Can schools really provide the learning environment that new teachers need? Complexities and implications for professional learning in Wales.

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Abstract

Based on data from the Welsh adaptation of the Langdon Induction and Mentoring Survey, this article presents the perceptions of induction and mentoring held by school leaders, mentors, classroom teachers and Newly Qualified Teachers in Welsh schools. Differences according to professional role were found, suggesting that school leaders have more positive perceptions of induction and mentoring in their schools than all other staff but particularly more than general teaching staff. Possible reasons for this variation in perspective are explored. The research conceptualises schools as complex, relational sites for the professional formation of new teachers. Within this context, induction and mentoring are multifaceted and comprised of multiple interactions between stakeholders and their respective engagements with the policy environment at all levels. Results suggest that, in this environment, induction and mentoring involve largely 'privatised' practices that are not viewed as the concern of those not occupying a designated mentoring role. This presents a problem for the realisation of schools as professional learning organisations which can harness the professional capital of all staff – including leaders - in order to help new teachers, and all others, to thrive.

Key words

induction, mentoring, newly qualified teachers, NQTs

Introduction

In 2017, the OECD suggested that 'little is known about the quality of induction programmes in Wales' (p. 32), an assertion that followed a period of intense policy development around the

learning of new teachers and the role of schools as sites of early professional formation. The OECD indicated the need for further understanding of schools' abilities to know and meet the needs of Newly Qualified Teachers (NQTs) and of the factors that contribute to schools' capacities in supporting teacher learning and development. This paper reports on a study that provides much needed insights into induction and mentoring of Newly Qualified Teachers (NQTs) in this context. The Langdon Induction and Mentoring Survey (LIMS) (Langdon *et al*. 2012, 2014) was conducted in a sample of schools employing NQTs in Wales, to investigate the perceptions of induction and mentoring held by key stakeholders - school leaders, mentors, NQTs and general teaching staff. It followed a period of intensive post-devolution policy-making that introduced extensive educational reform in Wales, reflecting aspects of what Sahlberg (2011) identified as the Global Education Reform Movement (GERM). Reform has related to school improvement, teacher education and professional learning, with one priority being the development of new teachers. Concerns regarding the learning and development of NQTs in Wales reflect international debates about inconsistent opportunities for teachers' professional learning (OECD 2014). The lack of learning opportunities for new teachers has been linked to high attrition rates of early career professionals in countries such as England, Australia and the USA and is regarded as having significant long-term impact on the quality of pupils' experiences. The quality of teachers is widely acknowledged as the prime school-level factor in improving outcomes for pupils and Waters *et al.* (2018) have articulated the explicit connection between the professional learning experienced by new teachers and their capacity to provide long-term, high quality and sustained impact on education systems.

It is in this high-stakes context that the survey's findings raise questions about the capacities of schools to act as sites of professional learning for new teachers. In particular, expertise within schools is not sufficiently harnessed to support NQTs; induction and mentoring involve largely 'privatised practices' (MacBeath 2012) that are dislocated from wider school agendas for professional learning.

The policy context surrounding NQTs in Wales

Wales has a population of just over three million. In 2017 there were 26,172 teachers (WG 2017c) and 20% of teachers registered with the Education Workforce Council (2017) were in their first five years of teaching. Since 2011 policy-making has focused on the improvement of pupil outcomes as measured against international comparative data, partly due to the pressures introduced following poor PISA performance (PISA 2006, 2010). The initial response was a drive to improve the quality of teaching and of teachers, as part of an ambitious '20 point' agenda for educational reform (Andrews

2011). In an ongoing attempt to address variation in the quality of teaching within and between schools (Furlong 2015), the learning and development of NQTs continues to be situated within a wider National Mission (WG 2017a), part of which builds on ensuring consistency of provision to support teachers' development in their first year of practice and beyond.

A year-long statutory induction period for NQTs has been required since 2003 and NQTs must meet the national Professional Standards for Teaching and Leadership (WG 2017b). Requirements include that NQTs receive day to day support from a school-based induction mentor and periodic support from an external verifier, acting for the Local Authroity (LA) as the 'appropriate body', that can confirm the successful completion of the induction period. Such policy requirements and entitlements aspire to achieve national coherence. However Jones (2011) identified a long-term challenge in the 'implementation gap' between what 'should be' and 'what is' (p. 762) in realising policy intentions. This has persisted according to findings from the OECD (2018) which was critical of the limited number and the quality of induction programmes in Wales, especially in secondary schools, specifying that the issues lie in broader problems within the professional learning culture in many schools: 'Coaching/mentoring, classroom observations and peer review are not yet well established in schools throughout Wales' (p. 34).

