'The self-improving primary school': understanding and approaching teacher inquiry: a pilot study.

Val Poultney
University of Derby

Abstract

This paper examines how one primary school in the East Midlands region has worked to establish a culture of teacher-led, evidence-based teacher inquiry. It reports on a pilot year of research when the senior leadership team (SLT) decided to implement a strategic focus on evidence-based teaching, which would generate their own school knowledge, equip teachers to take more responsibility for their own teaching and professional development and to broaden their local and national networks. The SLT led the inquiry process using various initiatives as suggested vehicles for inquiry with the aim of galvanising teaching staff into making changes to their pedagogical approaches. Working with a local HEI academic as supporter of this process and advisor to the Head teacher, appropriate practice-based methodologies were deployed, trialled, role-modelled and evaluated by the SLT. A local HEI academic advised the SLT on the implementation of this approach, which was followed up by a small scale piece of research and evaluation to further inform the evidence base.

Keywords

Background

This paper focuses on one primary school and its engagement with teacher inquiry or evidenced-based teaching from inception to the end of academic year 2014-2015. The school in question has academy status. It is situated in an area of high social deprivation with many instances of student mobility and over 70% of the pupils are designated for pupil premium. SATs (Standard Assessment Tests) results have been variable over recent years but remain generally below the national average. The teachers are not disenfranchised and the Head and senior leadership team have a clear focus on teaching and learning. However, no school-wide co-ordinated vision of how to implement an evidenced-based teaching and learning approach was in place. The pilot year was set up to evaluate, in the first instance, how a range of practice-based methodologies led and role-modelled by the SLT (Senior Leadership Team) might operate in the school. The required level of engagement with teaching staff in order to promote an inquiry approach to pedagogy was also evaluated. Finally, the ways in which school-based staff can work with the HEI academic to open up spaces for the co-creation of school improvement knowledge was considered. Whilst supporting the Head and SLT in these endeavours, the HEI academic also engaged in some small-scale evaluation research with the SLT as part of the pilot.

Context of evidenced-based teaching

There is much evidence to support the notion that self-improving schools should be research engaged and research active (Goldacre, 2013; Greany, 2015; Stoll, 2015). Yet for many schools the prospect of engaging with any form of research to inform professional practice is not seen as routine practice for classroom-based/practising teachers. This, in many ways, is troubling, in part because there is no agreed knowledge base for teachers (Hargreaves, 1996) and because there is scant support for teachers who may wish to undertake their own applied research.

Citation

From a training perspective, initial teacher education requires trainees to engage with a range of research methodologies as part of their academic programme yet in practice they rarely observe evidenced-based inquiry approaches in the classroom. Carter (2015) has made recommendations that evidenced-based teaching should form an integral part of the framework for ITT content and for the Teachers' Standards to be more explicit about the importance of teachers undertaking this type of work. However, in a school-based context, trainees experience a different approach to problem-solving which is not based on the outcomes of research but a professional 'knowledge' that has roots in teacher 'answerism' (Orland-Barak, 2009). This 'quick-fix' approach is frequently role-modelled by experienced teachers and observed by trainees in the classroom on a daily basis. Eventually, it could be argued this approach becomes part of their normalised practice and the value placed on the research evidence generated by teachers through an inquiry approach begins to wane. Although not entirely disregarded, the primary evidence gathered through classroom investigations is often seen as less accessible when compared with 'tips for teaching'. The gulf between what trainees learn in the academy and what they observe in school begins to widen and the importance of research evidence to inform professional practice diminishes. The translation of evidence-based approaches in schools of different phases and contexts is not a linear process, as Greany (2015: 14) points out:

> ...evidence must inform what is ultimately a messy process of social change, whether at the level of the individual practitioner, the school, or the system.

At a systems level the bar of accountability for schools is being raised, and changes to the way in which schools are being inspected gives rise to uncertainties about how to evidence continuous improvement beyond statistical data. There is no agreed professional body of knowledge akin to Law and Medicine that teachers may draw upon that can inform an inquiry approach to teaching. What constitutes good school improvement evidence is arguably fashionable, context-specific and largely based on small-scale samples which have limited impact. In today's fast-paced education world teachers need to be able to embrace and react to change, and building their own knowledge networks might be one way of making sense of their everyday practice.

