
Special issue: *International perspectives on signature pedagogies for school leaders*

Research article

Signature pedagogies for leadership development: a comparison of headteacher preparation programmes in England and Scotland

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Abstract

School systems worldwide wrestle with school leader recruitment, preparation and retention challenges. This article presents and discusses findings from the Researching Sustainable School Leadership project, which shows that while most leaders value the leadership development opportunities they receive, most headteachers do not feel fully prepared when they first take on the role. Meanwhile, the task of leading schools is becoming more complex and challenging. Drawing on Shulman's notion of signature pedagogies, we examine the extent to which the national headship preparation programmes in England (National Professional Qualification for Headship) and Scotland (Into Headship) equip newly appointed headteachers to think, perform

and act as professionals. We argue that there is no overarching signature pedagogy for headship preparation common to both programmes. Instead, we suggest that the programmes represent distinct 'national' signature pedagogies. The National Professional Qualification for Headship prioritises domain-specific knowledge, while Into Headship seeks to balance leadership knowledge with wider aspects, including self-awareness and professional values. The programmes have deep and implicit structures which reflect and reinforce the two national systems: England's emphasis on 'what works' and school effectiveness, and Scotland's commitment to partnership and ethical, place-based education. The article concludes by highlighting the importance of experience for leadership formation and socialisation, asking whether and how prospective headteachers could be helped to better curate and reflect on their experiences of leading.

Keywords headteacher preparation; Into Headship; leadership development; leadership experience; National Professional Qualification for Headship; NPQH; school leadership; signature pedagogy

Introduction

Most school systems that participate in international benchmarking studies, such as the Organisation for Economic Co-operation and Development's Programme for International Student Assessment (PISA), have a national or provincial strategy and an associated capacity for improving the supply and quality of leadership (Harris et al., 2016; Pont et al., 2008). These strategies generally focus on defining national standards for headteachers, which are then addressed through combinations of pre-service, induction and/or in-service programmes and qualifications.

These programmes seek to equip school leaders for a role that is becoming ever more demanding. In many international contexts, long-standing societal inequalities have been compounded by the Covid-19 pandemic and cuts to public services, meaning that rising numbers of children and families turn to schools for support (Ortiz and Cummins, 2022). School leaders face tight budgets, reduced support, staffing shortfalls and constant pressure to demonstrate impact. The result is that headteachers commonly report working unreasonable hours. Some are burning out and many plan to leave, while fewer senior leaders say they aspire to the top job (Dicke et al., 2022; Thomson and Greany, 2024). At the system level, there are school leader recruitment and retention challenges across the UK (Woods et al., 2020) and more widely (Aravena, 2020).

These issues raise important questions about how best to prepare and support headteachers to feel confident and competent in their roles. In this context, the purpose of this article is to examine and compare headship preparation arrangements in England and Scotland informed by Shulman's (2005a, 2005b) notion of signature pedagogies. We draw on an analysis of interviews with policymakers, leadership development providers and school leaders in each country from the three-year (2022–5) Researching Sustainable School Leadership (ReSSLe) project. Both England and Scotland have official headteacher preparation programmes (Into Headship in Scotland and the National Professional Qualification for Headteachers [NPQH] in England), providing a suitable focus for comparison, although we also explore leaders' reflections on their wider careers and experiences.

Our data indicate that newly appointed headteachers across the UK do not generally feel well prepared for the role. That said, in Northern Ireland, where the Professional Qualification for Headship was paused in 2017, school leader interviewees explained that they 'miss' such opportunities and would like them to be reinstated. So, while we offer a constructive critique of the programmes in England and Scotland, we do not suggest that they are not valued or valuable.

The article is structured as follows. The first two sections draw on the literature to set out what is meant by a signature pedagogy and how these issues have been explored in relation to school leadership development. The 'Methods' section describes the Sustainable School Leadership research project, specifically the data drawn on here, and notes limitations. 'Headship preparation programmes

in England and Scotland' sets out the key features of the two programmes. The 'Findings' section compares the two programmes, drawing on the perspectives of policymakers, programme designers, local leaders and headteachers. The 'Discussion' section assesses the two programmes through the lens of signature pedagogies. Finally, the 'Conclusion' raises questions about the implications of our analysis and highlights the main contributions.

