of public services. Within the education setting, the policy shift towards school networks as systems has been considered by Hargreaves¹⁰⁶, and Vilkinas¹⁰⁷ amongst others. There is considerable focus on driving healthcare through an outcomes focus¹⁰⁸, and through partnership working with patients 109-111. Of particular interest are published case studies of organisations whose success is attributed to a long established culture driven by single-minded value-driven purpose, and staff empowerment. The Mayo clinic¹¹² is one high profile example. The recent success of the Team GB and Team Sky Cycling teams bears some consideration as another powerful example in which the elements of Moore's strategic triangle were brought together in a way that every member of the team in every part of the system was both empowered and aligned behind common purpose and able to respond under the leadership of Sir Dave Brailsford 113,114, with a methodology of "aggregation of marginal gains" – another common theme of systems leadership, that challenges the normal wisdom of large scale change.

In summary, there is no silver bullet or golden thread that connects leadership to outcomes. To suggest that would be contradictory to the notion that in wider systems there is cause and effect. However, there are emergent patchworks where the actions that people take can be seen to have effect. The weaving together of these fragments takes thought as one senses what to do next in the rich context of the here and now – an ability that requires reflexivity, both individually and to engage in wider reflexive conversations.

2.4 Potential to identify a basis for optimising approaches to leadership to maximise outcome achievement

Within the patchwork approach discussed in section 2.3 there are contradictions. For example, on the one hand targets are useful in order to determine future (immediate, tentative) steps in order to focus minds and resources, but on the other, if taken to an extreme, they are destructive, leading to an inability to make the most of emergent opportunities³³. Much of the literature has highlighted the issue of paradox^{15,70,71,77,81,101,115-120} as a more useful way to think about two opposing forces, particularly when associated with the issue of uncertainty^{64,78,118,121}. As with 'systems' it is worth bearing in mind what is meant by paradox. For Stacey¹²², a complexity management scholar, who featured strongly in the literature review, it means:

Paradox [is] a state in which two diametrically opposing forces/ideas are simultaneously present, neither of which can ever be resolved or eliminated. There is, therefore, no possibility of a choice between the opposing poles or of locating them in different spheres. Instead, what is required is a different kind of logic, such as the dialectical⁶ logic.

To take this view, not only is paradox an essential feature of systems leadership, but to seek to 'collapse' paradox to one or other end of a spectrum leads to a lack of connection between the intention of the leader and outcome. For example, an overly developed focus on targets and measures leads to a lack of attention to what develops on the ground in each unique situation that a policy or a strategy is applied to. But on the other, an abandoning targets results in a lack of focus of attention and resource. Both are essential.

Grint^{123,124} and others differentiate between tame and wicked problems. Tame problems may be difficult to solve, but are those for which a known solution exists – others have solved similar problems elsewhere. In contrast, wicked problems are general surrounded by such a complex set of circumstances that there is no precedent from which to build a solution. Paradox is particularly associated with a 'wicked problem' ^{74,77}, defined by David Bolgar⁷⁷ in a paper on leadership in local government as: 'when the challenge is either wholly or perhaps long standing proving impervious to previous efforts to resolve it – teenage pregnancies might be an example or long term additions to alcohol or drugs'. Issues such as teenage pregnancy are 'wicked problems' for all within the system, from policy makers to those on the frontline of service delivery.

The process of argument by which understanding develops only to be subject to further discussion and argument summarised by Hegel's notion of 'thesis, antithesis and synthesis ...'.

2.5 Acts of leadership and followership throughout the system - power

Within a leadership system there are acts of leadership (as a verb) as opposed to anointed titles of the leader (a noun). To be a 'leader' implies a one way street of 'order and obey' whereas the act of leadership is associated closely with the role of followership 1,15,38,63,125. One moment a person is engaged in an act of leadership, the next they are a follower. No one person is in a position of complete power; they may have more or less than someone else, but not in absolute terms. The issue of power featured prominently in the literature, particularly when associated with whole systems. 45,58,62,116,126–130. In other words we all exist in a web of power relationships where we affect and are affected by others, some who we know, others we do not 131.

To illustrate the point, simplified examples of leadership, followership and power might include:

- **The regulator**: leadership to set standards, provide means of inspection, to raise awareness and confidence in the public; followership – respond to feedback about the justice of any inspection, to anticipate and respond to political demands, to work within resources given
- **The CEO**: leadership to give confidence to the public, to provide direction for one's direct reports, to establish the environment whereby people know what to do and have appropriate freedom, to enforce rules, to allocate resource; followership to listen and respond to the public and politicians, to take action and explain actions regulators, to take account of staff concerns
- **The politician**: leadership to set the policy, to convey what standards are acceptable and provide resource: followership - to be accountable to the public for events and concerns at the micro and macro level
- **The frontline service manager**: leadership to prove enough clarity to frontline staff, allocate resource, to set standards; followership – respond to frontline concerns by the public and staff

Within this context none of the players hold all of the cards; power is permeated throughout the system, an issue that has implications for leadership as reflected in the literature. Within the literature review nine papers published from 2010 onwards discussed the importance of distributed leadership, most within the context of whole or complex systems 37,62,71,74,98,130,132,133. Bolden⁶² defines distributed leadership as:

'post heroic' representation of leadership which has encouraged a shift in focus from attitudes and behaviours (as promoted within traits and styles...) of individual leaders to a more systematic perspective whereby leadership is conceived as a collective social process emerging through the interactions of multiple actors.