Recent reviews of system-wide education in Wales by OECD (201, 2017, 2018), of Teacher Education by Tabberer (2013) and Furlong (2015), of the school curriculum by Donaldson (2015) and teachers' career, conditions and pay by Waters *et al.* (2018) continue to exert national level influence over the experiences of new teachers. Recent policy focus has coalesced on school led curriculum development, developing research-informed teacher education and an emphasis on teachers engaging in 'close to practice' research (WG 2018, BERA 2019). Importantly, a major factor recognised in achieving coherence between national policy intentions and induction and mentoring as experienced by NQTs is leadership in schools. Estyn, the Welsh inspectorate, highlighted that in schools exhibiting effective leadership there was a culture of strong professional learning for all staff (2015). However, the OECD (2018) was critical of leadership in Welsh schools. It identified a lack of capacity to lead innovation and insufficient development of collaborative school cultures to support inquiry-focused learning for staff and pupils - in effect, inadequate capacity to build professional capital. This perspective may be partly a consequence of unfilled head teacher (HT) vacancies (NAHT Cymru 2016) in all twenty-two LAs prior to data collection for this study; in half of LAs more than twenty-five per cent of HT roles were not filled permanently (pp. 2-3). This indicates the instability of

many school environments, that would have been experienced by staff engaged in induction and mentoring practices at the time of the survey.

NQTs in Wales are therefore impacted by a dynamic national policy environment, its mediation by LAs within the four regional consortia[1], the inspectorate, the Education Workforce Council and Higher Education Institutions (the 'middle tier') and their own specific school cultures. This creates a complex interplay of policy factors, regional direction and the school level enactment of policy. It is within this volatile context that this study examines the perceptions of induction and mentoring held by key stakeholders within schools.

Literature review

Early career support, appropriate development opportunities and high quality mentoring have been identified as salient factors in fulfilling the potential of new teachers and retaining them in education systems (Borman and Dowling 2008, Ingersoll and Strong 2011, Allen and Sims 2018). It is acknowledged that schools alone cannot ensure consistent conditions for the learning of new teachers: national, regional and local education policy-makers have a central role in determining the conditions for new teachers to learn effectively (European Commission 2015). Policy, linked to resource, influences extensively what is enacted as induction and mentoring by members of a school community. In turn, schools are complex sites for professional learning, described by Langdon *et al.* (2012) as 'multi-faceted' and part of 'multi-level systems', with significant consequences for the ways in which induction and mentoring are implemented and experienced. Three complementary theoretical perspectives illuminate schools as complex sites of professional formation for NQTs. It is possible to consider at systems level through complexity theory; at the level of individual interactions with environment via ecological theory; and from a sociocultural perspective through theories of communities - professional, learning and practice-oriented.

Fidan and Balci (2017) have argued that complexity theory is needed to understand how to manage any intervention or policy initiative in schools, because they are 'full of uncertainty caused by numerous connections and various options' (p. 11). The claim rests on the argument that schools are 'complex adaptive systems'. They 'exhibit dynamic interaction of agents in a system which

[1] Welsh local authorities are organised into four regional consortia with responsibility for school improvement and effectiveness: the Central South Consortium Joint Education Service (CSC) for Central South Wales, Education Through Regional Working (ERW) for South West and Mid-Wales, Gwasa- naeth Effeithiolrwydd (GwE) for North Wales and the Education Achievement Service (EAS) for South East Wales.

simultaneously react to and create their environment' (Bovaird 2017, n.p.) meaning that the environment is not a 'given' but is 'co-created' by those who act within it. Because such systems are being constantly remade by those who inhabit them, it is impossible for a single leader to exercise control over conditions within a school. Fidan and Balci (2017) argue that school leaders need to understand that direct influence to achieve set goals may be unproductive because of the unpredictability of sequences of events in such contexts. They suggest that leaders need to learn to 'live with disorder instead of resisting it' (p. 15), meaning they should avoid setting detailed goals and instead focus on creating optimum conditions that allow self-forming groups of teachers to come together in 'teams' of mutual interest that evolve and are self-directed.

From a related ecological perspective, schools need to become effective ecosystems for teacher learning, meaning that interventions to promote professional development need to be 'integrated into the fundamental work of schools' rather than 'additive' (Rosas 2015, p. 306). This disrupts attempts to reproduce previous successful strategies and patterns of operation, instead embracing the features of an adaptive system. Rosas argues that over-reliance on previously successful, 'tried and tested' strategies can be limiting. It reduces the opportunities for knowledge exchange between members of a school staff, resulting in less incentive to adapt - and adaptation is core to healthy, evolving ecosystems. For schools, 'adaptive knowledge can be more widely accessed via member exchange networks' (p. 304) that can harness the diverse expertise and experience of staff.

La Salle *et al.* (2015) argue that 'understanding culture as a multidimensional construct must precede an understanding of how individuals…function within their school environments' (p. 159). They emphasise the need to understand the impact of both individual teacher characteristics '… education level, years of experience, grade and subject taught' and school characteristics '…class size, perceptions of shared leadership' on teacher perceptions of school climate. (p. 164). This introduces psychological factors to understanding induction and mentoring as enacted and constituted by individuals interacting within school environments.

