

Chapter 12: Leading for innovation and evidence-informed improvement

Chris Brown, Louise Stoll and David Godfrey

Aims

This chapter explores leadership in the context of evidence-informed practice (EIP). In it, we aim to:

- engage with the idea of EIP and the factors driving its uptake in many school systems world-wide
- outline the challenges facing the uptake of EIP in schools and by teachers
- argue that the challenges facing EIP can only be met if school leadership is effective in both its transformational and learner centred aspects
- suggest that, to harness the power of power of EIP, school leaders must find the strength to be bold in the face of accountability.

The 'self-improving school-led system' in England

The development, seeking out, use and sharing of effective pedagogic practice is something now viewed as vital to school improvement and as a necessary response to the structural changes facing many school systems worldwide (Brown, 2015). This is perhaps most apparent in England, where the current direction of education policy is providing impetus for teachers and schools to generate their own improvements in teaching and learning. England's move from a centralised to localised approach to school improvement is perhaps best highlighted by contrasting current government policy with that of previous administrations. As Greany (2015: 15-16) notes, the 1997 to 2010 New Labour government's approach to school improvement and system reform was predominantly top-down, albeit with a significant role for Local Authorities in both challenging and supporting schools.

While the UK's recent (2010-2015) Conservative/Liberal Democrat Coalition and newly elected Conservative governments have chosen to build on some of New Labour's foundations, their principal focus has been to develop a 'self-improving school-led school system'. In this system, schools are positioned as autonomous and accountable, with increased diversity and choice for parents through 'free schools' (akin to US Charter Schools) and with a radical reduction in central and local oversight (Greany, 2015: 16; Godfrey, 2014a). An analysis of the Department for Education's 2010 white paper (*The Importance of Teaching*) and other related documents which heralded this change in tack suggests that there exist four core criteria for self-improvement. These comprise:

- 1) teachers and schools being responsible for their own improvement
- 2) teachers and schools innovating (i.e. developing effective practice) by learning from existing good practice and also from research
- 3) the best schools and leaders extending their reach across other schools so that all schools improve through the spread of best practice
- 4) government support and intervention is continuously minimized (Greany, 2014).

Evidence-informed practice

Simultaneous to the notion of self-improvement, the use of research and evidence is now positioned as providing validity to teachers and learning (Brown, 2015; Stoll, 2015a), leading to the coining of the term, 'evidence informed practice' (Saunders, 2015). Although a

number of definitions of EIP abound, for the purposes of this chapter we adopt that provided by England's Department for Education, who suggest such practice may be thought of as: 'a combination of practitioner expertise and knowledge of the best external research, and evaluation based evidence' (www.education.gov.uk, 2014). Our definition of evidence encompasses three forms:

- 1) use of formal research produced by researchers
- 2) evidence produced by practitioner enquiry such as action research
- 3) interpretation of data routinely collected by schools.

The terms 'research' and 'evidence' interchangeably and we treat them as synonymous throughout.

There are numerous reported benefits to practitioners engaging in EIP: for example Supovitz (2015) observes that a common characteristic of high performing school systems is that they facilitate the collaborative examination of research and data evidence in order to identify both likely problem areas (in relation to teaching and learning) and potential solutions to these problems. Likewise Mincu (2013) and Cordingley (2013) report evidence suggesting that where research and data are used as part of high quality initial teacher education and ongoing professional development, they make a positive difference in terms of teacher, school and system performance (similar relationships are reported in Godfrey; 2014a, 2014b; see also Chapter 12). Furthermore, the experience of 'research-engaged' schools that take a strategic and concerted approach in this area is generally positive, with studies suggesting that research engagement can shift a school from an instrumental 'top tips' model of improvement to a learning culture in which staff work together to understand what appears to work, when and why (Godfrey, 2014b; Greany, 2015).

Given the emphasis on self-improvement, it is not surprising that the use of evidence, research and data as drivers for innovation has also become an intentional feature of recent government education policy. Teaching Schools, outstanding schools with a designated role to (amongst other things) co-ordinate Research and Development (R&D) across an alliance of partner schools, have played a prominent part of the educational landscape in England since 2010. To be eligible for Teaching School designation, schools need to demonstrate clear evidence of strong engagement in school-based practitioner-led research and support for teachers gaining academic and professional awards. Those successful in achieving designation are expected to:

- 1) build on existing research as they contribute to alliance and wider priorities
- 2) base new initiatives on existing evidence and measure the impact of these initiatives
- 3) ensure that staff use existing evidence
- 4) provide necessary time and support for staff to participate in R&D activities.