What is a signature pedagogy?

Signature pedagogies are practices which 'implicitly define what counts as knowledge in a field and how things become known' (Shulman, 2005a: 1). Signature pedagogies are not content or methods, but something that people do that actively (re)produces what it is to know about something and to become a knower – they are about 'knowing, doing and being' (Shulman, 2005b: 4). Shulman argues that they are particularly important in the education of professionals. For example, the first year of law school is dominated by the *case dialogue method of teaching*, in which an authoritative instructor engages individual students in a large class in dialogue about an appellate court case of some complexity. In medicine, we think of *bedside teaching*, where a senior physician or resident leads a group of novices through the daily clinical rounds, engaging them in discussions about the diagnosis (Shulman, 2005a).

A signature pedagogy has three dimensions. First, it has a surface structure, which consists of concrete, operational acts of teaching and learning, of showing and demonstrating, of questioning and answering, of interacting and withholding, of approaching and withdrawing. Second, it has a deep structure, reflecting a set of assumptions about how best to impart a certain body of knowledge and know-how. Third, it has an implicit structure, a moral dimension that comprises a set of beliefs about professional attitudes, values and dispositions. Finally, a signature pedagogy can be characterised by what it is not – how it is shaped by what it does not impart or exemplify. A signature pedagogy invariably involves a choice – a selection among alternative approaches. That choice necessarily highlights and supports certain outcomes while, usually unintentionally, failing to address other important characteristics of professional performance (Shulman, 2005a).

According to Shulman (2005b), the signature pedagogy of initial teacher education (ITE) is the placement, or *practicum*, although he bemoaned the lack of consistency in how such placements occur. In the practicum, new teachers must bring together domain and pedagogical knowledge with understandings of education and students. As they work in classrooms under the direction of expert teachers, they not only have to 'do' teaching, but they also have to 'become and be' a teacher, speaking, acting and interacting like an expert and professional. At a deep structural level, the assumption is that reflective practice is the best way to impart knowledge about how to become and be a teacher.

Not all educators agree that there is a singular signature pedagogy in teacher education, or in education more generally, while various authors have suggested alternative possibilities. Arnold and Mundy (2020) propose that a pedagogy for teacher education is 'praxis', which has three surface structures: portfolio dialogue, casewriting and signature pedagogy mapping. Parker et al. (2016) propose three discrete signature pedagogies for the professional development of physical education teachers – 'critical dialogue (process of acquiring knowledge through communicative interactions), public sharing of work (testing out practices in classrooms and share [sic] ideas with larger audiences), and communities of learners (collective learning around a shared concern or a passion)' (p. 1). Yendel-Hoppey and Franco (2014) identify six common practices with potential to become a signature: inquiry, focused observation, mentoring and coaching, co-teaching, reflection on teaching and integrated coursework and fieldwork. Critics of signature pedagogies also note their potential rigidity and a lack of recognition of cultural and linguistic diversity, and they query their capacity to prepare for varied professional contexts (for example, Creech et al., 2022; Kelly, 2022). Most recently, Brooks et al. (2023) have analysed common features of ITE programmes, noting two 'signatures': knowledge-first and people-first. Knowledge-first examples include theory-into-practice and apprenticeship models, where 'the knowledge that teachers need is foregrounded, but situated externally to them' (p. 5). In contrast, in person-first approaches, which include reflective practice and communities of practice, 'the new teacher is positioned as a competent but as yet uninitiated member of the teaching community' (p. 6).

Signature pedagogies and school leader development

The literature on leadership formation highlights how individual biography and career-long opportunities and experiences – both positive and/or negative – commonly shape leaders' identities and values, and their competence and confidence in the role (Gronn, 1999; Liu et al., 2021). This literature highlights the importance of considering how leaders' identities (continue to) shift as they make the transition from 'teacher' to 'leader' and move from novice to experienced principalship (Robertson, 2017). Also important are processes of socialisation, through which leaders learn to operate within a specific school, locality and wider professional context (Kılınç and Gümüş, 2020; Murphy, 2020).