Alongside these ecological and systems perspectives on schools, sociocultural analyses have focused on understanding schools as sites of social relations between participants. Community members construct their practices by interacting and communicating their understandings through processes of 'participation' and 'reification' (Wenger 1998). Wenger's theory of communities of practice has been highly influential in this area, arguing that work-related phenomena are realised and interpreted by community members who constitute their practices through shared 'talking within

practice' (ibid.). Communities of practice within schools are 'individual, multifaceted and relational' (Langdon 2017, p. 1), involving members in multiple interactions between individuals (such as mentor to NQT and NQT to general classroom teacher) and across layers of the school system and beyond - with the community and policy environment. Such perspectives share an ecological view of schools as constantly evolving but focus on how practices, beliefs and values are constructed within the environment - how school cultures are constituted and enacted.

What these theoretical perspectives have in common is the ways they illuminate how induction and mentoring can be understood as constituted by multiple interactions that take place between individuals, policies and resources, that are subject to continuous change. Therefore, learning conditions for entrants are constituted by constantly re-formed and dynamic relations. The induction and mentoring of new teachers is argued by Langdon (2017) to be situated within this conception of schools as multifaceted professional learning environments.

A series of studies in New Zealand (Langdon *et al.* 2012, 2014) has identified the perspectives of key stakeholders who constitute induction and mentoring within school communities of practice - leaders, mentors, NQTs and general teaching staff. Langdon's work is premised on two concepts - *comprehensive induction* and *educative mentoring* (Norman and Feiman-Nemser 2005, Langdon and Ward 2015). Comprehensive induction and educative mentoring are both located in the complexity of schools as sites for teachers' professional formation. Comprehensive induction is the entire set of resources, support, values and policy related to the new practitioner (Ingersoll and Strong 2011), and includes mentoring as a component (Langdon 2017). Educative mentoring is a set of practices, values and beliefs which engage participants in extending critically informed pedagogies that can increase educational opportunities. It adopts an inquiry approach to developing practice, and resists expert-novice conceptualisation of the mentee-mentor relationship, positioning the mentor as a co-learner

> …who is able to co-construct knowledge and understanding about teaching that can lead to the development of altered beliefs and practices for both mentor and mentee about pupils' learning and about the role of the teacher. Such principles indicate aspirational goals for mentoring that resist survivalist discourses and narrow perceptions of how to retain teachers based on easing the path into established routines.
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> (Langdon *et al*. 2019, p. 251).

The current study is reported at a time when policy-making in Wales (WG 2017a) has begun to recognise that complexity in schools must be harnessed to fully realise the potential of their professional capital (Hargreaves and Fullan 2012). The challenges of this cannot be underestimated however. Burn *et al*. (2017) emphasise that schools can act as learning environments for teachers but that they need to develop as sites for capacity-building for the teaching profession. They ask in what ways and to what extent can schools and the staff within them develop an ethos that problematises practice and embraces the complexity of teaching. They view this as the 'transformational' capacity of schools, which is vital to enriching teacher knowledge and skills rather than working at minimal levels of solution-focused policies and practices that diminish opportunities for teacher learning. They argue that one of the most effective ways for new teachers to be inducted into a learning orientation is for *all* those who support them to share that orientation. Killeavy (2006) argues further that school leaders should themselves engage with NQTs in inquiry-oriented professional learning. However Sunde and Ulvik (2014 p. 294) suggest such a shared orientation as difficult to achieve. They attribute leaders' 'lack of awareness' of NQTs' perspectives to the dominating agendas and discourses focused on managerial and accountability orientated objectives, including assimilating NQTs into the established practices of the school. This can lead NQTs to conceal the difficulties they may experience due to a need to 'fit-in' to schools' established norms and routines (Hobson and McIntyre 2013). This impairs the potential for learning relationships between other members of the school community and those who are learning as recently qualified teachers.

Thus, schools as sites for the induction and mentoring of NQTs contain both the possibility of transformation but also inhibiting factors that may be hard to shift. As a 'complex', schools are constituted by dynamic relations between staff members, who are in constant interaction with the policy environments and the resources they afford. It is this view of schools as 'relational' that formed the conceptual basis for this study.

Methodology

The LIMS, developed in New Zealand with three waves of data collection between 2012-2014 to examine the perceptions of induction and mentoring held by key school stakeholders, was applied in the Welsh context. Two research questions were investigated:

1. What are the perceptions of induction and mentoring held by school leaders, mentors, new teachers and classroom teachers in Wales?
2. How do the participants' combined perceptions illuminate the complexities of schools as sites of professional learning for new teachers?

