BRITISH ACADEMY OF MANAGEMENT

BAM CONFERENCE

3RD-5TH SEPTEMBER
ASTON UNIVERSITY BIRMINGHAM UNITED KINGDOM

This paper is from the BAM2019 Conference Proceedings

Developmental Paper

Triggering the Double Loop in Public Sector Leaders.

Authors

Chris Dagnan
Kate Bailey
Arumugam Velaayudan

University of Buckingham
Buckingham Lean Enterprise Unit (BLEU)
Business School
Hunter St
Buckingham
MK18 1EG
UK

Contact:
cdagnan@me.com

Abstract

Purpose. The purpose of this paper is to explore previous research and identify the challenges for organisations to trigger and operationalise learning, especially within the public sector and to propose pertinent questions for possible future research.

Methodology/approach. A review of existing literature in the areas of organisation learning, double loop learning, and the reasons why change appears to be difficult.

Findings. There appears to be a lack of research into what triggers that first realisation that learning is needed, and how to operationalise and implement a learning organisation.

Originality/value. Defining future research into the factors which are barriers to managers embedding a learning culture within their organisation

Keywords: Management thinking; public sector; organisational learning; systems thinking; double loop learning, defensive reasoning.

Word count: 2095

Introduction

The UK Public Sector cannot afford to waste taxpayers money on repeating failures, with austerity stretching limited public finances and the reported negative impact of Brexit on the economy (Macguire and Chakelian, 2018; Parker and Hughes, 2018). Unfortunately, these failures are a continuing concern; in 2014, of 200 live programmes with a total value of £400bn, just 17 projects – with a value of less than 4% of the total monitored – were given "green" status (defined as having "the lowest risks to success") (Ball and Pegg, 2014).

The Chief Executive of a Public Sector Agency in January 2019, which is in the midst of a significant programme of change, expressed this sentiment "We seem to have a 4 to 5-year cycle of boom and bust in performance, I'm not sure we are learning any lessons from what happened previously, are we in danger of repeating ourselves?". Seddon and Donovan, (2010) ask "Why aren't we all working for Learning Organisations?" Much has been written about Argyris', 1976 model of learning known as Double Loop Learning (DLL), and that DLL whilst being effective at changing the 'programming', and improving performance is difficult to do due to defensive behaviours in organisations. (Argyris, 1977, 2004; Diamond, 1986; Senge, 1990; Argyris and Schön, 1996; Garcia-Morales *et al.*, 2008).

The DLL literature describes the learning process and the difficulties of doing DLL, however there appears to have been little research as to how to trigger and start the process of implementing a DLL organisation. (Sun and Scott, 2003). Maden, (2012) states that public organizations should strive to build a learning climate, in their review of barriers to organisational learning, but doesn't go on to explain how individuals firstly realise that they need to. The literature fails to offer much in the way of methods and tools to actually do it, or to 'operationalise' it. This raises the question why is it so difficult for organisations to learn? Why is it that we are still unable to embed learning within organisations?

The purpose of this paper is to explore previous research and identify the challenges for organisations to embed learning, especially within the public sector and to propose pertinent questions for possible future research. It examines how double loop learning is a core element of organisational learning, the difficulties of implementation within organisations, and previous research into the use of double loop learning within the public sector and then sets out key areas and questions for future research. This study is to help towards preventing this cycle repeating itself again in this and other organisations.

Research methods

This literature review takes a narrative traditional inductive approach, as research questions are still forming, a strict systematic review would be too restrictive as new threads of interest open up, key topics and keywords searched included Organisational Learning, Management Decision Making, and Systems Thinking, and used EBSCO, google Scholar and JStor. The search did not limit itself to specific journals, as the search engines are able to locate keywords across a wide range of journals, books and other sources.

Defining Organisational Learning

Learning is the process of acquiring knowledge or skills through study, experience, or being taught. (Collins, 2019; OU Press, 2019), and the definition of an organisation is a group of people who work together with shared purposeful organised action.(Duncan and Weiss, 1979; Cambridge University Press, 2019) Thus Organisational Learning (OL), brings together these two definitions, by being both the process that enables the organisation to find out something new, and the actual changing of behaviours as a result of processing those new findings. (Huber, 1991; McGill *et al.*, 1992; Prange, 1999). However, while this learning may take place, it may not be aligned to the organisational goals and therefore may not result in a positive change in performance (Huber, 1991).