Unpicking the contribution of formal leadership training and programmes to processes of formation and socialisation can be challenging, not least because significant leadership development learning occurs informally and through experience (Van Veelen et al., 2017). Various studies and reviews of leadership preparation programmes indicate that these should: be context specific and adapted to individual as well as general needs; combine knowledge (key concepts, theory), skills and practice; and address current policy and practice requirements, but also be future-focused or transformational (Daniëls et al., 2019; Darling-Hammond et al., 2007; Fluckiger et al., 2014). There are various examples of how headship preparation programmes around the world seek to bring these features together (Breakspear et al., 2017; Harris and Jones, 2015; Jensen et al., 2017; Walker et al., 2013).

Relatively little of this work on leadership development touches directly on signature pedagogies. The University Council for Educational Administration (UCEA) in the USA responded to Shulman's initial writings by arguing that collaborative inquiry internships might support the formation of leaders, and the kind of reasoning that is 'not only practical but morally, ethically and politically informed' (Black and Murtadha, 2007, p. 12). Other candidates that have both individual and a cohort dimension include class discussion (Jenkins, 2012), case writing (Meyer and Shannon, 2010) and participatory action research (Sappington et al., 2010). Parker et al. (2016) suggest a trio of signature pedagogies: critical dialogue, public sharing and communities of learners. Nirit and Dorit (2024) investigated whether novice principal mentoring by experienced principals might be a signature pedagogy, concluding that mentoring helped principals fulfil their obligations, but 'did not contribute to the development of the principals' skills of diagnosis and inference of previous events' (p. 1).

Some of the more general writing on school leader development focuses on pedagogies, some of which overlap with the examples given above as potential signature pedagogies. The pedagogies explored include: action learning (Filipkowski, 2023); problem-based learning (Hallinger and Bridges, 2017); internships (Martin et al., 2013; Thessin and Clayton, 2013); and the application of learning within school projects (Simkins et al., 2009). These literatures commonly stress the importance of the application of knowledge in practice, although some emphasise additional aspects, such as self-development (Korkut and Llací, 2016) and values clarification through structured role play (Lasater, 2016).

Numerous studies address mentoring and/or coaching, suggesting that these are fairly ubiquitous pedagogies in leader development. Zhang and Brundrett (2010) state that aspirant leaders prefer mentoring and experiential learning over formal courses. Conversations with an experienced coach are seen to promote self-reflection and self-awareness, as well as problem identification, goal-setting and problem-solving, thereby strengthening 'political astuteness' (Close, 2013), 'goodness' (Nakai, 2005) and empowerment (Boon, 2022), while also 'acting as a counterweight to some of the consequences of performativity' (Lofthouse, 2019, p. 33). However, some question these benefits (Master et al., 2024), while others point out the potential for coaching to be used coercively to ensure compliance with policy (Ray, 2018). Another concern about coaching is its individualised nature, although a subsection of the literature does focus on group coaching (for example, Fluckiger et al., 2014; Nicolaidou et al., 2016; Thomas et al., 2024), and locality-based approaches (Weathers and White, 2015).

Finally, given significant concerns around the lack of leadership diversity across many school systems and contexts, it is important to highlight research into leadership development geared towards the needs of under-represented groups (Burton and Weiner, 2016; Lee, 2020; Sugiyama et al., 2016).

Methods

The Researching Sustainable School Leadership (ReSSLe) project is a three-year (2022–5) study being undertaken by the authors. The research is funded by the UK Economic and Social Research Council

and it received ethical approval from the Principal Investigators' University School of Education Ethics Committee. The research focuses on England, Scotland and Northern Ireland, but given that there has not been a headship preparation programme operating in Northern Ireland since 2017, we focus here on England and Scotland. The research explores two questions:

- RQ 1. how does each UK nation recruit, train and retain school leaders, particularly headteachers?
 RQ 2. how well do these approaches take account of individual, local and systemic needs, in particular in relation to the sustainability of leadership supply, its diversity, equity, quality and fitness for the future?