(Stoll, 2015b: 7)

Becoming evidence informed

At the same time, little has been written in terms of how teachers might actually become evidence informed (Godfrey 2014a, 2014b; Brown, 2015). An innovative approach to achieving EIP is provided by Brown and Rogers (2014). Drawing on the definition of EIP set out above, they argue that any joining of research and evidence with practitioner best practice must have at its centre the notion of the 'expert' practitioner. Taking Flybjerg's (2001: 14) notion of an expert as someone who '[exhibits] thinking and behaviour that is rapid, intuitive, holistic [and] interpretive...', Brown and Rogers argue that expertise of this type can only be achieved via a process of knowledge 'creation' that encourages both formal and practical learning. More specifically, it can only be reached in situations that have been

engineered and are facilitated so that the producers and users of formal knowledge are able to come together to create 'new' knowledge (ways and approaches for doing so can be found in Brown and Rogers, 2014; and Brown, 2015). Such knowledge should then be internalized through practical use and as teachers continually draw upon and appraise its applicability to different situations/cases (Nonaka and Takeuchi, 1995). In relation to the nature of the activities required to achieve this, Brown and Rogers (2014) also argue that acts of knowledge creation are best achieved within the auspices of professional learning communities (for detailed analysis for how these operate most effectively, see Stoll et al., 2006).

Challenges to self-improvement

While there appear to be benefits to facilitating evidence informed, school led self-improvement (EISI) - particularly when it derives from the development of practitioner expertise - as the level of more centralized support for schools is rolled back to enable EISI, a number of challenges face English schools and the school system in relation to this area. Perhaps the most significant is that, Teaching Schools face the removal of their Teaching School designation if they lose their 'outstanding' inspection grade. Given that educators are frequently risk averse when it comes to trying out new practices, this can hamper the extent to which schools wish to take risks in experimenting with innovative and evidence led practice. It also acts as a disincentive for school leaders to allow their best teachers to do anything other than teaching (and in particular dissuades them from allowing teachers to spend time out of school on inter-school activity).

Similarly as Godfrey (2014a: 4: our emphasis) argues, in England, the focus on accountability (and the power afforded to external inspection) has led to a disproportionate pressure on school leaders to 'account for their pupils' academic achievements and to find *quick fixes* where standards are lower than national benchmarks'. Related is the pressure on schools to adopt externally driven improvement strategies preferred by accountability bodies. Likewise, external accountability can also lead to headteachers gearing their schools' structures, procedures and practices towards addressing accountability requirements in an instrumental way: for example, performance management systems that align teacher 'success' to pupil attainment or to where teaching and learning practices are designed to ensure they produce exactly the outcomes required by Ofsted (Supovitz, 2015; see also Chapter 4). In both situations, the resulting approaches are unlikely to deliver EIP in the ways we have envisaged above.

Leading organisational learning

We argue that the challenges facing EISI can only be met if school leadership is effective (e.g. Earley, 2013). This is because it is the role of school leaders to create the most conducive conditions within and across their school for teaching and learning to flourish. School leaders' ability to do so stems from the myriad of ways they are able formally to influence the operation and performance of schools and a number of key characteristics have been identified as important in relation to effective leadership, including:

1. Providing vision
2. Developing, through consultation, a common purpose
3. Facilitating the achievement of organizational goals and fostering high performance expectations
4. Linking resource to outcomes
5. Working creatively and empowering others

6. Having a future orientation
7. Responding to diverse needs and situations
8. Supporting the school as a lively educational place
9. Ensuring that the curriculum and processes related to it are contemporary and relevant
10. Providing educational entrepreneurship. (Day and Sammons, 2013: 5)