The ability, or not, for an organisation to change its core programming that it uses to process and evaluate information is the measure of a learning organisation (McGill *et al.*, 1992; Blackman *et al.*, 2004). At a lower level, Argyris (1977) defines 'Single-Loop Learning' as the process which does not enable the organisation to change its policies, management thinking and system conditions (shown in red in Figure 1 below). This type of learning, where the organisation treats the symptoms and fails to comprehend the systemic causes, is referred to by Senge, (1990) as adaptive learning.

A higher level of learning (above adaptive learning) is, 'Generative learning'(Senge, 1990) or 'Double-Loop Learning' (Argyris, 1976), this is where the organisation, not only detects an error but can see and question the underlying policies, goals and its core programming or 'thinking' (Seddon, 2005).
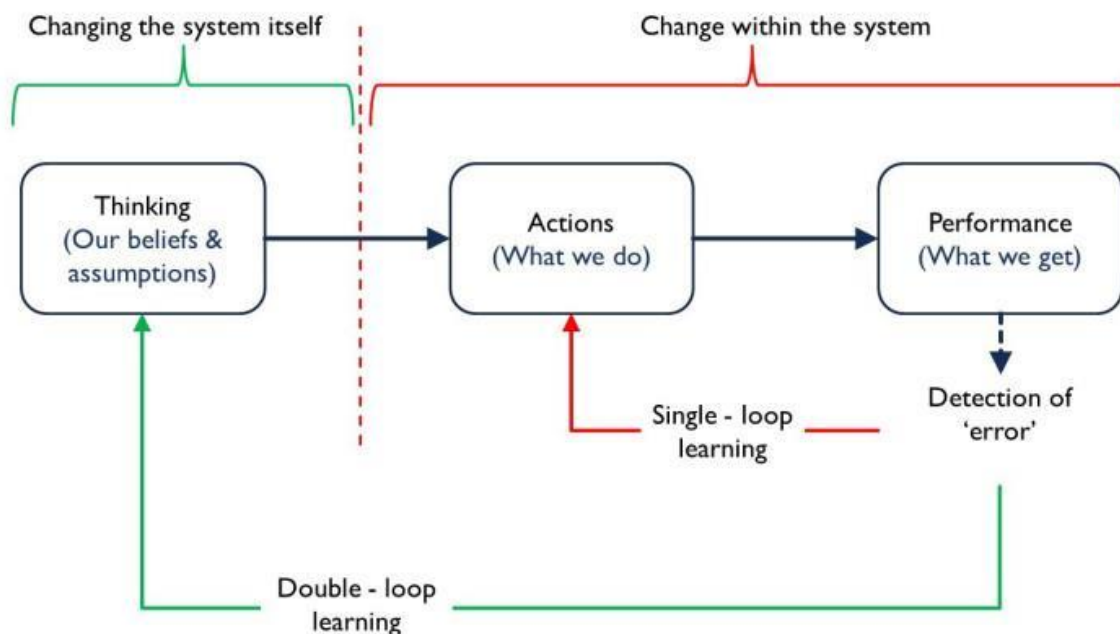

Figure 1: Double Loop Learning ((Steve, 2018)) after Argyris)

Organisational learning as a concept to enable high performance in organisations has existed since the 1950's; this history also applies in the public sector (Prange, 1999). An underlying element to a high performing organisation has been identified as being the creation of a learning organisation (Waal, 2006). Organisational learning is described as the process of improving what gets done, through better knowledge and the capability to correct and change

behaviour and the underlying core 'programming' (Argyris, 1977; Fiol and Lyles, 1985; Huber, 1991; McGill *et al.*, 1992). Thus, the organisation's performance improves as a result of these changes. "The question is not whether a business is successful, but why? and why was it not more successful?" (Deming, 1986, p. 129). To do this the organisation must understand its own performance and why it is so, and then learn from it.

What makes it difficult….