The project takes an emergent approach to theory, drawing together work on leadership (for example, Hargreaves and Fink, 2006), identity (for example, Heffernan and Niesche, 2020) and place (for example, Thomson and Hall, 2016). This theoretical work does not focus specifically on Shulman's work or on signature pedagogies, so the analysis here is additional, but complementary. The research adopts a pragmatic and constructivist stance, inquiring into leadership through the experience of leaders, using a range of methods. This article draws on three sources of data from the project: evidence review, expert interviews and locality case studies.

Evidence review

We draw here on the Programmes and Policies strand of the review. This concentrates on formal leadership programmes and related policy areas (for example, leadership standards, career structures and school accountability) in each nation. Relevant literature was identified, including academic and grey literature. Following initial screening, 860 references were sifted to establish relevance, resulting in a corpus of 127 items relating to England, Scotland or UK-wide findings, as shown in Table 1.

Table 1. Programmes and policies for leadership development evidence review

	Book chapter	Conference paper	Journal article	Policy/guidance document	Other 'grey' output	Report	Doctoral thesis	Total
England	6		44	3	2	12		67
Scotland	8	1	27	5	1	5	4	51
UK			7			2		9
Total	14	1	78	8	3	19	4	127

Expert interviews

Between July and September 2023 interviews were conducted online with 17 experts (4 international, 5 from England, 4 from Scotland and 4 from Northern Ireland). The sample was designed to include national and international education policymakers and leadership development experts. The final sample included academics, policymakers, designers and providers of leadership development, and union representatives. We used a standard semi-structured interview schedule, but we adapted this to reflect the expertise and context of each interviewee. Interview transcripts were analysed, and a set of themes was identified.

Locality case studies

Seven locality case studies were completed – three in England, and two each in Scotland and Northern Ireland, reflecting the conceptual framework focus on place. As noted, we focus here on England and Scotland, so we do not include data from Northern Ireland in our comparison. The localities were selected based on an analysis of national data and informed by discussions with project advisory groups in each country. Our aim was to visit a reasonably representative spread of contexts, considering factors such as geography (for example, urban/coastal/rural), socio-economic and demographic factors (for

example, above and below average levels of deprivation) and the nature and performance of local educational provision. In each locality, we interviewed a small number of local 'system' leaders (for example, local authority officers, local providers of leadership development) and employers (for example, chair of governors, director of human resources) (see Table 2). We visited a locally representative spread of primary and secondary schools, where we interviewed potential or serving heads – usually individually, but sometimes in small groups. Each interview lasted 1.5 hours, following a semi-structured schedule. In line with our project ethics approach, all interviewees have been anonymised, with pseudonyms assigned.

In addition, we reviewed publicly available documents and websites which described local leadership development arrangements in each locality. In some localities, we observed relevant events (for example, headteacher briefing or induction).

Cleaned interview transcripts were coded in NVivo by three members of the research team, using a combination of top-down and bottom-up codes. Locality case studies were written and shared with the project advisory group in each country and with research participants via in-person workshops, providing an opportunity to validate findings and discuss implications.

Table 2. Locality case studies: interview participants by role

Locality	Deputy head	Headteacher	Headteacher and local leader	Local leader	Employer	Total
England	6	23	4	16	13	64
City	3	7	1	6	8	27
Coast	2	8		6	4	20
Shire		8	3	4	1	16
Pilot	1					1
Scotland	2	15		9	3	29
City	1	7		4	3	15
Rural/Coast	1	7		5		13
Pilot		1				1
Total	8	38	4	25	16	93

We acknowledge two key limitations in this article. First, it does not include data from the ReSSLe project's two quantitative strands: namely, the UK leadership survey and secondary data analysis of workforce data in each country. These strands of the mixed methods study were not complete at the time of drafting the article, so they were excluded. We expect the findings to add further breadth and depth to this analysis, once they are available. Second, the sample for the case studies was not selected to focus on recent participants in NPQH or Into Headship. This is more of a limitation in England, where the new 'domain specific' version of NPQH was introduced recently (2021), meaning that relatively few of our interviewees had undertaken the new version by the time of our data collection (up to October 2024).