For whole systems leadership, awareness of one's shifting situation within the wider web of power relations is critical as is the ability to give up on the illusion that the leader is a form of hero, always in charge.

3. Implications and Conclusions

The literature has shown that leadership in whole systems requires different abilities to those where a person is seen to be in 'firm control' over the bounded domain of a single organisation. Over reliance (but not abandonment) on models, frameworks and tools in moving from that domain to take up a wider systems leadership role can be counterproductive. This is particularly the case where the anxiety a leader faces within the confines of a unitary organisation amplifies when they find themselves in wider systems leadership role. In such cases it is not surprising that a person relies on what has worked for them before – more control, more targets, more and detailed policy etc. This would be a mistake, a new mind-set is required.

The literature suggests that the following inter-connected features are important, in no particularly order; these include an understanding and/or an ability to encompass:

- Ambiguity: an understanding of the shifting contexts in which one now works. For example, the ability to adapt and consider how to reconcile policy objectives with changing and sometimes contradictory events on the ground
- Power relations: the ability to control does not lie with one individual; we are all bounded by complex threads of power relations that require acts of insightful followership and leadership
- An authorising environment: we are all subject to an environment that legitimises our ability to act, but in conventional organisations the ordered and structured environment tends to convey such authority subconsciously. In complex systems, leaders play a strong part in establishing a de facto authorising environment comprising formal and informal permissions and power structures
- Paradox: essentially contradictory and opposing features often arrayed around an irresolvable wicked problem. Here, the importance lies in understanding the fluid nature of tension and an ability to work step by step to be aware of emergent opportunities and threats
- Managing conflict: when working in complex systems, there is considerable danger in reaching a superficial understanding, as the marginal effects can dominate over a prolonged period – the communal process in which a multi-disciplinary team "wrestles" with the ambiguities and contradictions can lead to a greater depth of understanding, create new insight and generate superior solutions – working with the conflict and against the grain of simplistic compromises
- Reflexivity: related to paradox, ambiguity and power relations. The ability of leaders to conscientiously consider their own practice and the practices of others in a way can come to improve practice and further thought within their rich context leading to further processes of reflexivity
- Distributed leadership: of the many 'types' of leadership, descriptions of distributed leadership with an appreciation of the 'unheroic' leader, aware of the social processes of leading and following, offer a more helpful way in which a leader can positively influence the terrain that they have influence over and link emergent features with others in the networks of power.

Annex 1 - Research Methodology

The research questions

A growing range of problems are manifest across whole systems which are not tractable to conventional leadership focused at, or below, organisational level. The premise of our research is that new emphases are required for successful leadership either across whole systems, or at the nexus between systems. Implicit in our research, is the need to meet the growing demands of both capacity and capability of leadership capable of delivering at a systems' level.

As a precursor to creating development interventions to build this capacity and capability we are seeking to answer the question:

What leadership characteristics or styles are required for successful outcomes of such systems' problems?

Search domains

The key challenge in developing our search criteria lies in the relatively loose application of terminology in each of the key areas of our work. We therefore developed a model for the search domains which identified broad target areas for the literature review, which we then applied iteratively, adapting our search terms based on the yield of results from each search.



The diagram above illustrates the series of research domains, showing some of the "synonyms" targeted for exploration as part of the search process. Notionally, the diagram shows that we are seeking a linked path from the combination of systems thinking in public services, through to outcomes as we cross from left to right, using each of the identified domains as a target to identify or narrow down specific references which might add value to our understanding.

The above domain model reflects our initial thoughts about the need to target our research with a coding taxonomy in mind, but acknowledging the need to reflect and refine our approach, contingent on search yields.

Search criteria

In practice, combinations of search criteria focusing on leadership, system thinking, turbulence and outcomes yielded a corpus from which we were then able to extract relevant results using the other domains as selection and filtering criteria.

Search databases

The Cass e-resource centre provides a portal into a number of search databases, providing excellent coverage of the relevant literature abstracts, with direct access to the majority of full texts from mainstream journals, supported by indexing to a wider range of materials. A relatively small number of apparently useful materials could not be accessed. We also had access to a similar portal at Roffey Park.

In practice, a combination of EBSCO, Pub Med, Emerald and Sage databases gave access to the wide range of materials on which we drew. This proved a sufficiently comprehensive source of materials, including exploration of case studies as well as theoretical materials, that we did not draw significantly on grey literature.

Evidence timeline

As we conducted a thorough review of whole systems leadership within the last 12 months, we aimed to confine our additional research to the last 3 years in areas which overlap with our previous work, and a maximum of 5 years for other areas. Results of our searches confirmed that conditions created by the global financial crisis have indeed conspired to produce a context within which systems leadership has come to the fore, and we are therefore confident that narrowing our searches to this period have not excluded significant concepts.

Filtering

As discussed in the body of the review, it readily became apparent that the corpus of research revealed by our work included a significant volume of work of limited value: mainly of poor quality. For works in this category, the process of filtering required rather more attention than usual, and our approach to sifting the material relied less on methodology than might normally be the case.

Results

Based on this highly reflexive methodology, our literature review identified some 300 or more potential papers over and above the 200 or so covered in our review 12 months ago. Of these around a further 200 were investigated and some 150 were considered in detail. We reference 130 papers including some of the more definitive foundation works already known to us.

Annex 2 – background on systems leadership models

Conceptual Approach

It is well documented that there is limited robust research evidence demonstrating a causal relationship between the calibre of leadership and successful outcomes. This fact invariably casts a shadow over the integrity and resilience of any findings emerging from leadership research.