The LIMS was designed as a measure of the quality of induction and mentoring in schools. Its survey items were derived from an extensive review of the literature (Langdon *et al.* 2012) that refined twelve principles of induction and mentoring that reflect the influence of the policy environment, the influence of leaders on the enactment of policy and the capacities of mentors to undertake 'educative' mentoring. The survey is psychometrically valid and for each principle, four to five related survey items were created. Participants consider each statement which begins 'in my school...', e.g. 'in my school the HT selects effective mentors to induct newly-qualified teachers', and indicate the extent of their agreement with the statement. Total LIMS scores out of one hundred are calculated on the basis of these responses. Factor analysis showed all 56 survey items fit together as a one factor solution that measured overall perceptions of induction and mentoring – Langdon *et al*. (2012, 2014) provide a full technical account of the survey development.

Only limited and essential changes were made to the original survey items in order to address the Welsh context. It was piloted with primary and secondary school participants who were interviewed to identify any problematic items (e.g. items not relevant to the Welsh context) on the basis of which those items were adapted but none were removed. Factor analysis was repeated and a similar factor structure was found to the responses from teachers in New Zealand schools. The LIMS was judged to be a defensible measure of overall perceptions of effective induction and mentoring within Wales.

The survey was distributed in English and Welsh, for all state-maintained settings that employ NQTs, comprising nursery, infant, junior, primary, secondary and special schools. The school leader was invited to complete the survey if they employed a NQT and asked to distribute the survey to the relevant stakeholders within their setting. For analysis, the settings were reduced to two sector groups (Primary and Secondary) with nursery, infant, junior and full primary schools categorised as Primary. The small number of Special schools (n=6) with respondents, were allocated to either Primary or Secondary categories depending on their age range; 'through schools' (3-19) were allocated to the Secondary category. Schools from all 22 Local Authorities in Wales were included in the survey. The refined sample consists of respondents from 34 primary schools and 39 secondary schools; 8 participants did not indicate their school type.

The sample

Ninety-nine respondents completed the survey, of which 20 were school leaders; 31 were both school leaders and mentors; 23 were mentors; 13 other teaching staff and 12 NQTs. Some respondents did not reply to all questions and the responses are reported in terms of those who did (percentages and numbers). The majority of respondents were female (68.8%, *n* = 64; male: 31.2%, *n* = 29) broadly in line with the gender balance of staff in schools in Wales. The largest proportion of respondents self-identified as being of White ethnic background (97.9%, *n* = 95; Welsh/English/Scottish/Northern Irish: 94.8%, *n* = 92). Most worked in urban areas (69.8%, *n* = 67; rural: 30.2%, *n* = 29) throughout Wales (North: 26.5%, *n* = 26; South East: 22.4%, *n* = 22; Central South: 34.7%, *n* = 34; and South West and Mid: 16.3%, *n* = 16). The majority taught in English medium schools (78.6%, *n* = 77), while 10.2% (*n* = 10) taught in Welsh medium and 11.2% (*n* = 11) in Bilingual[2] schools. Respondents taught across a number of subject areas. A substantial proportion taught across the curriculum in primary schools (31.6%, *n* = 30). A fairly even distribution taught humanities (14.7%, *n* = 14), literacy and communication (9.5%, *n* = 9), health and well-being (7.4%, *n* = 7), science and technology (6.3%, *n* = 6), and expressive arts (6.3%, *n* = 6). Few respondents reported that they taught maths and numeracy (3.2%, *n* = 3) or languages (3.2%, *n* = 3).
The majority of the sample spent less than 12 months completing their induction (87.8%, *n* = 65). Many fewer reported that it took between 12 and 24 months to complete induction (12.2%, *n* = 9) and a further 25 did not identify the length of time it had taken.

Mentoring factors

The majority of NQTs (91.7%, *n* = 11) indicated that they were currently completing induction and that there was an induction programme at their school - all of these had an assigned mentor (*n* = 11). The majority of NQTs (90.9%, *n* = 10) reported their mentor was another staff member at their school and did not go offsite for mentoring. Only one NQT had a mentor from another institution and went offsite for mentoring. Their induction programmes included: observations (90.9%, *n* = 10), one-to-one conversations (72.7%, *n* = 8), goal setting (63.6%, *n* = 7) and workshops (45.5%, *n* = 5). The majority (72.7%, *n* = 8) reported experiencing three or more of these mentoring activities. Two participants (18.2%) reported that they experienced only one type. On average, NQTs experienced three induction activities (*SD* = 1.01).

[2] Bilingual and Welsh medium schools are categorised as such on the basis of their most recent ESTYN inspection report.