Headship preparation programmes in England and Scotland

In both England and Scotland, the national governments commission and subsidise the cost of pre-service headteacher development programmes – NPQH in England and Into Headship in Scotland (Greany, 2018). In Scotland, Into Headship is aligned to the General Teaching Council for Scotland's Standard for Headship (GTC Scotland, 2021), which is mandatory for all new headteachers. In England, NPQH was previously mandatory, but it has been optional since 2012, although public funding and support have been sustained. Both nations support wider suites of formal programmes aimed at leaders at different stages of their careers (for example, middle leadership to established headteachers) and/or in specialist roles (for example, literacy leaders). In England, these qualifications are all named National Professional Qualifications (henceforth referred to as 'NPQ suite') (see GOV.UK, 2020). In Scotland, the

programmes have a range of titles (see Education Scotland, n.d.). In both England and Scotland, many leaders engage in other forms of professional learning beyond these national programmes.

The two school systems are very different in size: England has around 24,000 schools, compared with 2,500 in Scotland (Woods et al., 2020). These differences are reflected in the scale of each programme: 2,655 leaders started NPQH in 2022, compared with 253 starting Into Headship. There are also significant structural differences which impact on headteacher recruitment, development and employment arrangements. In Scotland, the 32 local authorities employ all staff, while in England, staff are employed by either an academy trust (of which there are well over a thousand) or one of 153 different local authorities (Greany and Higham, 2018).

Headship preparation arrangements in both countries have evolved, and there have been multiple reviews and revisions, reflecting changing political priorities and preferences. NPQH was first introduced in 1997, while Into Headship was launched in 2015 (replacing the Scottish Qualification for Headship – SQH – which had been in place since 1998). Into Headship is delivered through a partnership between seven universities, the local authorities and Education Scotland, a Scottish government agency. In England the NPQH content framework is determined by the Department for Education (DfE), with input from the Education Endowment Foundation (EEF), a government-endowed ‘what works’ agency. Eight national providers are contracted by the DfE to design and deliver the programme in line with this framework, working with a national network of 87 officially designated Teaching School Hubs.

Both programmes have prescribed content and learning which is related to published standards for headship in each country (DfE, 2020a; GTC Scotland, 2021). These frameworks characterise the headteacher role in broadly similar ways, but there are notable differences in how these understandings are translated into specific standards, with the English version being far more concrete and prescriptive, while the Scottish version emphasises underpinning values, principles and processes.

These differences are reflected in the design and content of the programmes, as shown in Table 3. The NPQH framework (DfE, 2020b) sets out tightly prescribed domain-specific requirements for what participants are expected to know (‘learn that’) and know how to do (‘learn how’), centred on ‘what works’ evidence drawn from ‘rigorous’ studies. In contrast, the content of Into Headship is not set out with the same degree of specificity, and the programme includes a much wider range of learning processes, including a 360° assessment, mentoring from an experienced headteacher and the completion of an in-school project.

Findings

The interviews showed clearly that formal leadership programmes play a relatively small – although often important – part in the leadership formation and socialisation of school principals. We heard a range of views on NPQH and Into Headship: while some had found the programmes more helpful than others, only a small minority had not found them valuable at all. However, there was universal agreement from policymakers, providers and leaders themselves that such programmes did not – and almost certainly could not – fully prepare someone for headship, given all the complexities of the role. The serving heads we interviewed were unequivocal that they did not feel fully prepared for the role when they first started. While some expressed views about particular areas where additional training would have been helpful, such as budgeting and HR, a more common view was that the ‘apprenticeship of headship’ requires experience, or, as one interviewee put it, ‘It’s a bit like when you pass your test and learn how to drive, you’re only really learning how to drive once you’re driving a real car.’ However, as we explore below, the extent and nature of headteachers’ prior experience, together with their ability to reflect on it, was an important differentiator.