It has been said that organisations are not built to learn, rather their de-facto purpose is to make the same routine response to a variety of stimuli. (Karl E . Weick, 1991; Seddon, 2005)

DLL is shown to be difficult, not only to do and maintain but to also start (Argyris and Schön, 1996). The fear of failure, being seen to be wrong, of losing face or embarrassing oneself are key challenges that emerge from previous research (Argyris, 1977, 2004; Diamond, 1986; Adams, 1994; Crossan, 2003; Johnson, 2005; Garcia-Morales *et al.*, 2008; Schilling and Kluge, 2009; Putnam, 2014; Watts, 2014; Gibson and O'Donovan, 2014; Love *et al.*, 2016; Jaaron and Backhouse, 2017; Noonan, 2018). Together these result in organisationally embedded defensive routines that encourage cover up and avoid individuals having to admit to their peers that their espoused theories are incorrect. (Diamond, 1986; Argyris, 2004; Garcia-Morales *et al.*, 2008; Jaaron and Backhouse, 2017). These behaviours result in a challenge to overcome; namely the construction of a defensive wall of self-protection which defends and consolidates the position of the organisation and the individuals from having to alter present policies, objectives, and mental maps and inhibits productive organisational learning (Argyris and Schön, 1996; Romme and Van Witteloostuijn, 1999).

Others state it is the dominance of the command and control management thinking which, twenty years on [from Senge, (1990)], still prevails and prevents the development of more generative learning. (Seddon and Donovan, 2010). "The triggers that spur the learning process are not addressed" (Sun and Scott, 2003, p. 205), it is this creation of the learning organisation which is often found to be difficult in practice. (Clement-Okooboh, 2016).

According to Schilling and Kluge, (2009), in their research into the barriers of organisational learning much of it is theoretical and case study based, and there is a need for further empirical research. They also discuss the need to understand and develop the additional steps. prior to the learning loop itself, to develop the pre-conditions for successful learning, in effect creating the trigger conditions that start the cycle.

Previous Research studies

Academically there appears a paucity of previous research studies on the topic of operationalising double- loop learning in organisations, and understanding systems for implementing organisational learning (Shipton *et al.*, 2013; Jaaron and Backhouse, 2017). The literature according to Shipton, either focusses on abstract ideas such as culture and structure or the measuring or reflecting of behaviours and would benefit from more research into the systems for implementing organisational learning, whilst latterly Jaaron and Backhouse say that it pays little attention to tools and models that can operationalise DLL.

According to Argyris research is not being conducted on how to overcome the defensive wall to trigger change, "it stops with describing these features and does not continue with research to change them"(Argyris, 2004). Literature searches have yet to yield examples of research, empirical or otherwise into the factors that cause or trigger a change of thinking, towards a double loop learning model, both in the public sector or the private.

Ang and Joseph's, (1996) research identified organisational trigger events that preceded undefined organisational learning. They describe these trigger events as executive succession, project implementation issues, market changes, technology change, legislation change, and posit them as antecedents to organisational learning. However, their research did not identify what caused managers within the organisation to realise they needed to change their approach from single to double loop learning. Other authors identified 'serendipitous' moments such as chance meetings and seminars which triggered a change in thinking .(McQuade, 2008; Middleton, 2010). The Customer Services Director of Flagship Housing Group in 2005 identified the need to learn in a different way because of a crisis, a dynamic or challenging external environment (McQuade, 2008; Deverell, 2009; Jaaron and Backhouse, 2017). However, here again, they do not explain what triggered the change of approach in the first place.

For an organisation to be successful at learning it is essential that it applies a systems thinking approach to how it looks at the world and learns (Senge, 2006; Jaaron and Backhouse, 2017). The author has experience of The Vanguard Method (TVM) as a systems thinking based method of improvement and learning, the literature contains several case studies in public sector services, such as housing repairs, and local council call centres, which show that TVM is a way this could occur (Office of the Deputy Prime Minister, 2005; Jackson *et al.*, 2008; McQuade, 2008; Pyke, 2008; Middleton, 2010; Zokaei *et al.*, 2010; Jaaron and Backhouse, 2014, 2017; Jaaron *et al.*, 2014; Watts, 2014). Once started TVM itself takes staff on a normative learning journey where they can see the effects of their current thinking, and then decide to change them, but again this is once the method has been chosen and started, *after* the trigger point. The method, however, does offer a way of operationalising the implementation of a DLL organisation, through improving the operation as a system, improving the capacity of the organisation to change and learn, and thinking about the design of work from the outside-in (Jaaron and Backhouse, 2017).