A large proportion of the participants reported that they were mentors (55.7%, *n* = 54). Of these, 48 (88.9%) mentored newly qualified teachers and 6 (11.1%) mentored 'others' (unspecified). All reported that they mentored in school with a substantial proportion reporting they did not volunteer to mentor (38.9%, *n* = 21). The majority reported that they had access to mentoring professional development (79.6%, *n* = 43). The time engaged in professional development varied: 23.3% (*n* = 10) reported they engaged in a single session, 44.2% (*n* = 19) reported that they engaged in a one day course, 23.3% (*n* = 10) had engaged in a two-three day course and 9.3% (*n* = 4) had completed in-school professional development. This included development in: induction and mentoring guidelines (92.7%, *n* = 38), observation (82.9%, *n* = 34), assessments of teachers against standards (75.6%, *n* = 31), communication (53.7%, *n* = 22), approaches to adult learning (19.5%, *n* = 8). Most mentors (75.6%, *n* = 31) had experienced three or more of these areas as part of their professional development. Of those who experienced professional development, on average this was in three different areas (*SD* = 1.32).

Almost all mentors reported that their mentoring included conducting observations (98.1%, *n* = 53), one-to-one conversations (94.4%, *n* = 51) and most reported goal setting with NQTs (90.7%, *n* = 49). Only 35.2% (n = 19) reported that their mentoring included workshops. The majority (90.7%, *n* = 49) also reported that they engaged in three or more of these mentoring activities with their mentees. Only one mentor reported that they engaged in just one type of mentoring activity – one-to-one conversations - with their mentee. On average, mentors reported that they engaged in three mentoring activities with their mentees (*SD* = 0.65). Participants who had not volunteered to mentor did not differ significantly in their perceptions of induction and mentoring programmes when compared with those who had volunteered (*p* = .892). There were no significant differences in perceptions of induction and mentoring by the length of time mentoring (*p* = .421); current number of mentees (*p* = .871); the frequency of meetings with mentees (*p* = .758); or access to mentor professional development (*p* = .233).

INSERT TABLE 1 HERE

The results confirm that dominant mentoring practices are 'private' between the mentor and mentee, as might be expected. This is reflected in the range of activities that mentors reported - largely (lone) observations of NQTs and one-to-one conversations. The picture emerges of a largely privatised and isolated mentoring relationship where the locus of responsibility for the NQTs' development rests solely on one mentor rather than the wider school staff/team. It appears that

there are highly varied experiences of mentoring in this context, with frequency of mentor meetings following no regular pattern and 15% of meetings occurring monthly or less often. Although mentor meetings can take multiple forms to suit different purposes, this raises questions about varying expectations of the purpose and nature of mentor conversations over time. Variability is also present where complete consistency might be expected. For example, 9.3% of mentors did not report goal-setting as part of their mentoring activities, a practice which it would be reasonable to expect all mentors to engage with.

One potentially idiosyncratic result warrants exploration. It would be expected that all NQTs completing induction in Wales would have an induction programme at their school as it is a statutory requirement. One respondent in this small sample reported this was not the case which raises a query as to how widespread this may be and consequently about the consistency and equity of NQTs' experiences and the support they receive. Similarly, workshops formed a minority experience for most NQTs. A narrow range of mentoring activities that centre on interacting with the mentor indicates a high reliance on the skills and expertise of those individuals, 38.9% of whom did not volunteer for the role. Whilst it is recognised that volunteering to mentor may be a poor predictor of whether a mentor can support practice to enhance learner outcomes (Timperley *et al*. 2008), it does highlight the importance of mentor professional learning. There was considerable variation in the time mentors spent engaging in professional development, with approximately 20% reporting that they did not have access to any, and a further 23.3% reporting they experienced just a single development session. This suggests a serious under-investment in the learning and development of mentors in this study and is a concern when considered in the context of their potential as 'co-learners' within educative mentoring, coupled with often sole responsibility for the development of new teachers at a time of mounting expectations on entrants to the profession.

Results: What are stakeholders' perceptions of induction and mentoring?

Some demographic information was missing for a small number of participants and therefore numbers(n) vary. Valid percentage is reported in the tables. In general the perceptions of all respondents in participating schools are positive which is demonstrated in the total LIMS mean score (M) of 80.84 out of 100 (see Table 2). The standard deviation (SD) is also shown.

INSERT TABLE 2 HERE

Individual factors

Individual factors related to perceptions of induction and mentoring are presented first (Table 3) followed by the school and contextual factors (Tables 4 and 5). The greatest variation in perceptions was found in certain individual factors, with little or no significant variation in school or contextual factors.

INSERT TABLE 3 HERE

There were no differences in perceptions of induction and mentoring by gender (p = .284), the number of previous schools in which teachers had been employed in (p = .940), the time teaching at the current school (p = .076), and whether the teachers were employed on permanent or fixed term contracts (p = .301). We found a significant difference in perceptions of induction and mentoring by participants' position in the school, p = .000. This indicated that teaching staff members reported significantly less positive perceptions of induction and mentoring than school leaders (p = .000), school leaders who were also mentors (p = .000), and mentor teachers (p = .012). Although scores were higher than other teaching staff members, NQTs reported lower perceptions than school leaders, leaders who were also mentors, and mentor teachers. Figure 1 displays the mean Total LIMS scores by position for the Welsh participants.