In themselves these qualities can be divided into the ‘transformational’ aspects of school leadership and ‘pedagogic’ or learner-centred leadership (Day and Sammons, 2013). The former is described as a process based on increasing the commitment of those in a school to organizational goals, vision and direction (Bush and Glover, 2003) and has been shown to have positive impact in relation to the introduction of new initiatives or the remodeling or restructuring of school activity (e.g. Leithwood, 1994). The latter is seen to relate to the efforts of principals in improving teaching in their school and their focus on the relationships between teachers, as well as the behaviour of teachers viz-a-viz their work with students (e.g. Timperley and Robertson, 2011). Effective development of, engaging in and sharing of evidence informed effective practice within and across schools is thus likely to require school leaders to address both the ‘transformational’ and ‘learning-centred’ aspects of self-improvement, and we argue that to do so requires school leaders to focus on and address four distinct but overlapping and interdependent ‘organizational learning’ factors. These are:

- 1) Ensuring school cultures are attuned to seeking out and using evidence and evidence-informed effective practice. For example, school leaders promoting the benefits of considering innovative new ideas and normalizing the notion of experimenting with new ways of working (Leithwood et al., 2006; Stoll, 2015a). One way to do this is suggested by Stoll (2015a) who argues that senior leaders themselves should model the characteristic of an ‘enquiry habit of mind’. That is, senior leaders should actively look for a range of perspectives to help them address given issues, purposefully seek relevant information from numerous and diverse sources and continually explore new ways to tackle perennial problems.
- 2) Ensuring there is teacher capacity (i.e. ability) to identify, engage in and adopt effective practice, including the ability to engage in and with research activity. This involves ensuring there are processes for upskilling teachers so that they are able to engage critically with research, data and evidence as well as other sources of new practice ideas. Capacity building activity should thus include opportunities for postgraduate training (Goldacre, 2013).
- 3) School leaders facilitating an effective formal learning environment within which new practice can be developed, trialed, evaluated and shared, leading to the development of expertise (Stoll et al., 2006; Datnow et al., 2013). In addition, that development of practice includes the use of theories of action (Argyris and Schön, 1974), cycles of enquiry and approaches to measuring impact (Taylor and Spence-Thomas, 2015). These ensure that assumptions underpinning proposed new practices are made explicit and so can be challenged and improved, also that the embedding of practice is not treated as a one off event; instead the introduction of new approaches to teaching and learning take place within the context of a wider iterative ‘cycle’ of investigation, innovation and improvement (Halbert et al., 2011).
- 4) The existence of effective structures, systems and resource that facilitate engagement with evidence and in EIP. In other words, that school leaders make available and coordinate time and the space and budget required for teachers to engage in the capacity and development outlined above. For instance, they must:

free up periods within the school day to enable teachers to spend quality time engaging with new approaches to practice; ensure the school timetable facilitates collaboration between teachers (and importantly between subgroups of teachers, such as those within subject departments); and ensure experienced facilitation and appropriate protocols exist to enable meaningful discussion in relation to new practice. (Datnow et al., 2013; Goldacre, 2013). Also important is that research and evidence (including that in academic journals) is made available (Goldacre, 2013); for example UCL IOE's Research and Development network offers its members access to the UCL IOE library and other resource.

The importance of relationships

In addition to the formal organizational learning factors above, however, is the role of school leaders in understanding and fostering the informal relationships within and across their schools. Historically, efforts at self-improvement, including more general approaches to encouraging practitioners to become 'evidence informed' in Ontario, the USA and a number of other jurisdictions, have tended to result in mixed outcomes (Gough, 2013; Saunders, 2015). It is argued that, in part, this is because such initiatives often fail to take into account the informal social aspects of change as part of their implementation strategies (Daly, 2010). Patterns of social interactions within and between schools are a vital component of successful school improvement and need to be fully considered (e.g. Daly, 2010). This perspective is nicely set out by Mohrman et al., (2003: 321) who contend that, because change is moderated through interpersonal relationships, '...lasting change does not result from plans, blueprints, and events. Rather change occurs through the interaction of participants'. More generally, Hubbard et al., (2006) argue that any given reform is, ultimately, socially constructed, and so it is the interdependence of action that moderates the influence of planned change. This notion is also reflected by Spillane et al., (2010) who argue that implementation of new initiatives must attend to the informal aspects of an organization: i.e. the organization as lived by organizational members in their day-to-day work life.

Given the importance of social relations to the ultimate outcome of any attempts at self-improvement, it is vital to understand what might lead to optimal relationships between practitioners within schools. Empirical evidence suggests that where social relations are steeped in high levels of trust, they are likely to improve outcomes for pupils (Mintrop and Trujillo, 2007). In part, this is because the nature, pattern and quality of ties amongst teachers determines whether an individual can access resources and correspondingly whether they are able to maximize their pedagogic effectiveness. In essence, it is trust that improves the nature, pattern and quality of relations (Finnigan and Daly, 2012). In particular, high levels of trust are associated with a variety of reciprocal efforts, including where collaboration, learning, complex information sharing and problem solving, shared decision making, and coordinated action are required (Tschannen-Moran, 2004).