Creating capacity for learning
A good school is one where students learn effectively, teachers teach effectively and where there is opportunity for everyone to learn. Sustaining the capacity for learning is a key driver for Head teachers and senior leadership teams; they become leaders of learning (Harris, 2014; Moss, 2008). Building capacity for learning can help leaders to change hearts and minds and encourage teachers to re-focus on their pedagogy to make learning happen. The development and understanding of a critical epistemological base for practice, that gives teachers scope to work more autonomously requires leadership that provides the structural architecture in which teachers can explore their pedagogical and professional practice.

School leaders need to be aware of the capacity of individual teachers and groups of teachers (the collective capacity) and know when their school is in deficit capacity mode. This mode may well apply to schools in challenging circumstances; and in the spirit of taking responsibility for their own improvement; school leaders may seek the assistance of an intermediary body to help them make sense of their work. HEIs, for example, may be instrumental in bringing teachers into closer contact with research (as inquiry) as a legitimate means of changing practice. This is well-known, yet not fully explored beyond the giving of advice and support (McGee and Lawrence, 2009; Moss, 2008). Historically there have been various views on the role of HEIs in this context, ranging from bringing rigour to school–based decisions (Hargreaves, 1996) and, more recently, to research as a means of addressing the disenfranchisement of teachers, where teachers are encouraged to develop their

own body of locally held knowledge (Coleman, 2007; Ebbut, Worrall and Robson, 2000). Stoll (2009: 125) suggests that:

> Researchers who want their findings on capacity building for school improvement to be taken seriously have to find ways to help policy makers and practitioners engage with them in such a way that they can make the kind of meaning that enables them to use these findings to enhance attempts to create capacity. This process of engagement- knowledge animation (Stoll 2008) – is also a process of learning. Essentially, it boils down to creating capacity for learning.

Mobilising, building and sustaining learning capacity at all levels in a school requires leadership that is committed to evidenced-informed improvement. There has to be a clear commitment to providing the necessary resources and environment for teachers to become competent learners (Southworth, 2000). There needs to be a clear shared strategy around how inquiry or other research endeavours will impact on learning for everyone. Despite some rhetoric dismissing educational research as lacking rigour, Nelson and O'Beirne (2014) suggest that teacher research as an initiative can have wider ramifications beyond improving learning and teaching. It can be used as a means of engaging staff to work more collegially throughout the school, promoting greater use of school data and building teacher confidence. This, in turn, will enable teachers to make informed choices about their practice and encourage them to engage with the agendas they feel take a priority in their teaching.

Inquiry practice therefore becomes much greater than the sum of its parts, contributing to improving pedagogical practice and acting as a means of bringing staff together to generate locally held knowledge. Schools may need to become more critically focused on issues of school leadership, pedagogical practice and ways of working in the spirit of Stoll's (2010) knowledge animation, with a view to building their own professional learning community (PLC) (Harris, 2014). Rather than taking on wholesale imposed initiatives, school leaders and teacher leaders gain proficiency in evaluating practice and are able to adopt those strategies that realise the potential of all learners. This also has implications for staff development that is self-generated around a culture of the 'way we do things around here' (Schein, 1985).

Leaders also require support when setting up new initiatives around teacher inquiry and the engagement of a local HEI academic (or team of academics) is often the preferred model. The role of the HEI academic as a leadership partner can provide a focus on learning and that can help teachers reflect on their current pedagogical practices. Teachers can take on the roles of consultant, adviser and critical friend. If teachers are to challenge their own commonly held practices, develop their own discourses and reconceptualise their practice, they require safe spaces in which to do so. School leaders, in establishing links with the academy, can provide a knowledge partnership that informs and critiques current best practice and develops new knowledge discourses.

The advent of the new curriculum (Department for Education 2013, updated 2014) requires that students engage in more 'deep thinking' and that the processes needed to expedite deep thinking are securely understood by the teaching profession. Deciding on a course of action for the HEI-School partnership is an important stage in the start-up process that may promote this and is reminiscent of the findings of Postholm (2009), who observes that teachers find it beneficial to have some theoretical concepts handy in order to make sense of their practice. This construction of a 'theory toolkit' can help to inform inquiry practices particularly those related to choices of methodological approach.