However, this argument generally exposes impoverished thinking about the validity of differing types of evidence. Management science requires a different approach to evidence compared with either the largely rational evidence sources involved in physical sciences, or the statistical basis of evidence in social sciences. In management science, a series of pragmatic but well triangulated case studies provide the main body of evidence. In this context, there is ample case study evidence to demonstrate that weak leadership is likely to yield poor outcomes, whilst strong leadership is usually (though not inviolably) associated with successful outcomes.

In our research, we are seeking an even more subtle distinction to permit finer discrimination so that we can identify the relevant attributes of leadership which achieve greater prominence at a whole system level contrasted to an organisational level. We have therefore employed an inductive approach, in which we have drawn on our experience, supported by insight from our interviewed stakeholders, to postulate a series of propositions describing those characteristics which we suggest are relevant to whole systems thinking. For each of these propositions, we have identified published material that supports the proposition to weigh against material which may challenge or directly conflict with the proposition. In this way, we aim to build our rationale on "probable cause".

Section 4.3 sets out two separate foundation models developed by the authors, from which our propositions draw.

As we have been designing the research study, a further complementary model has emerged as a useful concept that has also shaped the development of our initial propositions. In this model, we note that recently developed leadership frameworks emphasise a competence based approach to describe the essential ingredients of leadership. Such a framework is relevant in an organisational setting in which a performance management or target driven culture is used to influence and define success. In our experience, this emphasis leads to a strong task orientation – and focus on what leadership achieves and why. In many sectors, such an approach to characterising leadership has been found to be too narrow. An alternative, and increasingly fashionable approach, is to focus on the qualities which contribute to successful leadership. Such a framework emphasises "being" rather than "doing", an approach often found associated with the spiritual dimension of leadership where the maturation process is described as formation, rather than development. As a result, there is a clear temptation to align a qualities-based framework around individual leaders, rather than leadership. The focus of a qualities based approach could best be described as "who provides the leadership?" or "how is the leadership provided"? A third alternative recognises that leadership is contextual, challenging the norm that competences of leadership are transferable between situations. At its extreme, this contextual model of leadership would propose that the situation makes the leader, rather than the reverse. Arguably, in this view, leadership is characterised by where and when.



Our challenge to each of these leadership frameworks is that they are generally represented as a fully rounded paradigm. For one such framework to be preferred over others the deficiencies of those others must be drawn out. Arising from our studies, we take a different view, namely that each of these opposing models is only partially effective, and inadequate attention has been given to the boundaries within which each is helpful, and outside of which the framework increasingly fails to address important aspects of leadership. Instead, we propose a model in which effective leadership requires a creative tension between competences, qualities and contextual relevance. The natural tensions that occur throughout leadership thought are an integral part of this model. We venture to suggest that systems leadership is that place in which there is a natural equilibrium between the doing, being and place of leadership. With apologies to Kipling⁷, this brings the six honest friends into partnership.

Propositions

In our approach set out above, we have deduced a number of propositions which are at least partially supported by our experience, our preliminary review of relevant literature and views expressed by those interviewed. These propositions themselves are then explored in greater detail, seeking evidence for and against each.

We have suggested the following key propositions be used as the touchstone of our research, namely that systems leadership requires:

- confidence to recognise and resolve paradox; systems thinking is often characterised by several pairs of apparently conflicting pressures which readily develop into paradox
- constant reappraisal and adaptation to navigate towards loosely defined goals, following well established principles rather than rules: the context for systems thinking is increasingly characterised by turbulence, complexity, ambiguity, and chaos, requiring fleetness of foot to sustain a dynamic balance between opposing forces
- qualities associated with promoting the leadership of others: success across systems demands a co-operative willingness to promote other players in the system above self interest, calling for magnanimity, humility and shared values as exemplified (but not limited specifically to) "servant leadership"

I keep six honest serving-men, (They taught me all I knew); Their names are What and Why and When and How and Where and Who. - Rudyard Kipling

- elevated levels of reflexivity and self awareness: this describes leadership informed by deep insight about the way actions, behaviours and events are perceived through different external lenses, demanding personal characteristics such as strong emotional intelligence, powerful observational skills, and synthesis of practice with theory
- sensitivity to identify and tap into different sources of power: systems are characterised by a complex mix of power sources, including formal and informal, sustained and transient, and effective leadership needs to ensure that these are embraced and aligned with the grain of the overall outcomes
- a single minded drive towards outcomes that are meaningful to those for whom services are provided: making the space to actively listen to the varied voices of service users and understanding that outcomes are very personally defined, in order to break away from the traditional approaches of defining and measuring internal processes as surrogates for outcomes because in turbulent and uncertain times, these surrogates are stretched outside the context within which they offer a relevant analogue
- a strong emphasis on assurance capable of maintaining an effective and appropriate balance between empowerment and authority: a systems response requires leadership that is fully informed and in command, whilst distributing throughout the system a broad range of permissions for action and decision (noting the contrast with performance management as a vehicle of control rather than assurance)

As we undertake the synthesis of our research findings, we will be testing out both the individual validity and completeness of the set of propositions. We are adopting a structured process for capturing the results of our research using the attached template.

Underpinning models and concepts in systems leadership that we have adopted as foundation

As noted in the requirement specification for this research study, we recently undertook a study of published research relating to leadership of whole systems, as one of a number of supporting papers for the King's Fund's second annual leadership summit 1. Although that work was conducted with the UK's health system in mind as the primary recipient, we did not allow ourselves to be constrained either by the UK as a geographic context, or the health domain as a specialist field. We therefore anticipate that our core findings from that research study will remain applicable to this study of whole systems leadership for children's services, but will be seeking to supplement that work by seeking additional studies which offer particular and potentially fresh insight into the field of children's services.