The ability of trust to produce more effective ties/interactions between teachers is further enhanced when linked to efforts at organizational learning. This is because, where there is also trust in relation to organizational learning efforts (which will be guided by aspects of transformational leadership such as vision), staff will 'buy in' to these more whole heartedly: thus reciprocity, when undertaken within the direction and structure of a given organizational learning effort, is likely to lead to more consistent communication and interaction, greater inter-school coherence and so greater goal attainment (Agullard and Goughnour, 2006). When combined with more collaborative efforts centred on developing new approaches to improving teaching and learning, there is greater willingness by teachers to engage with complex information, which will be more conducive to EIP. This is likely to be

the case even when organizational learning is not evenly distributed within a school. Finnigan et al., (2012), for instance, recognizing that effective evidence use is dependent on capacity (ability) to use evidence, illustrate how trust mediates between those with and without such capacity. In other words, where teachers feel they do not have the knowledge or skills to challenge a research-informed position, trust enables a given position is to be widely adopted.

Vitally, Finnigan and Daly (2012) also argue that reciprocal relations underpinned by trust can form a bulwark against a key challenge facing self-improvement – high stakes accountability. So, rather than respond to such accountability by playing safe and sticking to ‘tried and tested’ methods - with low trust environments serving to dampen innovation - in high trust schools, individuals feel supported in engage in risk taking and innovative behaviors associated with efforts at developing or trialing effective practice in a ‘safe’ learning environment (also Stoll et al., 2006; Mintrop and Trujillo, 2007). Similarly, when individuals feel confident in taking risks with one another and being able to expose vulnerabilities, they are generally better equipped to identify and voice problems, seek support and feedback, innovate, and connect to others across the organization (Moolenaar et al., 2010).

The role of school leaders in facilitating a culture of trust is highlighted by Tschannen-Moran and Hoy (2000: 573) who note that ‘creating an organizational culture of cooperation rather than competition is likely to have a significant impact on the trusting and trustworthy behavior of participants’. Conversely, Daly and Finnigan (2011) caution against school leaders ratcheting up the number of improvement initiatives they are engaged in so as to improve their performance – e.g. by attempting to improve their Ofsted grading. This is because the resulting intensification for schools to improve can negatively impact on staff morale and make these schools less attractive places to work. In turn, staff turnover often increases, meaning both that teachers do not have enough time together to normalize a trusting culture; and that school leaders can also over-regulate the working environment to compensate for the low morale/high turnover situation (in turn exacerbating it). As a result, within such schools, there tend to be diminished levels of collaboration and professional interchange and exchange (Daly and Finnigan, 2011).

Summary

The concept of EIP is grounded in the idea that teaching practice (and so outcomes for pupils) can be drastically improved if aided by high quality, pertinent knowledge. At the same time, as school systems move away from positions of top-down command and control, it is also believed that they will only be in a position to 'self-improve' if research-informed effective practice is helped to flow within and between teachers and schools (Hargreaves, 2010; Goldacre, 2013). Despite these potential benefits, connecting research-to-practice is notoriously difficult, with the failure of research to make a widespread and sustained impact on the practices of teachers recognized as an international phenomenon (Hinton and Fischer, 2008).

To help alleviate this situation we argue that realizing the benefits associated with EIP will require schools to address and build the capacity of practitioners to engage with research and evidence; which we argue derives from aspects of formal organizational learning; and to ensure the existence of effective, quality relationships that are steeped in high levels of trust. At the same time, we have already highlighted some of the challenges facing school and system self-improvement: for example the impact of high stakes accountability and the potential threat facing Teaching Schools in England should they lose their ‘outstanding’ rating. We argue therefore that to harness the power of EIP within their schools, school leaders must find the strength to be bold in the face of accountability; and to

create for their teachers a safe environment that encourages and rewards effective practice. Simultaneously that school leaders develop EIP and EISI in ways steeped in the best practices of organizational learning: for instance employing cycles of investigation, innovation and improvement (such approaches thus leave open the possibilities of maximal gain whilst reducing the risk of testing out new practices, since new approaches will begin small scale and will be refined, scaled up or dropped depending on their success). These approaches thus require school leaders to be cognizant of the formal and informal requirements of their organization: i.e. the need for them to put in place the most facilitative structures, and to establish the supportive cultures possible whilst ensuring meaningful relationships can thrive.