TVM, as described by its founder (John Seddon) is based on redesigning service operations around customer demand. It enables managers to study their organisation as a system and on the basis of the knowledge gained, particularly of their own thinking, beliefs and assumptions and their consequences, as shown in Figure 1 above . TVM has 3 stages 'Check' 'Plan' and do, explained overleaf. (Seddon, 2005, 2008)

The stages in the Vanguard Method		
Stage in process	What is it	What does it do.
'Check'	An analysis of the what and why of the current system.	Provides a sound understanding of the system as it is and identifies potential causes of waste. 'Check' asks. What is the purpose of this system? What is the nature of customer demand? What is the system achieving? How does the work flow? Why does the system behave like this?
'Plan'	Exploration of potential solutions to eliminate waste.	Provides a framework to establish what the purpose of the system should be and how the flow of work can be improved to meet it. What needs to change to improve performance against purpose? What action could be taken and what would be the predicted consequences? How should success be measured and against what measures should action be taken?
'Do'	Implementation of solutions incrementally and by experiment.	Allows for the testing and gradual introduction of changes whilst still considering further improvement. Takes the planned action and monitors the consequences against purpose.

Table 1: The Stages of the Vanguard Method.(Jackson et al., 2008)

The Check phase in its examination of the 'what and why of current performance', directs the individual to question their own thinking about the design and management of work, in the style of the Double loop model. (Seddon, 2005)

There have been several published case studies, both academic (Jaaron and Backhouse, 2012, 2014, 2017; Jaaron *et al.*, 2014) and in book format (Middleton, 2010), these studied specific aspects of the organisation, such as resilience (Jaaron and Backhouse, 2014) or utilisation of resources and cost reduction (Jaaron *et al.*, 2014).

Those case studies published in Middleton, (2010), do conclude that the overall results have been better performance at lower cost, the results speaking for themselves(Middleton, 2010). One case study paper concluded "that the Vanguard Method is positively related to creating a 'double-loop' learning organisation" (Jaaron and Backhouse, 2017, p. 18).

Future research

Summing up the preliminary findings: Public sector change programmes continue to fail, appearing to repeat previous failures. Double Loop Learning, (DLL) has been proposed as a method of learning and that it is essential for high performance of organisations. DLL is itself difficult to do, and to start or trigger. There appears to be a gap in literature in the understanding of what causes and triggers a change in approach in individuals.

There is an apparent lack of research into the antecedents to the trigger point for individuals to become double loop learners, and into how to 'operationalise' DLL in organisations, once triggered.

The proposed future research seeks to understand what factors are related to decisions around the choice and realisation that some personal change and reflection may be needed and that there may be another way, to learn and become part of a learning organisation. The proposed research questions are:

How can the factors that influence Executive Decision Makers be better understood to improve the efficacy of public sector operational delivery?

Objectives.
1. To critically review the literature relating to organisational decision making at executive level, with a particular focus on how organisations learn, systems thinking, and organisational learning.
2. To conduct a study of a recent change programme in a public sector operational delivery, from an OL perspective.
3. To study public sector operational delivery Executive Decision Makers in order to understand the factors preventing or triggering the adoption of a systems thinking / DLL approach.
4. To contribute to the understanding in the Public Sector of what factors influence the thinking of those who make decisions through the development of a model to support the understanding of those factors prior to decision making.

The current proposed future research is to conduct a review of a recent 'transformation programme' to understand the thinking behind the decisions made and to study other Civil Service organisation's management decisions, and then perhaps compare with an organisation that uses systems thinking as its way of working. Methods could include questionnaires and interviews with the aim to develop a tool to help managers in their decision making.

"One doesn't discover new lands without consenting to lose sight, for a very long time, of the shore" (Gide, 1927, p. 353), however in order to do that one has to consciously decide to consent. The next steps are to complete the literature review into the above question areas and into possible research methods to use for the primary research, then finalise the research questions and then the design the primary research. The research will then help in the avoidance of waste in the use of UK taxpayer's money.

Bibliography

Adams, G. B. (1994) 'Review : Blindsided by the Elephant Source', *Public Administration Review*, 54(1), pp. 77–83.

Ang, S. and Joseph, D. (1996) 'Organizational Learning and Learning Organizations : Trigger Events , Processes , and Structures', *Academy of Management Meetings*, (August). doi: 10.1111/J.1364-3703.2006.00362.X.

Argyris, C. (1976) 'Double-Loop Models in Research on Decision Making', 21(3), pp. 363–375.

Argyris, C. (1977) *Double Loop Learning in Organizations*, *Harvard Business Review*. Available at: https://hbr.org/1977/09/double-loop-learning-in-organizations (Accessed: 27 May 2018).

Argyris, C. (2004) *Reasons and Rationalizations: The limits to organizational knowledge*. 1st edn. Oxford: Oxford University Press.