Policy perspectives

NPQH and Into Headship arguably have some broad similarities; both are publicly-funded national programmes that aim to align policy and practice and to develop applied skills. That said, Table 3 highlights some clear differences between them, in terms of their scale, design, content, delivery models and mandatory requirements. Our interviews revealed that these differences were substantive and that they extended to underlying beliefs about headship and the purpose and role of national leadership development provision. These differences came through most clearly in interviews with policymakers and

leadership design experts. These revealed that England's current model was designed to be technical, domain-specific and focused on policy implementation, while Scotland's was intended to encourage reflection, self-awareness and a more agentic approach to policy enactment.

In England, a national policymaker explained that there had been 'a very intentional pivot' when the NPQ programmes were redesigned in 2020–1, aiming to create 'a real intentional focus on making it [NPQH] domain specific, focusing in on what are the characteristics of a well-run school, rather than what you could caricature as more generic leadership'. A parallel aim was to place the NPQs 'into the continuum of what we call the "golden thread"', so that school leaders would hear the same messages about 'the characteristics of effective teaching' as newly trained teachers. One of the challenges with this approach, according to the policymaker, was that the DfE and EEF were committed to only including 'rigorous' evidence derived from 'what works' style evaluations in the programmes (Perry and Morris, 2023), but that such evidence had been hard to find, as 'there is relatively little evidence on the particular contribution made by leaders to overall school effectiveness'. A national provider of the new NPQs explained that Conservative ministers in power at the time had kept a 'tight grip' on the content and process of the reforms, and suggested that, implicitly at least, providers were not approved by the DfE unless there was 'some sort of agreement around ideology'.

In contrast, in Scotland, we heard from policy and design leads for Into Headship that 'supporting people to know themselves is key ... building self-awareness and encouraging that sense of reflection'. For these interviewees:

It was never about there's a particular way to be a headteacher, but it's understanding all the different facets of school leadership and then supporting them to understand themselves in that context and the context they might find themselves in ... the balance of self, who they are, and the community that they are working with. (National expert, Scotland)

Provider perspectives

These policy-level differences were reflected in our interviews with local providers of each programme. In Scotland, we interviewed local university-based providers of Into Headship in both City and Rural-Coast. Both described the partnership between the various bodies involved (that is, Education Scotland, GTC Scotland, local authorities and the universities) as strong. They explained that the seven universities involved 'all teach the same thing' with 'the same learning outcomes', in order to support quality assurance, but that 'we all teach very differently'. The content, pedagogical activities and assessments of their modules clearly reflected the commitment to encouraging self-reflection and adapting policy to the context and needs of a school, with an emphasis on personal and professional values. Interestingly, the module on the strategic leadership of change and improvement often draws on what our English policymaker might call 'generic leadership' theories and research, for example, around transformational and distributed leadership. One interviewee worked for a local authority but was also a tutor on Into Headship: they were positive about the programme, but they admitted that they were 'not convinced about the master's bit ... We see a quite high attrition rate. Just finding time to do eight thousand-word assignments, is that right?'

In England, we interviewed the national provider quoted above and several local leaders who were involved in running NPQH across the three localities, for example, as a Teaching School Hub. Local providers were largely positive about the overall NPQ suite of programmes, because they offered a clear and consistent pathway and a set of evidence-based messages (that is, the 'golden thread') which individuals and schools were seen to value. However, there were mixed views about how far and how successfully the programmes could be adapted to meet local needs. The national provider explained that 'we've really tried to make sure that our programmes are not about just inculcating knowledge', including by adding flexible sessions which local providers could offer as opportunities for participants to reflect and translate the knowledge into their context and practice. However, these sessions were 'the most poorly attended part of the programme' (National provider). In contrast, the local providers (who worked with different national providers) explained that while they were required to deliver the curriculum as prescribed, they could adapt this somewhat to meet local needs. For example, the Shire Teaching School Hub Leader explained: 'We whizz through some of the generic bits [that is, the prescribed content] and then spend more time saying, right this is what it looks like in [Area], where you've got lots of small rural primaries or you're an isolated secondary school head.'