It is worth noting however, that our previous study confirmed a number of difficulties relevant to this study. We had to resolve some of these difficulties before we could focus adequately on our previous brief of identifying important characteristics that future leaders need to be aware of and develop, as they are increasingly expected to provide effective leadership beyond the boundaries of their formal organisational remit. These difficulties included:

- apparent inconsistencies in what is meant by a system
- a surprising degree of ambiguity between concepts of leadership and management
- remarkably little definitive and robust research linking leadership to outcomes.

We addressed the first of these by providing a working framework which defined four different types of system (markets, networks, collaborations and movements), each described by differing relationships and bases of power between the players. The second we addressed by adopting a working definition that management focuses on the control of resources to achieve a specific set of goals, whilst leadership achieves goals through influence.

The third continues to pose a significant problem for all leadership research. It remains true that there is little evidence demonstrating a strong relationship between high calibre leadership and the successful achievement of goals. There is however, plenty of evidence that weak leadership is more likely to contribute to failure, and we might like to suggest that good leadership is more likely to achieve the set goals. However, the combination of problem complexity, the variety of contexts for which we are seeking to find solutions, and the significance of inter-personal relationships between the different actors, their motivation and tendency (or not) to power-play leads to a situation in which definitive research becomes a near impossibility.

What we have found in our research is that there are certain characteristics of leadership which are regularly found in situations of successful outcomes. We have also noted from system theory that leadership is more powerful than management when dealing with systems rather than individual organisations. We also observe that even systems which are relatively simple and predictable under normal circumstances, begin to exhibit similar behaviours to those of much more complex systems when subjected to greater stresses. In the current economic climate, we therefore conclude in support of the other studies referenced, that leaders will increasingly need to understand how to apply their leadership skill and experience to contexts which increasingly exhibit complex behaviours.

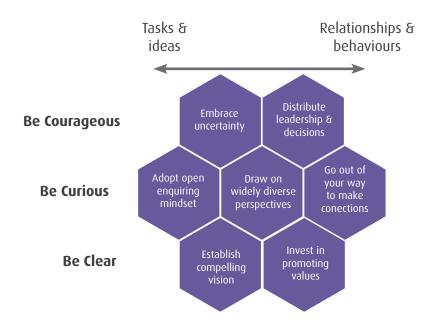
In our work for the King's Fund, we identified seven characteristics which are repeatedly found in leaders who are successful across whole systems, and we summarised these as guiding instructions to leaders:

- go out of your way to make new connections
- adopt an open, enquiring mindset, refusing to be constrained by current horizons
- embrace uncertainty and be positive about change adopt an entrepreneurial attitude
- draw on as many different perspectives as possible; diversity is non-optional
- ensure leadership and decision-making are distributed throughout all levels and functions
- establish a compelling vision which is shared by all partners in the whole system
- promote the importance of "values": invest as much energy into relationships and behaviours as into delivering tasks.

In more recent work, we have synthesised these seven, initially isolated characteristics, into a practical framework which we are continuing to strengthen through practical case studies, and which lends itself especially to this work. We believe this new framework provides a further breakthrough for practical tools to develop leadership capability which is especially appropriate for those charged with maximising achievement of complex goals across whole systems. It is especially pertinent to public sector leaders who are increasingly seeking to achieve outcomes through a wide range of partnerships embracing public, private and third sector actors.

By grouping these seven important characteristics in the honeycomb diagram below, it is readily apparent that in the horizontal plane, they represent a continuum from being wholly task/ idea focused, through to being entirely focused on relationships and behaviours. In our casual observations, the growth of rigid performance management and target driven regimes in public services has distorted this horizontal balance, but we know intuitively, that mature and effective relationships and behaviours contribute significantly to successful systems. Our model emphasises the importance of re-setting this balance between task and behaviour, so that leaders invest time and energy into new and sustainable relationships.

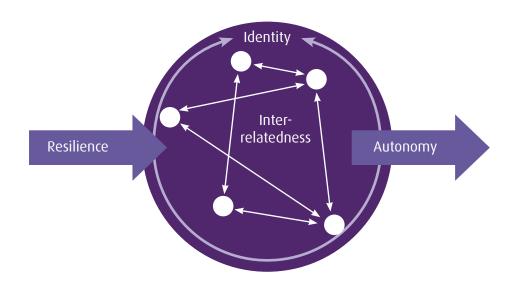
In the vertical axis, the foundation is created by leaders who establish clear and compelling combinations of vision and values, and then build consistently on those. There is nothing unusual in this – almost all management theories will teach this. What is less common in leadership teaching, is that the characteristics which prove successful in leading systems, demand curiosity to continue to learn, to explore scenarios, and to always strive for improvement. Leaders who lack curiosity will not be prepared to deal with complexity. But our evidence suggests that the value of being curious is lost without the courage to take bold and often difficult decisions. This new framework is especially important for leadership in systems which are generally referred to as complex adaptive systems; ones which are self-learning, and adapt to changes in their context.



The concept of organisational health yields a complementary model which has potential to shed additional light on this research ¹³⁴. This concept challenges the target culture of performance management, noting that a truly healthy organisation achieves the double of great operational performance today whilst making tangible and defined progress towards its strategic vision. Although the concept was developed with specific reference to organisations, it appears equally applicable and potentially even more relevant to whole systems.