Third spaces in which to undertake research
Teacher accountability to school leaders internally and the inspectorate externally may be seen to limit the capacity teachers have to engage in evidenced-based teaching. Creating spaces for research

inquiry to happen and be sustained over time requires strategic leadership and a vision to change school culture from the research-interested school to the research-engaged school. McIntyre and Hobson (2015) talk about beginning teachers having a 'vulnerable' stage in their early teaching career where they need to develop their identity and teaching style. Teachers in challenging schools may feel similarly vulnerable; constrained by the inspection framework and a lack of confidence around taking risks or being creative about their pedagogy. Alternatively some teachers may see inquiry-based approaches as a means of enhancing their practice but either way, if led and supported appropriately, inquiry work can be a catalyst for teachers to create space for critical reflection within the classroom and beyond.

This idea of 'third space' (Bhaba, 1994) or teachers working on the interstices between their own classrooms and the formal wider school structures, can allow critical dialogue to flourish. Supporting the formation of formal spaces in regularly scheduled meetings for example, can bring opportunities to share the outcomes of inquiry and provide learning spaces for teachers (Skattebol and Arthur, 2014). Spaces can exist outside these formal structures with the development of informal networks arising as a result of teachers collaborating through their inquiry work. The legitimisation of inquiry as routine classroom practice that is supported at the school leadership level gives opportunities for teachers to disengage with tried and tested school approaches to lessons and to re-engage with their professional practice in ways which allow them to think more deeply about their pedagogy in a critical, detached manner.

The creation of third space with other inquiry-focused colleagues assists the development of a body of knowledge around subject and pedagogical discourses that can be widely shared among professional staff. Having space to focus on teaching and learning with the express support of the leadership team creates a learning culture for both students and staff with:

> …the potential of creating such spaces for teaching and learning where pupils had as much right and opportunity as teachers to shape the agenda for learning and where teachers took risk in order to enhance pedagogy, how they calculated those risks and how they overcame related uncertainties to move forward in the efficacy of their practice
>
> (Broadhead, 2010: 42).

Turning teachers' 'answerism' approach (Orland-Barak, 2009) into powerful knowledge arguably creates a self-sustaining learning community of teachers and creates authentic third spaces where teachers can examine their own practice and that of others; and it is within this community that teachers can appraise accountability systems and the competing political agendas that shape current educational practice.

The link with the HEI academic legitimises and makes overt the use of academic theory to support teachers' focus both pre and post inquiry and throughout the research phase. Continued support from the HEI academic during the writing-up and dissemination stages strengthens teachers' confidence in the presentation of their findings within the school, the academy, the teaching school alliance and at external professional and academic conferences. In the spirit of 'everyone researching', the outcomes of the pilot study as conducted by the HEI academic have been a key feature in how the school views its involvement with an evidenced-based approach to teaching as the project moves into its second year.

Methodology

This paper reports on the pilot year of this study and in particular on the findings from a sequential mixed-methods approach adopted to capture the experiences and perspectives of the senior

leadership team who were initially charged with taking on their own inquiry projects and who acted as role models or advocates for inquiry for other staff.

The aim of the pilot year study was to ascertain the potential for establishing an evidenced-based agenda across the whole school and to see what impact this initiative would have on teaching and learning. There was also interest in observing how the SLT would collaborate on this project and if they could sustain an inquiry-based approach over the academic year and potentially beyond. The development of a working relationship with the HEI academic was another important feature of this pilot year.