INSERT FIGURE 1 HERE

Significant differences in overall perceptions of induction and mentoring by the amount of time teaching were found, p = .045. This indicated that teachers who had taught for more than ten years had significantly higher perceptions than those who had taught for less than five years (p = .038). No other differences in perceptions by time teaching were significant. Participants who had been employed in more than two schools had the least positive views of induction and mentoring, whereas those who had not been employed in another school had the most positive views.

School factors

No significant differences in perceptions by school factors were found: language medium, p = .780; school type, p = .419 and roll size, p = .179 (Table 4).

INSERT TABLE 4 HERE

Those working in primary schools had marginally more positive perceptions of induction and mentoring compared with those in secondary schools, as in Figure 2.

INSERT FIGURE 2 HERE

Contextual factors

There were no significant differences in perceptions by contextual factors: school region, p = .233; school area (urban/rural), p = .455 and socioeconomic status of the school, p = .368 (see Table 5).

INSERT TABLE 5 HERE

How do the participants' combined perceptions illuminate the complexities of schools as sites of professional learning for new teachers?

The perceptions of stakeholders reported here point to challenges for schools as sites of professional formation that are important to recognise in the current Welsh policy context. Although the overall LIMS score is fairly positive at 80.84, which confirms the widespread prevalence of induction and mentoring that accords with the mandatory requirements that apply to all Welsh schools, there is wide variation in stakeholders' perceptions. Perceptions of induction and mentoring are linked to differing school roles; they reflect unequal power relations that need to be considered in terms of how well schools are positioned to provide coherent experiences and opportunities for new teachers to learn. At the same time other individual factors, school factors and contextual factors do not make significant impacts on perceptions across all stakeholder groups. There is reason for optimism here, in that the potential for schools to be productive sites for professional learning may reasonably apply to a wide teacher constituency and is not constrained by infrastructural factors that are very hard to shift (for example, school location). The marked variance in perception according to role highlights the importance of understanding the relational features of schools and how induction and mentoring needs to be understood from an ecological perspective.

Power relations

The results suggest the importance of power relations in affecting perceptions of induction and mentoring. There is a major difference in perceptions related to the varying positions held by stakeholders in school. The mean LIMS scores of school leaders (86.17) and school leaders who are also mentors (85.80) are much higher than general teaching staff members (64.92) (see Figure 1). The differential is less but the leaders' mean scores are also considerably higher than the NQTs'

(76.82). Although the sample is small, these differences are consistent with the results found in the New Zealand surveys where Langdon *et al*. (2014) commented on the 'exceptionally' (p. 99) positive perceptions of school leaders in relation to *all other school staff*. This consistency is in line with extensive findings elsewhere into the variance between NQTs' and school leaders' and mentors' perceptions of induction and mentoring, which indicate persistent and pervasive power differentials that affect mentoring relations (Hobson and Maldrez 2013) and HT-NQT relations (Sunde and Ulvik 2014). Sunde and Ulvik (2014) identify school leaders' 'lack of awareness' (p. 294) of the realities of NQTs' experiences and learning opportunities, resulting from their differing priorities. From a socio-cultural perspective, HTs essentially operate in a different set of immediate relationships and priorities, with different spheres of action and responsibilities from NQTs. These differences are likely to be exacerbated in times of HT shortages and with the accompanying accountability imperatives that dominate leadership roles (Connolly *et al*. 2018).

Such power differentials are elaborated by Hobson and Malderez (2013) who identify 'judgementoring' as a feature of conflicted roles occupied by mentors who both support and assess NQTs. Hobson and McIntyre (2013) have argued that NQTs in turn 'fabricate' and employ 'avoidance strategies' to disguise problems they may be encountering, in an effort to appear competent to those who manage their career progression. Our survey results are consistent with such previous studies, which help to account for the variation in NQTs' LIMS scores and those of their school leaders and mentors. These issues have not before now featured in reseach within the Welsh context. This is of particular significance given the current rapid policy development in Wales around the learning of new teachers and schools as professional learning comminuties (Furlong 2015, OECD 2018). The results suggest the need for school leaders to address the perceptual anomalies related to how they translate induction and mentoring policy into practice and how work conditions are adapted to the teachers' novice status.

'It takes a school to grow a teacher'

What is notable in this research is the differential between those who lead schools and the rest of the staff, in terms of how induction and mentoring is perceived. Comprehensive induction (Ingersoll and Strong 2011) is concerned with how the total school environment works with policy and resources to influence professional learning for new teachers. The considerable variance in perception between general classroom teachers and school leaders suggests a disengagement from and/or lack of awareness of induction and mentoring processes by classroom teachers. It may reflect a perceived lack of relevance to their role as more experienced classroom teachers, but the results

also suggest a gap between induction and mentoring and school-wide practices. Whilst it is reasonable to expect that differing priorities are embedded in practitioner roles post-induction, Burn *et al*. (2017) have indicated the importance of whole school learning culture in the professional formation of new teachers. The data suggest there is some way to go to achieving integrated professional learning cultures within schools, in which induction and mentoring are part of shared knowledge and experience beyond mentor-mentee interaction - 'it takes a school to grow a teacher'. The findings are in line with the OECD (2018) study of Welsh schools as learning organisations. Alongside many positive findings, OECD identified two dimensions that are 'considerably less well developed and deserve particular attention' – 'developing a shared vision centred on the learning of all students' and 'establishing a culture of enquiry, innovation and exploration' (p. 29).