Implications

1. How might accountability systems be altered in order to encourage EIP and the sharing of effective practice within and across schools?
2. How might we measure the 'success' of efforts to embed EIP both in terms of teacher and pupil outcomes?
3. How might we identify and learn from those schools where EIP has been effectively and successfully embedded? In particular, how do the leaders within these schools best develop high levels of trust in the context of high stakes accountability?

Further reading

Brown, C. (2015) Introduction, in Brown C. (ed) *Leading the use of Research and Evidence in schools*, London: IOE Press.

Godfrey, D. (2014) Leadership of schools as research-led organizations in the English educational environment: cultivating a research engaged school culture, *Educational Management Administration and Leadership*, early online publication

Stoll, L., Bolam, R., McMahon, A., Wallace, M. and Thomas, S. (2006) Professional learning communities: a review of the literature, *Journal of Educational Change*, 7 (4), 221-258.

References

Agullard, K. and Goughnour, D. (2006) *Central office inquiry: Assessing organization, roles, and actions to support school improvement*, San Francisco: CA, WestEd.

Argyris, C. and Schon, D. (1974) *Theory in practice: Increasing professional effectiveness*, San Francisco: Jossey-Bass.

Brown, C. (2015) Introduction, in Brown C. (ed) *Leading the use of Research & Evidence in schools*, London: IOE Press.

Brown, C. and Rogers, S. (2014) Knowledge creation as an approach to facilitating evidence-informed practice: examining ways to measure the success of using this method with early years practitioners in Camden (London), *Journal of Educational Change*, 15 (1), early online publication.

- Bush, T. and Glover, D. (2003) *School Leadership: Concepts and Evidence*, Nottingham: National College for School Leadership.
- Cordingley, P. (2013) The contribution of research to teachers' professional learning and development, available at: <https://www.bera.ac.uk/wp-content/uploads/2013/12/BERA-Paper-5-Continuing-professional-development-and-learning.pdf>, accessed on 22 November, 2014.
- Daly, A. (2010) Mapping the terrain: social network theory and educational change, In Daly, A. (ed) *Social Network Theory and Educational Change*, Cambridge, MA: Harvard Education Press.
- Datnow, A., Park, V. and Lewis, B. (2013) Affordances and constraints in the context of teacher collaboration for the purpose of data use, *Journal of Educational Administration*, 51 (3), 341-362.
- Day, C. and Sammons, P. (2013) *Successful leadership: a review of the international literature*, Reading: CfBT Education Trust.
- Earley, P. (2013) *Exploring the school leadership landscape: changing demands, changing realities*, London: Bloomsbury.
- Finnigan, K and Daly, A. (2011) The ebb and flow of social network ties between district leaders under high stakes accountability, *American Educational Research Journal*, 48, 1, pp. 39-79.
- Finnigan, K and Daly, A. (2012) Exploring the space between social networks, trust and urban school district leaders, *Journal of School Leadership*, 22, 493-530.
- Flyvbjerg, B. (2001) *Making Social Science Matter*, Cambridge: Cambridge University Press.
- Goldacre, B. (2013) Building evidence into education, available at: <https://www.gov.uk/government/news/building-evidence-into-education>, accessed on 27 January 2014.
- Godfrey, D. (2014a) Leadership of schools as research-led organizations in the English educational environment: cultivating a research engaged school culture, *Educational Management Administration & Leadership*, early online publication
- Godfrey, D. (2014b) Creating a research culture – lessons from other schools, available at: <http://www.sec-ed.co.uk/best-practice/creating-a-research-culture-lessons-from-other-schools>, accessed on 22 November, 2014.
- Gough, D. (2013). Knowledge mobilisation in education in England, in: Levin, B., Qi, J., Edelstein, H. and Sohn, J. (Eds) *The Impact of Research in Education*, Bristol: The Policy Press.
- Greany, T. (2014) *Are we nearly there yet?: progress, issues and possible next steps for a self-improving school system*, London: IOE Press.