Context

A series of meetings with the Head teacher followed by a workshop conducted with the HEI academic, SLT and teachers established some of the key areas of the school where inquiry-based teaching might have most impact. The Head teacher agreed to act as role model for the initial inquiry project so that all staff could see an exemplar approach in practice. The first inquiry approach using video footage to capture teacher feedback to their classes revealed no useful data and was replaced by a survey with follow-up interviews. Following dissemination of the outcomes of this project it was agreed that SLT would base their inquiry projects on specific initiatives such as Peer Critique (Austin's butterfly, 2012) and Mastery (EEF, 2015). An evaluation of the pilot was conducted by the HEI academic using the SLT group as the sample group (purposive sample) who completed a short questionnaire and an in-depth qualitative semi-structured interview about their experiences and perceptions of the work. Ethical clearance for this research was granted by the academy and agreed with the SLT. This placed the academic as 'outsider' researcher and the SLT and teachers as 'insider' researchers. Members of the SLT were very keen that their work was recognised. The skill for the HEI academic is around 'activating the hyphen' around the 'insider-outsider' researchers (Broadhead, 2010: 41), to work with insider researchers (SLT and teachers) and to move towards a joint researcher perspective. The role of the HEI academic was to help with external dissemination of the work. Participants agreed not to be named but fully appreciated they might be identified in ensuing publications or dissemination outlets due to the nature of their leadership role.

Findings

The first part of the findings is confined to the perceptions and values of 4 senior leaders to bring a focus on how they experienced undertaking an inquiry approach and their reflections upon its efficacy. The second part is confined to reflections from the HEI academic taken from field notes over the course of the research. The Head has been very clear about using initiatives as vehicles for inquiry and for SLT to be role-modellers for the process. For all the senior leaders in this research it is important to note that the focus remains on raising levels of teaching and learning through all aspects of the school's work. These practices are described as 'non-negotiables' and are agreed with all staff through school policies.

Another key area has been to improve the engagement of the children in lessons and the development of pupil voice. Raising the profile of how pupils respond to marking and feedback, improving writing and literacy skills are key curriculum foci. The Head teacher is keen that all staff have a teaching and learning action plan where evidence from all observations, work scrutinies and individual plans is held. These individual plans contain evidence of how teachers are engaging in improving their practice and can feed into performance management systems. At this stage it was agreed inquiry would not form part of the performance management system as teachers were unfamiliar with its use. Data from SLT fell into three distinct categories:

Improving knowledge around how to conduct an inquiry

Table 1. SLT strongly agreed that inquiry should be an inherent part of their practice:

Questionnaire statement	Mean score	Interviewees completing the questionnaire
I think networking with other inquirers internally and externally would be a valuable experience for me	4.0	Not doing (inquiry) in isolation...it has been a nice way to build relationships with some of my staff...some are hard to reach...but they needed me for certain things...(SLT 4)
I see inquiry as a normal part of my professional practice	3.75	In a way inquiry, when I trained, was part of reflective teaching, new ideas from magazines or discussions were used and then reflected upon to see how well it had gone (SLT2).

Interestingly, SLT did see inquiry as a 'normal part of their professional practice' and gave this a high priority. Interview data, however, revealed that most of them were reticent to engage with the inquiry agenda until they had some experience of it in action, or were reminded about its importance in their professional practice:

'I think it was just that you (the teacher) are so busy almost being forced into doing it (inquiry), it was quite nice to try trialling something new with the children and seeing how it worked. Then going away thinking. The first time I introduced it, it didn't go how I wanted it to go. So reflecting on what I had done that meant it didn't work as well as I needed it to. It was just quite nice professionally to have something new to try and to challenge and reflect on' (SLT 2).

'I think it was just that word isn't it, I mean I did my degree, I went back years later and did my PGCE, I didn't do it straight away and that was very much research and about inquiry, and then you qualify don't you, and then come into the job and suddenly someone says inquiry and you go back to uni days and big dissertations and oh I don't think I can do it and you start to panic, whereas it's not, you start to panic, whereas it's just part of the practice' (SLT 3).