Our research yielded a model for organisational health in which there are four important attributes as shown in the figure below – (in this instance the descriptions have been adapted to the system rather than organisation):

- **identity** is all about the alignment of purpose and the creation of a clear and coherent vision;
- **inter-relatedness** describes the way every component in the system has a clear and distinct relationship with all the others, reflecting both the leadership challenge of uniting the partners, but also the critical aim of aligning incentives and motivators behind a common purpose;
- **resilience** relates to the robustness with which the system can adapt to the changing pressures and turbulence arising from external forces;
- **autonomy,** in contrast to resilience, expresses the way that the system "imposes" itself on the external world, describing the extent to which the system takes responsibility for its own destiny and has sufficient presence to influence and shape the world around it. In the context of leadership, this manifests through the self-conviction and courage to define a common destiny and purpose for the whole system, rather than waiting for someone else to give permission, or, for everything to fall neatly into place.



References

- Welbourn, D., Warwick, R., Carnall, C. & Fathers, D. Leadership of whole systems. King's Fund 1. (2012).
- Heifetz, R. A. & Linsky, M. Leadership on the Line: Staying Alive through the Dangers of 2. Leading. (Harvard Business Press: 2002).
- Heifetz, R. A., Grashow, A. & Linsky, M. The practice of adaptive leadership: tools and tactics 3. for changing your organization and the world. 326 (Harvard Business Press: 2009).
- Tate, W. Centre for Progressive Leadership Launch Conference. (2012). 4.
- 5. Gilmore, B. Design Failure: Organizational and Leadership Boundary Spanning. 27, (2009).
- Jackson, M. C. Systems Thinking: Creative Holism for Managers. 6, 376 (John Wiley & Sons: 6. 2007).
- Larson, S. How to calm the "perfect storm". Frontiers of health services management 24, 7. 35-40; discussion 41-3 (2007).
- Leskes, A. Leading through a Perfect Storm. Liberal Education 92, 28–33 (2006). 8.
- Cotton, R. D. & Stevenson, W. B. PERFECT STORM: A CROSS-LEVEL STUDY OF TRANSFORMATIONAL 9. LEADERSHIP DURING SCANDAL-EXACERBATED DECLINE. Academy of Management Annual Meeting Proceedings 8, 1–6 (2008).
- Shinn, L. D. Inside the Eye of a Perfect Storm: Leadership in Rough Financial Seas. Presidency 10. 13, 30-35 (2010).
- Falk, C. F. B. The H Factor: A Behavioral Explanation of Leadership Failures in the 2007-2009 11. Financial System Meltdown. Journal of Leadership, Accountability & Ethics 9, 68–82 (2012).
- Horney, N., Consulting, A., Pasmore, B. & O'Shea, T. Leadership Agility: A Business Imperative for a VUCA World. People & Strategy 33, 32–39 (2010).
- Swarbrick, A. & Stearman, C. When it 's VUCA, do you call? Training Journal 47–51 (2012). 13.
- 14. Ohanian, A. Leading in a VUCA world. Training Journal 19–23 (2012).
- Bathurst, R. & Monin, N. Shaping Leadership for Today: Mary Parker Follett's Aesthetic. 15. Leadership 6, 115-131 (2010).
- Wheatley, M. J. Leadership and the New Science. (Berrett Koehler Publishers Inc.: San 16. Francisco, 2006).
- Wheatley, M. Creating Change. Leadership Excellence 26, 9–9 (2009). 17.
- Wheatley, M. Selfless Service. Personal Excellence 14, 14–14 (2009). 18.
- 19. Wheatley, M. Perseverance - its a life-saving skill. Leadership Excellence 27, 11–11 (2010).
- Wheatley, M. Fearless Leaders, Leadership Excellence 27, 5–6 (2010). 20.
- Wheatley, M. (Meg) Lost and Found in a Brave New World. Leader to Leader 2013, 46–51 21. (2013).
- Wheatley, M. J. Self-Organized Networks. Leadership Excellence 25, 7–8 (2008). 22.
- Wheatley, M. & Frieze, D. Emergence. Leadership Excellence 25, 10–10 (2008). 23.
- Frieze, D. & Wheatley, M. It's time for the heroes to go home. Leader to Leader 2011, 27–32 24. (2011).
- Christensen, C., Grosman, J. H. & Hwanq, J. Innovator's Prescription. (McGraw-Hill Professional: 25.
- Davis, G. F., McAdam, D., Scott, W. R. & Zald, M. N. Social Movements and Organisation 26. Theory. (Cambridge University Press: 2005).
- Laszlo, K. C. From systems thinking to systems being: The embodiment of evolutionary 27. leadership. Journal of Organisational Transformation & Social Change 9, 95–108 (2012).