Argyris, C. and Schön, D. A. (1996) *Organisational Learning II: Theory, Method, and Practise*. 1st edn. Reading, Mass: Addison Wesley.

Ball, J. and Pegg, D. (2014) *The costly trail of British government IT and 'big bang' project disasters*, *The Guardian*. Available at: https://www.theguardian.com/technology/2014/aug/19/costly-trail-british-government-it-disasters-universal-credit (Accessed: 19 January 2019).

Blackman, D., Connelly, J. and Henderson, S. (2004) 'Does double loop learning create reliable knowledge?', *The Learning Organization*, 11(1), pp. 11–27. doi: 10.1108/09696470410515706.

Cambridge University Press (2019) 'Cambridge Dictionary'.

Clement-Okooboh, M. K. (2016) *Transitioning towards a Learning Organisation :* The University of Bolton.

Collins (2019) 'Collins Dictionary'.

Crossan, M. M. (2003) 'Altering theories of learning and action: An interview with Chris Argyris', *Academy of Management Executive*, 17(2), pp. 40–46. doi: 10.5465/AME.2003.10025189.

Deming, W. E. (1986) *Out of the Crisis*. Cambridge, Mass.: The MIT Press.

Deverell, E. (2009) 'Crises as learning triggers: Exploring a conceptual framework of crisis-induced learning', *Journal of Contingencies and Crisis Management*, 17(3), pp. 179–188. doi: 10.1111/j.1468-5973.2009.00578.x.

Diamond, M. A. (1986) 'Resistance to change: A psychoanalytic critique of Argyris and Schön's contributions to organization theory and intervention', *Journal of Mangement Studies*, 23(5).

Duncan, R. and Weiss, A. (1979) 'Organizational Learning: Implications for Organizational Design, Research in Organizational Behavior', *Research in Organizational Behavior*, (1), pp. 75–123.

Fiol, C. M. and Lyles, M. a. (1985) 'Organizational learning', *The Academy of Management Review*, 10(4), p. 803. doi: 10.2307/258048.

Garcia-Morales, V. J., Verdú-Jover, A. J. and Lloréns, F. J. (2008) 'The influence of CEO perceptions on the level of organizational learning', *International Journal of Manpower*, 30(6), pp. 567–590.

Gibson, J. and O'Donovan, B. (2014) 'The Vanguard Method as Applied to the Design and Management of English and Welsh Children's Services Departments', *Systemic Practice and Action Research*, 27(1), pp. 39–55. doi: 10.1007/s11213-013-9281-0.

Gide, A. (1927) *The Counterfeiters*. Alfred A Knopf Inc.

Huber, G. (1991) 'Organizational Learning : The Contributing Processes and the Literatures',

Organization Science, 2(1), pp. 88–115. doi: 10.1287/orsc.2.1.88.

Jaaron, A. A. M. and Backhouse, C. J. (2014) 'Service organisations resilience through the application of the vanguard method of systems thinking: A case study approach', *International Journal of Production Research*, 52(7), pp. 2026–2041. doi: 10.1080/00207543.2013.847291.

Jaaron, A. A. M. and Backhouse, C. J. (2017) 'Operationalising "Double-Loop" Learning in Service Organisations: A Systems Approach for Creating Knowledge', *Systemic Practice and Action Research*. Springer US, 30(4), pp. 317–337. doi: 10.1007/s11213-016-9397-0.

Jaaron, A. A. M., Backhouse, C. J. and Morton, S. C. (2014) 'Enhancing resource utilisation in service industries: the application of the Vanguard Method of systems thinking', *European Journal of Industrial Engineering*, 8(6), pp. 861–883.

Jaaron, A. and Backhouse, C. (2012) 'the Application of Vanguard Method To Enhance Service Workers Performance', *PMA 2012 Conference, Cambridge UK 11-13 July 2012*, (July), pp. 11–13.

Jackson, M. C., Johnston, N. and Seddon, J. (2008) 'Evaluating systems thinking in housing', *Journal of the Operational Research Society*, 59(2), pp. 186–197. doi: 10.1057/palgrave.jors.2602521.

Johnson, K. (2005) 'Combating Defensive Reasoning', *Harvard Management Update*, 10(3), pp. 3–4.

Karl E . Weick (1991) 'The Nontraditional Quality of Organizational Learning', *Organization Science*, 2(1), pp. 116–124.