Creating the right conditions for inquiry to happen

Table 2. how SLT might access inquiry knowledge and the means to conduct inquiry in their own classrooms:

Questionnaire item	Mean score	Interviewees completing the questionnaire
I struggle to understand what inquiry would look like in my classroom context	1.25	JF had come back from another school and peer-critique was on the hand-outs so we decided we could use it in Year 6 – it helped to adapt our

		practice and take it to the next step (SLT 2)
Inquiry should only be part of a validated course, such as Masters' study	1.0	You qualify don't you and then come into the job and suddenly someone says inquiry and you go back to uni days and big dissertations... you start to panic... whereas it's just part of practice (SLT 3)

The SLT did not see inquiry as being part of an accredited university programme only
but were keen to use initiatives sourced by the Head teacher to shape the inquiry focus and to
rehearse their own starting points and how these might be shared with colleagues:

> '...it was about getting the teachers to turn the initiative into an inquiry...they identify a need within their class or classroom practice and most of the time they do something about it, they either talk to colleagues, ...or research it themselves. So I wanted to almost formalise that natural process of teaching, to say that they could make improvements and put it into practice and potentially share them with other colleagues ... '
>
> (SLT 1).

> '…I needed something from my own classroom first of all to do the research but then I asked for this observation for some new ideas because within school we only know what we know…the best practitioners who have tried things and they say that works – have a go at that. It would be nice to share things further, out at other schools. Maybe with the academy trust'
>
> (SLT 4.)

Working with an HEI academic

Table 3. Forming and sustaining a School and University partnership:

Questionnaire item	Mean score	Interviewees completing the questionnaire
I would welcome support in how to identify a clear and worthwhile focus/question for my inquiry	3.25	When you can in to talk to us I was a bit like woah!, this is massive, this is huge...then we discussed it a bit more...it was everyday things we do all the time...you don't think of it in an inquiry way (SLT 3).
I would welcome support in ensuring I undertake my inquiry ethically/responsibly	3.00	You showed us how to do it (inquiry), it really helped us with the language to do inquiry, you gave us examples and that's what's helped to grip the staff (SLT 4).

Introducing inquiry at the school level requires some introspective thought. Both the SLT and the
classroom-based teachers needed a 'vehicle' (initiative) to frame their foci and further support and

encouragement over the course of the inquiry. Selling inquiry to teachers was more effective utilising a practical approach initially, with supporting theory added as and when appropriate:

'It's difficult isn't it because ideas don't just generate spontaneously, most of the time someone has to trigger it and I think (teachers) can look at the research and particularly our teaching staff are really good at putting things into practice and turning theory into reality really (SLT 1).

As a teacher graded outstanding by Ofsted I had become quite stale…I requested an observation from the school improvement officer…with a year 6 class. …he said the learners were receptive but they didn't take control of their own learning…not able to apply their learning. We talked about the Shanghai method of mastery…I went away and read about it…and then used it for my inquiry' (SLT 4).

Reflections from the academic perspective
The findings of this pilot reveal that members of the Senior Leadership team have been able to reflect on their own approaches to inquiry and prompted to consider how this may benefit their own practice. Through this work they were encouraged to consider how they trained to be a teacher and to look for ways to reach and support other teaching staff. Theory had, in part, been rejected by the STL who viewed it as something carried out solely during academic sessions at the University. In order to dispel this notion, a process of formalising inquiry was needed, making it overt to practice and giving licence to take creative approaches in the classroom.

The initial workshop was challenging for most teaching staff. A major area of learning centred upon the use of teachers experienced in inquiry to work with other primary schools prior to the HEI academic talking with staff and this caused some consternation at the outset of the pilot study A key area of work for the HEI academic and the Head teacher concerned the development of dissemination routes and teaching staff have taken the opportunities to share the outcome of inquiry at staff meetings and at professional and academic conferences. The triad approach to supporting inquiry (senior leadership team, teachers and HEI academic) coupled with an ethos of risk-taking and role-modelling of how inquiry might work in classroom settings has seen been an effective means of selling research to teachers as a sustainable way of improving classroom practice. The SLT have themselves worked as insider-researchers but have participated in evaluating their own leadership practice. These tentative steps have resulted in the appointment of an 'horizon-scanner' – a member of the SLT who oversees, supports and links with the academy to help develop and sustain evidence-based teaching into the second year.

Discussion
Embracing evidence-based teaching as a culture change requires a school to consider three areas; first, authorisation for inquiry and the commitment to evidence-based approaches; second, leadership for inquiry and role modelling the approach, and third, evaluating inquiry and having various dissemination routes open to all staff. This pilot study reveals that changing to this approach to teaching is a long-term commitment that must be embedded in all aspects of school policy.