- 28. Corrigan, P. Centrifugal forces and the role of clionical commissioning groups. www. paulcorrigan.com (2013).at http://www.pauldcorrigan.com/Blog/reform-of-the-nhs/ centrifugal-forces-and-the-role-of-the-clinical-commissioning-groups/>
- Bai, X. & Roberts, W. Taoism and its model of traits of successful leaders. Journal of Management 29. Development 30, 724-739 (2011).
- 30. Grint, K. The Sacred in Leadership: Separation, Sacrifice and Silence. Organization Studies 31, 89-107 (2009).
- Waldman, J. D. Thinking systems need systems thinking. Systems Research and Behavioral 31. Science 24, 271-284 (2007).
- Van den Belt, M. et al. Public sector administration of ecological economics systems using 32. mediated modeling. Annals of the New York Academy of Sciences 1185, 196–210 (2010).
- Seddon, J. "Deliverology": the sciences of delivery, or dogmatic delusion? Systems thinking 33. in the public sector - the failure of the reform regime ... and a manifesto for a better way 108-120 (2008).
- Page, J., Pearson, J., Jurgeit, B. & Kidson, M. Transforming Whitehall Whitehall departments -34. Leading major change in Whitehall Departments. Intitute for Government (2012).
- Munn, S. L. Book review: Neal E Chalofsky, Meaningful Workplaces: Reframing How and 35. Where We Work. Work, Employment & Society 26, 542–543 (2012).
- Blomme, R. J. How Managers Can Conduct Planned Change in Self-organising Systems: Actor 36. Network Theory as a Perspective to Manager's Actions. International Journal of Business Administration 3, 2012 (2012).
- Garrow, V. Evaluation of the Academy for Large Scale Change. Institute for Emplyment Studies 37. (2010).
- White, R. P. Acceptance of uncertainty as an indicator of effective leadership. Consulting 38. Psychology Journal: Practice and Research 62, (2010).
- Rooke, D. & Torbert, W. R. 7 Transformations of Leadership. Harvard business review 83, 39. 66-76, 133 (2005).
- Kapsali, M. Systems thinking in innovation project management: A match that works. 40. International Journal of Project Management 29, 396–407 (2011).
- Garud, R., Gehman, J. & Kumaraswamy, A. Complexity Arrangements for Sustained Innovation: 41. Lessons from 3M Corporation. Organization Studies 32, 737–767 (2011).
- Gilley, A., Dixon, P. & Gilley, J. W. Characteristics of Leadership Effectiveness: Implementing 42. Change and Driving Innovation in Organizations. Forum 19, 153–169 (1999).
- Aguilera, R. V., Filatotchev, I., Gospel, H. & Jackson, G. An Organizational Approach to Comparative 43. Corporate Governance: Costs, Contingencies, and Complementarities. Organization Science 19, 475-492 (2008).
- Mowles, C. Planning to innovate. Designing change or caught up in a game? Perspectives in 44. Public Health 131, 119–123 (2011).
- Stevenson, B. W. Developing An Awareness And Understanding Of Self-Organization As It 45. Relate... Emergence: Complexity & Organization 14, 69–85 (2012).
- Stevenson, B. W. Application Of Systemic And Complexity Thinking In Organizational 46. Development. Emergence: Complexity & Organization 14, 86–99 (2012).
- Alvesson, Mats; Spicer, A. A Stupidity-Based Theory of Organizations Mats Alvesson and 47. André Spicer. (2012).doi:10.1111/j.1467-6486.2012.01072.x
- Goleman, D. Working with Emotional Intelligence. (Bloomsbury: 2009). 48.
- Hamill, P. Embodied leadership: towards a new way of developing leaders. Strategic HR 49. Review 10, 5–10 (2011).

- 50. Nesbit, P. L. The Role of Self-Reflection, Emotional Management of Feedback, and Self-Regulation Processes in Self-Directed Leadership Development. Human Resource Development Review 11, 203-226 (2012).
- Fullan, M. Intrinsic Motivation. Leadership Excellence 28, 6–7 (2011). 51.
- Fullan, M. The big ideas behind whole system reform. available from www.michaelfullan. 52. com (2010).
- Georgellis, Y., Iossa, E. & Tabvuma, V. Crowding Out Intrinsic Motivation in the Public Sector. 53. Journal of Public Administration Research and Theory 21, 473–493 (2010).
- Pink, D. DRiVE: The Surprising Truth About What Motivates Us. Reporter. 2011 38, 54.
- Welbourn, D. Leadership of innovation. Work in progress for the "Innovation, Health and 55. Wealth Programme"
- Eisenbeiß, S. A. & Boerner, S. Transformational Leadership and R&D Innovation: Taking a 56. Curvilinear Approach. Creativity and Innovation Management 19, 364–372 (2010).
- Kerfoot, K. The strategic use of humility. Nursing economic\$ 16, 238–9 (1998). 57.
- McKennan, R. Does Sacrificial Leadership Have to Hurt? The Realities of Putting Others First. 58. Organization Development Journal 29, 39-50 (2011).
- 59. Ebener, D. R. & Connell, D. J. O. How Might Servant Leadership Work? 20, 315–336 (2010).
- Gabriele, E. F. Ethics Leadership in Research, Healthcare and Organizational Systems: 60. Commentary and Critical Reflections. Journal of Research Administration 42, 88–102 (2011).
- Chopra, P. K. & Kanji, G. K. Emotional intelligence: A catalyst for inspirational leadership and 61. management excellence. Total Quality Management & Business Excellence 21, 971–1004 (2010).
- Bolden, R. Distributed Leadership in Organizations: A Review of Theory and Research. 62. International Journal of Management Reviews 13, 251–269 (2011).
- Shekari, H. & Nikooparvar, M. Z. Promoting Leadership Effectiveness in Organizations: A 63. Case Study on the Involved Factors of Servant Leadership. International Journal of Business Administration 3, 54-66 (2012).
- Rietsema, K. W. W. Beyond Leadership. International Journal of Business & Social Science 3, 64. 22-30 (2012).
- Shavinina, L. V. Discovering a Unique Talent: On the Nature of Individual Innovation Leadership. 65. Talent Development & Excellence 3, 165–185 (2011).
- Hirschhorn, L. The Work Place Within: Psychodynamics of Organizational Life. 8, 278 (MIT 66. Press: 1990).
- Menzies, I. E. P. A Case-Study in the Functioning of Social Systems as a Defence against 67. Anxiety: A Report on a Study of the Nursing Service of a General Hospital. Human Relations 13, 95-121 (1960).
- Francis, R. Foundation Trust Inquiry Independent Inquiry into care provided by Mid Staffordshire 68. NHS Foundation Trust January 2005 - March 2009 Volume I Chaired by Robert Francis QC. I, (2009).
- Cicero, L., Pierro, A. & Van Knippenberg, D. Leadership and Uncertainty: How Role Ambiguity 69. Affects the Relationship between Leader Group Prototypicality and Leadership Effectiveness. British Journal of Management 21, 411–421 (2009).
- 70. Holbeche, L. Organisational effectiveness: A fresh mindset. People Management 32–37 (2012).
- Holbeche, L. GP consortia: Navigating ambiguity to produce greater public value? Perspectives in Public Health 131, 131-136 (2011).
- Noer, D. Six crucial leadership competencies for an era of downsizing. Leader to Leader 72. Spring, 8–12 (2010).