Love, P. E. D. *et al.* (2016) 'Building absorptive capacity in an alliance: Process improvement through lessons learned', *International Journal of Project Management*. Elsevier Ltd and Association for Project Management and the International Project Management Association, 34(7), pp. 1123–1137. doi: 10.1016/j.ijproman.2016.05.010.

Macguire, P. and Chakelian, A. (2018) 'The deepest cuts: austerity measured', *The New Statesman*.

Maden, C. (2012) 'Transforming Public Organizations into Learning Organizations : A Conceptual Model', pp. 71–84. doi: 10.1007/s11115-011-0160-9.

McGill, M. E., Slocum, J. W. and Lei, D. (1992) 'Management practices in learning organizations', *Organizational Dynamics*, 21(1), pp. 5–17. doi: 10.1016/0090-2616(92)90082-X.

McQuade, D. (2008) 'New development: Leading lean action to transform housing services', *Public Money and Management*, 28(1), pp. 57–60. doi: 10.1111/j.1467-9302.2008.00620.x.

Middleton, P. (2010) *Delivering Public Services that Work (Volume 1): Systems Thinking in the Public Sector - Case Studies*. Edited by P. Middleton. Axminster, Devon: Triarchy.

Noonan, W. R. (2018) *Overcoming Defensive Routines in the Workplace*, *The Systems Thinker*. Available at: https://thesystemsthinker.com/overcoming-defensive-routines-in-the-workplace/.

Office of the Deputy Prime Minister (2005) 'A Systematic Approach to Service Improvement'. doi: 10.1007/s10745-005-8215-6.

OU Press (2019) 'Oxford Dictionaries'.

Parker, G. and Hughes, L. (2018) 'What the UK's Brexit impact assessments say', *Financial Times*. doi: 10.1016/S0164-0704(96)80041-3.

Prange, C. (1999) 'Organizational learning -desperately seeking theory?', *Organizational Learning and the Learning Organisation*, (January 1997), pp. 23–43. doi: EJB6246 [pii]\n10.1111/j.1742-4658.2008.06246.x.

Putnam, R. W. (2014) 'Theories of Action, Putnam 2014', pp. 778–781.

Pyke, W. (2008) 'Is Performance Personal or in the System?', *Management Servcies*, 52(Winter), pp. 40–47.

Romme, A. G. L. and Van Witteloostuijn, A. (1999) 'Circular organizing and triple loop learning', *Journal of Organizational Change Management*, 12(5), pp. 439–453. doi: 10.1108/09534819910289110.

Schilling, J. and Kluge, A. (2009) 'Barriers to organizational learning: An integration of theory and research', *International Journal of Management Reviews*, 11(3), pp. 337–360. doi: 10.1111/j.1468-2370.2008.00242.x.

Seddon, J. (2005) *Freedom from command and control*. 2nd edn. Buckingham: Vanguard Education Ltd.

Seddon, J. (2008) *Systems Thinking in the Public Sector*. 1st edn. Axminster, Devon: Triarchy Press.

Seddon, J. and Donovan, B. O. (2010) 'Why aren't we all working for learning organisations ?', *e-Organsiations & People*, 17(2).

Senge, P. (1990) 'The Leaders New Work: Building Learning Organizations', *Sloan Management Review*, 32(1), pp. 7–23.

Senge, P. M. (2006) *The Fifth Discipline*. 2nd edn. London: Random House.

Shipton, H., Zhou, Q. and Mooi, E. (2013) 'Is there a global model of learning organizations? An empirical, cross-nation study†', *International Journal of Human Resource Management*, 24(12), pp. 2278–2298. doi: 10.1080/09585192.2013.781431.

Steve (2018) *Double Trouble*, *Squire to the Giants blog*. Available at: https://squiretothegiants.wordpress.com/2017/08/03/double-trouble/ (Accessed: 28 July 2018).

Sun, P. Y.-T. and Scott, J. L. (2003) 'Exploring the divide – organizational learning and learning organization', *The Learning Organization*, 10(4), pp. 202–215. doi: 10.1108/09696470310476972.

Waal, A. A. de (2006) 'The Characteristics of a High Performance Organisation', *Ssrn*, (January). doi: 10.2139/ssrn.931873.

Watts, J. (2014) 'The Perils of Command and Control', *Systemic Practice and Action Research*, 27(1), pp. 75–89. doi: 10.1007/s11213-012-9246-8.

Zokaei, K. *et al.* (2010) *Lean and Systems Thinking in the Public Sector in Wales*, *Report for the Wales Audit Office*.