It has been evident in dissemination that staff at this primary school have engaged fully with the study, and it is clear that the opportunities to generate their own knowledge and, importantly, to share this with other colleagues, has revitalised their practice. They are now actively engaging with theory to learn more about their practice particularly as this has been reinforced by a strong leadership approach to inquiry where role-modelling is evidenced, critiqued and evaluated (Yendol-Hoppey et al, 2008). This is also in line with the thinking of Postholm (2009).

The development of teacher/pedagogic theory became evident as the SLT described their inquiry journey, They turned previously unknown (tacit) knowledge into 'known' by talking about their practice, discussing outcomes, sharing all aspects of how their inquiries were progressing, and identifying/acknowledging the challenges they had faced.

The potential of investing in a learning network reminiscent of Harris' (2014) Professional Learning Community had a positive impact on enhancing leadership capacity at all levels in the school; and in the spirit of Stoll's (2010) knowledge animation, the learning that began to take place as a result of the dissemination process made pedagogical knowledge accessible and transferrable across the school. A celebration event hosted by the University gave further opportunities for staff to share and evaluate the outcomes of the study and this helped to cement the impact of the inquiry projects in the minds of the participants.

This pilot has revealed that while teacher agency might be improved through the use of inquiry (Menter and Hulme, 2010), and big picture scenarios and generalist solutions to school improvement might make eminent theoretical sense, some sophisticated fine tuning regarding 'how to' and 'where to begin' will be required if teacher agency is to be seen as an effective tool for school improvement.

The role of the HEI academic as supporter, leader and advocate of inquiry remained integral to this study from the outset. Making sense of this role as 'outsider' (Broadhead, 2010), the HEI academic has to work on the interstices as described by Bhabha (1994) of the school, the academy and other external agencies to create the space in which inquiry can become embedded in school practice.

The aim was to create, over time, a research-engaged school, where teachers are ready to take on board their own learning (Southworth, 2000).The boundaries within primary schools noted by Little as far back as 1990 have, to some extent, been eroded as a result of this work and we continue to forge ahead in this new academic year, building research capacity (Hargreaves and Fullan, 2012) and creating space for staff to investigate and report on their own practice. The impact of inquiry (evaluated at different stages during the pilot year) and the need to build capacity to ensure the development of this work became key themes throughout the year.

Conclusions and next steps

The three areas required in turning a school from research-interested to research-engaged one requires a strong and committed school leadership who understand their role as advocates, role modellers and supporters of inquiry practice, and their commitment to it for the long term. Leaders who legitimise evidenced-based teaching as a normal part of school culture and who are prepared to seek support of external agents in their research endeavours can begin to improve the intellectual, social and professional capacities of their staff and have real impact on teaching and learning. For this school, there is still more work to be done. There is a fine, blurred boundary between what constitutes professional inquiry practice and academic research. Our next focus will be on the ethical dimensions of evidenced-based teaching. We look forward to engaging in these challenging debates.

Acknowledgments

References

Austin's Butterfly (2012). Available at: https://www.youtube.com/watch?v=hqh1MRWZjms (Accessed: 10 August 2015).

Bhabha, H. K. (1994) *The Location of Culture.* New York: Routledge.

Broadhead, P. (2010) 'Insiders' and 'outsiders' researching together to create new understandings and to shape policy and practice: is it all possible?' in Campbell, A. and Groundwater-Smith, S. (eds.) *Connecting Inquiry and Professional Learning in Education: International perspectives and practical solutions.* London and New York: Routledge, pp.40-52.

Carter, A. (2015) *Carter review of initial teacher training (ITT).* Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/399957/Carter_Review.pdf (Accessed 03/12/15).

Coleman, A. (2007) 'Leaders as Researchers: Supporting Practitioner Enquiry through the NCSL Research Associate Programme', *Educational Management Administration and Leadership,* 35 (4), pp.479-497.

Department for Education (2013, updated 2014) 'National Curriculum'. Available at: https://www.gov.uk/government/collections/national-curriculum (Accessed: 20 July 2015).