- Jones, R. & Corner, J. Stages and Dimensions of Systems Intelligence. Systems Research and Behavioral Science 29, 30-45 (2012).
- Worrall, R. Co-Creating Public Service Leadership Development in a new era of Collaboration. 74. Proceedings of the European Conference on Management, Leadership & Governance 274– 282 (2009).
- 75. Grant, A. M. Leading with Meaning: Beneficiary Contact, Prosocial Impact, and the Performance Effects of Transformational Leadership. Academy of Management Journal 55, 458-476 (2012).
- Carman, J. G. The Accountability Movement: What's Wrong With This Theory of Change? 76. Nonprofit and Voluntary Sector Quarterly 39, 256–274 (2010).
- Bolger, D. Total Place: a practitioner's quide. 77.
- 78. Yorks, L. & Nicolaides, A. A Conceptual Model for Developing Mindsets for Strategic Insight Under Conditions of Complexity and High Uncertainty. Human Resource Development Review 11, 182-202 (2012).
- Song, Y. The Leadership Effectiveness in the Process of Planned Organizational Change. Public 79. Organization Review 9, 199-212 (2009).
- Warwick, R. & Board, D. Reflexivity as methodology: an approach to the necessarily political 80. work of senior groups. Educational Action Research 20, 147–159 (2012).
- Varney, S. Learning in complex organisations: uncovering the secrets of successful practice. 81. Roffey Park Report (2007).
- Moore, M. H. Public value as the focus of strategy. Australian Journal of Public Administration 82. 53, 9 (1994).
- 83. Moore, M. H. Creating Public value - strategic management in Government. (Harvard University Press: Cambridge, Massachusetts, 1995).
- Rhodes, R. A. W. & Wanna, I. The Limits to Public Value, or Rescuing Responsible Government 84. from the Platonic Guardians. Australian Journal of Public Administration 66, 406–421 (2007).
- RHODES, R. A. W. & WANNA, J. BRINGING THE POLITICS BACK IN: PUBLIC VALUE IN WESTMINSTER 85. PARLIAMENTARY GOVERNMENT. Public Administration 87, 161-183 (2009).
- Alford, J. The Limits to Traditional Public Administration, or Rescuing Public Value from 86. Misrepresentation. Australian Journal of Public Administration 67, 357–366 (2008).
- O'Flynn, I. From New Public Management to Public Value: Paradigmatic Change and 87. Managerial Implications. Australian Journal of Public Administration 66, 353–366 (2007).
- 88. Moore, M. & Khagram, S. On creating Public Value: what business might learn from Government about strategic management. Corporate Social Responsibility initiative - working paper 3 (2004).
- Fisher, J. & Grant, B. Beyond Corporate Social Responsibility: Public Value and the Business of 89. Politics. International Journal of Business and Management 7, 2–14 (2012).
- Colebatch, H. K. Valuing Public Value: Recognising and Applying Knowledge About the 90. Governmental Process. Australian Journal of Public Administration 69, 66–78 (2010).
- Bennington, J. & Moore, M. H. Public Value: theory and practice. (Palgrave Macmillan: 2010). 91.
- Moore, M. H. Recognising Public Value. (Harvard University Press: Cambridge Massachusetts, 92. 2013).
- 93. WILLIAMS, I. & SHEARER, H. APPRAISING PUBLIC VALUE: PAST, PRESENT AND FUTURES. Public Administration 89, 1367–1384 (2011).
- Weinberg, M. The public value approach to strategic management. Museum Management and Curatorship 24, 253-269 (2009).
- Cady, S. H. & Fleshman. Kimberley J Amazing Change. OD Practitioner 44, 4 10 (2012). 95.