- Greany, T. (2015) How can evidence inform teaching and decision making across 21,000 autonomous schools?: learning from the journey in England, in Brown C. (ed) *Leading the use of Research & Evidence in schools*, London: IOE Press.
- Halbert, J., Kaser, L. and Koehn, D. (2011) Spirals of inquiry, building professional inquiry to foster student learning, paper presented at ICSEI 2011, Limassol, Cyprus.
- Hansen, M. T. (1999) The search-transfer problem: The role of weak ties in sharing knowledge across organization subunits, *Administrative Science Quarterly*, 44, 1, pp. 82–111.
- Hargreaves, A. and Fullan, M. (2012) *Professional Capital: Transforming Teaching in Every School*, New York, NY: Teachers College Press.
- Hubbard, L., Mehen, H. and Stein, M. (2006) *Reform as learning*, New York, NY: Routledge.
- Leithwood, K. (1994) Leadership for school restructuring, *Educational Administration Quarterly*, 30 (4), 498–518.
- Leithwood, K., Day, C., Sammons, P., Harris, A. and Hopkins, D. (2006) *Successful school leadership: what it is and how it influences student learning. Research report 800*, London: DfES.
- Mincu, M. (2014) Inquiry paper 6: teacher quality and school improvement – what is the role of research? In the British Educational Research Association/ The Royal Society for the encouragement of Arts, Manufactures and Commerce (Eds) *The Role Of Research In Teacher Education: Reviewing The Evidence*, available at: <https://www.bera.ac.uk/wp-content/uploads/2014/02/BERA-RSA-Interim-Report.pdf>, accessed on 8 November 2014.
- Mintrop, H. and Trujillo, T. (2007). The practical relevance of accountability systems for school improvement: A descriptive analysis of California schools, *Educational Evaluation and Policy Analysis*, 29, 319–352.
- Mohrman, S., Tenkasi, R. and Mohrman, A. (2003) The role of networks in fundamental organizational change, *Journal of Applied Behavioral Science*, 39 (3), 301-323.
- Nonaka, I. and Takeuchi, H. (1995) *The knowledge creating company: how Japanese companies create the dynamics of innovation*, New York: Oxford University Press.
- Saunders, L. (2015) 'Evidence' and teaching: A question of trust?, in Brown C. (ed) *Leading the use of Research & Evidence in schools*, London, IOE Press.
- Southworth, G. (2009) Learning centred leadership, in Davies, B. (ed) *The Essentials of School Leadership* (2nd edn), London: Sage.
- Spillane, J., Healey, K. and Kim, C. (2010) Leading and managing instruction: formal and informal aspects of elementary school organization, In Daly, A. (ed) *Social Network Theory and Educational Change*, Cambridge, MA: Harvard Education Press.
- Stoll, L. (2015a) Using evidence, learning and the role of professional learning communities, in Brown, C. (ed) *Leading the use of research and evidence in schools*, London: IOE Press.

Stoll, L. (2015b) Three greats for a self-improving school system – pedagogy, professional development and leadership: Teaching schools R&D network national themes project 2012-14 Research Report, available at:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/406278/Three_greats_for_a_self_improving_system_pedagogy_professional_development_and_leadership_full_report.pdf, accessed on 11 June, 2015.

Stoll, L., Bolam, R., McMahon, A., Wallace, M. and Thomas, S. (2006) Professional learning communities: a review of the literature, *Journal of Educational Change*, 7 (4), 221-258.

Supovitz, J. (2015) Teacher Data Use for Improving Teaching and Learning, in Brown C. (ed) *Leading the use of Research & Evidence in schools*, London: IOE Press.

Taylor, C. and Spence-Thomas, K. (2015) Understanding Impact and the Cycle of Enquiry, in Brown C. (ed) *Leading the use of Research & Evidence in schools*, London: IOE Press.

Tschannen-Moran, M. (2004) *Trust matters: Leadership for successful schools*, San Francisco, CA: Jossey-Bass.

Tschannen-Moran, M. and Hoy, W. K. (2000) A multidisciplinary analysis of the nature, meaning, and measurement of trust, *Review of Educational Research*, 71, 547-593.

Timperley, H. and Robertson, J. (2011) Establishing platforms for leadership and learning, in Robertson, J. and Timperley, H. (Eds) *Leadership and Learning*, London: Sage Publications.