Ebbut, D., Worrall, N. and Robson, R. (2000) 'Educational research partnership: differences and tensions at the interface between; the professional culture of practitioners in schools and researchers in higher education', Teacher *Development: An international journal of teachers' professional development,* 4 (3), pp.319-336.

Education Endowment Foundation (EEF) (2015) 'Mastery Learning Available at: 'https://educationendowmentfoundation.org.uk/toolkit/toolkit-a-z/mastery-learning/ (Accessed: 2 September 2015).

Goldacre, B. (2013) *Building Evidence into Education.* Department for Education. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/193913/Building_evidence_into_education.pdf Accessed: 25 July 2015).

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 and Evidence in Schools.* London: Institute of Education Press, pp.11-28.

Hargreaves (1996) *Teaching as a research-based profession: Possibilities and prospect*: *The Teacher Training Agency Lecture 1996.* London: TTA.

Hargreaves, A. and Fullan, M. (2012) *Professional Capital: Transforming Teaching in Every School.* New York, London: Teachers' College Press.

Harris, A. (2014) *Distributed Leadership Matters: Perspectives, Practicalities, and Potential.* London, New Delhi, Singapore: Corwin: Sage.

Little, J. (1990) 'The persistence of privacy: Autonomy and initiative in teachers' professional relations, *Teachers College Record,* 9 (4), pp.509-536.

McGee, A. and Lawrence, A. (2009) 'Teacher Educators inquiring into their own practice', *Professional Development in Education,* 35 (1), pp.139-157.

McIntyre, J. and Hobson, J. (2015) 'Supporting beginner teacher identity development: external mentors and the third space', *Research Papers in Education,* DOI: 10.1080/02671522.2015.1015438.

Menter, I. and Hulme, M. (2010) 'Teacher researchers in the UK: what are their needs?', in Campbell, A. and Groundwater-Smith, S. (eds.) *Connecting Inquiry and Professional Learning in Education: International perspectives and practical solutions,* London and New York: Routledge, pp.109-121.

Moss, J. (2008) 'Leading professional learning in an Australian secondary school through school-university partnerships', *Asia–Pacific Journal of Teacher Education,* 36 (4), pp.345-357.

Nelson, J. and O'Beirne, C. (2014) 'Using Evidence in the Classroom: What Works and Why?' Slough NFER.

Orland-Barak, L. (2009) 'Unpacking variety in practitioner inquiry on teaching and teacher
    education', *Educational Action Research,* 17 (1), pp.111-119.

Postholm, M. B. (2009) 'Research and development work: developing teachers as researchers or just
    teachers?' *Educational Action Research,* 17 (4), pp.551-565.

Schein, E. (1985) *Organisational Culture and Leadership.* San Franscisco: Jossey-Bass.

Skattebol, J. and Arthur, L. M. (2014) 'Collaborative practitioner research: opening a third space for
    local knowledge production', *Asia–Pacific Journal of Teacher Education,* 34 (3), pp.351-365.

Southworth, G. (2000) 'How Primary Schools Learn'. *Research Papers in Education,* 15 (3), pp.275-91.

Stoll, L. (2009) 'Capacity building for school improvement or creating capacity for learning? A
    changing landscape', *Journal of Educational Change,* 10 (2-3), pp.115-127.

Stoll, L. (2010) 'Connecting Learning Communities: Capacity Building for Systemic Change' in
    Hargreaves A., Lieberman, A., Fullan, M. and Hopkins, D. (eds) *Second International Handbook
    of Educational Change (Part 1),* Dordrecht, Heidelberg, London, New York: Springer, pp. 469-
    484.

Stoll, L. (2015) 'Three greats for a self-improving school system – pedagogy, professional
    development and leadership: Teaching schools R & D network national themes project 2012-
    14' *National College for Teaching and Leadership.* Available at:
    www.gov.uk/goverment/publications (Accessed: 2 April 2015).

Yendol-Hoppey, D., Gregory, A., Jacobs, J. and League, M. (2008) 'Inquiry as a Tool for Professional
    Development School Improvement: Four Illustrations', *Action in Teacher Education,* 30 (3),
    pp.23-38.