More positively, the OECD study (ibid.) also identified that schools in Wales have it within their power to grow as learning organisations by leadership commitment to culture change, centred on developing enhanced professional dialogue among staff and with greater exposure to external bodies (p. 29). This increases the capacity of a school to be adaptive. Our results suggest that such ambitions are realistic. Perceptions of induction and mentoring were not adversely affected by a school's socio-economic status nor by regional variations or rural/urban difference – a similar finding was identified in the New Zealand studies (Langdon *et al.* 2012, 2014). This is an important message, and calls into question the focus in some quarters on targeting teacher education policy and resource to regions that find it hard to attract and retain sufficient teachers, for example in England where teacher supply 'cold spots' have been targetted as a problem to be solved. It suggests that a priority needs to be to enable leaders to grow school cultures as adaptive, professional learning environments – the concern is profession-wide, not only related to schools identified as disadvantaged or in less accessible regions. This is consistent with the assertion made by OECD (2018 p. 30):

> although policy action will be required to reduce the variability in school funding between schools in similar circumstances, schools have the ability to take measures to ensure staff have the time and resources to engage in collaborative working and learning.

The issue is achieving fundamental cultural shift across schools and redirecting leaders' gaze towards the ways in which all teachers are enabled to learn with and from each other. Such redirection may be difficult to achieve without due attention to Fidan and Balci's (2017) warning that direct control

strategies among leaders are not productive in achieving change in complex, relational school ecologies.

Conclusion

The research increases understanding of schools as dynamic and evolving sites of professional learning in Wales. This dynamic affects the enactment of policy aimed at improving the learning and development of new teachers, and relates to the role of leadership, the role of mentors and how all members of the teaching community contribute to the potential for new teachers to experience effective mentoring. The survey indicates some of the challenges of building professional capital (Hargreaves and Fullan 2012) in a time when support for HTs is as necessary as support for NQTs.

There are implications with respect to the pace of educational reform in Wales linked to expectations that schools are well-positioned to advance practioner expertise. There is a need to probe more deeply into the readiness of schools to fuction as learning communities (Stoll *et al*. 2006). Significant investment is needed in the design and provision of mentor development in order to meet more expansive expectations of their educative roles within such communities. The small sample size is acknowledged. There would be benefits in conducting the survey again with a larger sample and including interviews to pursue questions, for example about stakeholders' perceptions of the 'disconnect' between general teaching staff from induction and mentoring. Essentially, there is a case for policy to focus on measures that de-privatise induction and mentoring practices within schools and build a collective investment among staff and leaders in the learning of new teachers.

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Table 1: Mentoring factors.

	Wales			
	%	***n***	***M***	***SD***
Mentor factors				
Volunteer to mentor				
Yes	61.1	33	83.41	11.50
No	38.9	21	83.86	12.36
Length of time mentoring				
1 year or less	11.1	6	79.31	14.13
2-5 years	42.6	23	85.77	9.74
More than 5 years	46.3	25	82.60	12.85
Current number of mentees				
1	37.3	19	85.26	11.43
2	31.4	16	83.32	8.51
3 or more	31.4	16	83.84	13.52
Frequency of meetings with mentee				
More than once a week	28.3	15	84.53	14.06
Weekly	28.3	15	81.49	10.42
Fortnightly	28.3	15	86.05	11.86
Monthly or greater	15.1	8	83.42	8.65
Access to mentor professional development				
Yes	79.6	43	84.56	11.71
No	20.4	11	79.79	11.53

Table 2: Overall total LIMS score.

	Wales			
	%	***n***	***M***	***SD***
Total LIMS	100.0	99	80.84	15.14

Table 3. Descriptive Statistics by Individual Factors for all Respondents.