- 96. Cherney, A. & Head, B. Supporting the knowledge-to-action process: a systems-thinking approach. Evidence & Policy: A Journal of Research, Debate & Practice 7, p471–488 (2011).
- Burnes, B.; C. Review Article: The past, present and future of organization development: 97. Taking the long view. Human Relations (HUM RELAT) (2012).
- Finney, L. & Jefkins, C. Best Practice in OD Evaluation Understanding the impact of 98. organisational development. (2009).
- Francis, H. M., Holbeche, L. & Reddington, M. People and Organisational Development: A New Agenda for Organisational Effectiveness. 353 (McGraw-Hill Education: 2012).
- 100. Cunliffe, A. L. Reflexive Inquiry in Organizational Research: Questions and Possibilities. Human Relations 56, 983–1003 (2003).
- 101. Cunliffe, A. L. The Philosopher Leader: On Relationalism, Ethics and Reflexivity--A Critical Perspective to Teaching Leadership. Management Learning 40, 87–101 (2009).
- 102. Willmott, H. Theorizing Contemporary Control: Some Post-structuralist Responses to Some Critical Realist Questions. Organization 12, 747–780 (2005).
- 103. Hoffman, B. J., Woehr, D. J., Maldagen-Youngjohn, R. & Lyons, B. D. Great man or great myth? A quantitative review of the relationship between individual differences and leader effectiveness. Journal of Occupational and Organizational Psychology 84, 347–381 (2011).
- 104. Packard, T. Staff Perceptions of Variables Affecting Performance in Human Service Organizations. Nonprofit and Voluntary Sector Quarterly 39, 971–990 (2010).
- 105. Weinberger, L. a. Emotional Intelligence, Leadership Style, and Perceived Leadership Effectiveness. Advances in Developing Human Resources 11, 747–772 (2010).
- 106. Hargreaves, D. Creating a self-improving school system. National College for Leadership of Schools and Children's services (2010).
- 107. Vilkinas, T. & West, D. Leadership behaviour displayed by heads of school its extent and importance. Journal of Higher Education Policy and Management 33, 347–361 (2011).
- 108. Black, N. Patient reported outcome measures may transform healthcare. BMJ: British Medical Journal 346, 19–21 (2013).
- 109. Donaldson, A., Lenk;, E. & Maher, J. Communities of Influence. 1–208 (Radcliffe Publishing:
- 110. Luxford, K. What does the patient know about quality? International journal for quality in health care: journal of the International Society for Quality in Health Care/ISQua 24, 439–40 (2012).
- 111. Coulter, A. Leadership for patient engagement. King's Fund (2012).
- 112. Dickson, F. The Mayo Mystique. Marketing Health Services 22–27 (2012).
- 113. Birnie, L. Inside the mind of Dave Brailsford. Cycle SPort online May, (2011).
- 114. Pardey, D. The time to lead is now. Edge on line Institute of Leadership Management October, (2012).
- 115. Alvesson, M., Hardy, C. & Harley, B. Reflecting on Reflexivity: Reflexive Textual Practices in Organization and Management Theory. Journal of Management Studies (2008).
- 116. Plowman, D. A. et al. RADICAL CHANGE ACCIDENTALLY: THE EMERGENCE AND AMPLIFICATION OF SMALL CHANGE The University of Texas at San Antonio The University of Texas at San Antonio. Academy of Management Perspectives 50, 515–543 (2007).
- 117. Bevan, H., Plesk, P. & Winstanley, L. Part 1 a practical guide. Leading large scale change (2011).
- 118. Plsek, P. E. & Greenhalgh, T. Complexity science: The challenge of complexity in health care. Bmj 323, 625-628 (2001).
- 119. Bate, P., Bevan, H. & Robert, G. "Towards a million change agents" A review of the social movements literature: implications for large scale change in the NHS. Modernisation Agency

- 120. Stacey, R. The challenge of human interdependence: Consequences for thinking about the day to day practice of management in organizations. European Business Review 19, 292–302 (2007).
- 121. Plsek, P. E. & Wilson, T. Complexity science Complexity, leadership, and management in healthcare organisations four articles. Education and Debate 323, 746–749 (2001).
- 122. Stacey, R. Learning as an Activity of Interdependent People. Complexity And Organization: Readings And Conversations 237–246 (2006).
- 123. Grint, K. Problems, problems, problems: The social construction of "leadership". Human Relations 58, 1467–1494 (2005).
- 124. Keith Grint Wicked Problems and clumsy solutions: the role of leadership. The new public leadership challenge 169–186 (2010).
- 125. Crippen, C. Enhancing authentic leadership-followership. Management in Education 26, 192– 198 (2012).
- 126. Zald, M. N. The Strange Career of an Idea and its Resurrection: Social Movements in Organizations. Journal of Management Inquiry 14, 157–166 (2005).
- 127. Hazy, J. K. Measuring leadership effectiveness in comples socio-technical systems. 8, 58–77 (2006).
- 128. Black, a. M. & Earnest, G. W. Measuring the Outcomes of Leadership Development Programs. Journal of Leadership & Organizational Studies 16, 184–196 (2009).
- 129. Samra- Fredericks, D. Strategizing as Lived Experience and Strategists' Everyday Efforts to Shape Strategic Direction*. Journal of Management Studies (2003).
- 130. Malik, R. K. A. Shared Leadership: A Systems Perspective. Interdisciplinary Journal of Contemporary Research in Business 3, 2004–2011 (2011).
- 131. Stacey, R. & Griffin, D. A Review of complexity and the experience of managing in the public sector. 131-133 (Routledge: 2005).
- 132. Barnett, K. & McCormick, J. Leadership and Team Dynamics in Senior Executive Leadership Teams. Educational Management Administration & Leadership 40, 653–671 (2012).
- 133. OECD Preparing Teachers and Developing School Leaders for the 21st Century [electronic resource]: Lessons from Around the World. OECD Education and Skills 2012, 1–112 (2012).
- 134. Welbourn, D. Organisational health: a new perspective on performance improvement. NHS Institute for Innovation and Improvement (2009).

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