	Wales			
	%	***n***	***M***	***SD***
Individual factors				
Gender				
Female	68.8	64	81.90	15.23
Male	31.2	29	78.14	16.32
Time teaching				
0- up to 5years	18.2	18	73.21	18.87
5-10 years	11.2	11	79.14	17.99
More than 10 years	70.4	69	83.04	13.14
Position				
School leader	20.2	20	86.17	12.89
School leader and mentor	31.3	31	85.80	8.45
Mentor teacher	23.3	23	80.60	14.76
Teaching staff member	13.1	13	64.92	22.22
Newly qualified teacher	12.1	12	76.82	12.17
Number of schools previously employed				
0	20.6	20	81.75	12.44
1	34.0	33	80.79	16.57
2	16.5	16	82.22	12.23
More than 2	28.9	28	79.53	17.59
Time in current school				
0-12 months	16.3	16	73.41	17.41
13 months-5 years	24.5	24	80.22	17.91
More than 5 years	59.2	58	83.08	12.80
Employment status				
Permanent	91.6	87	81.26	15.46

Fixed term	8.4	8	75.38	13.37
Total LIMS	100.0	99	80.84	15.14

Table 4. Descriptive Statistics by School and Contextual Factors for all Respondents.

	Wales			
	%	***n***	***M***	***SD***
School factors				
Language medium				
English	78.6	77	81.34	15.66
Welsh	10.2	10	77.98	14.10
Bilingual	11.2	11	79.61	13.80
School type				
Primary	44.8	43	82.23	14.24
Secondary	55.2	53	79.68	16.06
Roll size				
Less than 250	24.5	24	81.67	11.75
251-500	25.5	25	82.20	14.83
501-1000	29.6	29	75.90	19.00
More than 1000	20.4	20	85.11	12.02
Total LIMS	100.0	99	80.84	15.14

Table 5. Descriptive Statistics by Contextual Factors for all Respondents.

	Wales			
	%	***n***	***M***	***SD***
Contextual factors				
Consortia Region				
North	26.5	26	76.48	17.39
Central South	34.7	34	82.43	14.11
South East	22.4	22	79.78	17.01
South West and Mid	16.3	16	85.76	9.09
Area				
Urban	69.8	67	80.06	16.20
Rural	30.2	29	82.62	13.17
School socioeconomic status (SES) [+]				
Low	23.7	22	84.55	15.83
Mid	46.2	43	79.26	15.67
High	30.1	28	79.15	14.56
Total LIMS	100.0	99	80.84	15.14

[+]Low SES = Wales: FSM% 31+;

Mid SES = Wales: FSM% 11-30;

High SES = Wales: FSM% 1-10.

Figures

Figure 1. Mean Total LIMS Score by Position for the Participants.

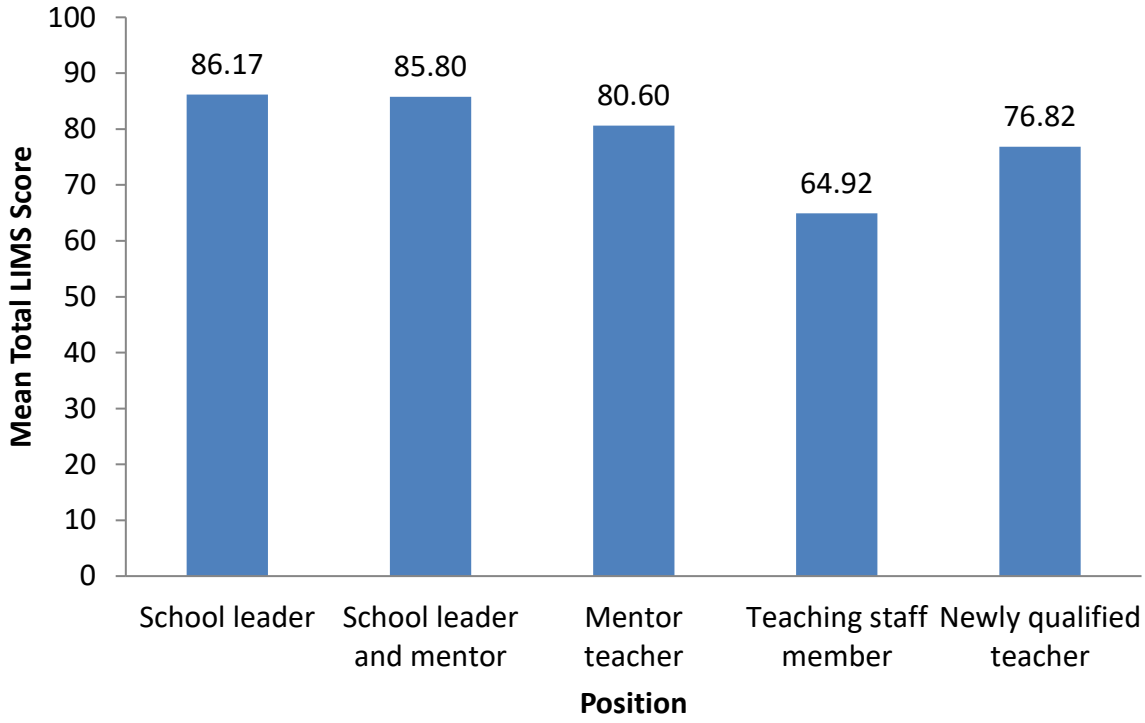

Figure 2. Interaction Mean Total LIMS Scores by School Type.