Table 3. Key features and content of NPQH and Into Headship

	NPQH	Into Headship
Alignment to national headteacher standards	Indirect – not equated with meeting the standards	Direct – qualification includes an assessment against the standards
Mandatory for new headteachers	No	Yes
Who can apply?	Any serving, qualified teacher who aspires to headship or is a serving head.	Assessed by local authority and school as suitable for headship.
Duration	18 months	1 year
Providers	Eight national providers commissioned by the DfE – mix of private, voluntary and higher education organisations. Providers are inspected by the Office for Standards in Education, Children's Services and Skills (Ofsted). Providers work with a network of officially designated Teaching School Hubs.	Partnership model – Education Scotland, local authorities and seven universities – steered by a national design group.
Content and learning model	Core content defined by the DfE, advised by expert group and the EEF. Sets out required content ('Know that'/'Know how to') in 10 areas – School culture, behaviour, professional development, teaching, curriculum and assessment, additional and special educational needs, organisational management, school improvement, working in partnership, governance and accountability. Providers must address these requirements, but courses vary somewhat between providers (for example, mix of online <i>versus</i> in-person sessions, or approach to group coaching).	Programme content not specified but reflects headteacher standards. Participants: • self-evaluate themselves against the General Teaching Council for Scotland (GTCS) Standard for Headship • receive 360° feedback from colleagues related to their emotional and social competences • engage with headteacher mentor identified by local authority • complete two academic modules ('Developing as a Strategic Educational Leader' and 'Leading Strategic Educational Change') • complete four online modules provided by Education Scotland: employment law, education law, health and safety, and finance • attend two Education Scotland-run national conferences.

Table 3. Cont.

	NPQH	Into Headship
Assessment	Written, open-book case study assessment (1,500 words)	Leads to Postgraduate Certificate (60 master's credits) assessed by universities. As part of Leading Strategic Educational Change module, participants identify/lead a change initiative in their school. Trained verifiers (usually serving headteachers) visit candidate to verify this and assess against GTCS Standards.

School leader perspectives

In England, school leaders generally welcomed the NPQ suite as offering 'free' continuing professional development (CPD) provision for their staff. Many described benefits in having a coherent pathway and set of content for staff at different stages of their career. Views on NPQH across its various iterations were generally positive, although a minority were more critical. Several employers and headteachers in England described NPQH as a partial solution for headship preparation at best, so they were seeking out (or designing themselves) additional programmes to supplement the official programme. One primary head in England Shire had been appointed to her first headship recently, having completed the new (that is, domain-specific) version of NPQH, as well as a master's degree in educational leadership. She explained how 'NPQH has been changed significantly and now it's more about, these are the roles and these are what you need to, how you deal with tricky parents, how you deal with staff members and absences'. When she reflected on the different learning, she explained: 'What I always describe is my MA gave me the education, the knowledge, and the NPQH gave me the practical skills ... I think they're both really valuable.'

In contrast, interviewees in Scotland tended to emphasise how Into Headship had introduced new ways of thinking, rather than practical skills, as this Secondary Head in Scotland (City) explained: 'During Into Headship ... you get that opportunity, that space, and that kind of big thinking stuff that sometimes you forget about when you're in the role.'

The role of experience in preparation for headship

We turn now to the findings from our case study interviews, which shed light on the wider ways in which leaders are prepared – or not – for headship. This analysis reveals that: (1) it was what they had learned through *experience* that interviewees talked about most when discussing whether or not they felt prepared for their first headship – far more than what they had learned on the national programmes; and (2) new headteachers varied widely in terms of their level of leadership experience and their ability (or propensity) to reflect on, and draw implications from, their leadership experience.

The following three quotations give a flavour of how our interviewees characterised this experience: the first emphasises the importance of time served across every key area of school life, and of really understanding children's lives across different contexts; the second highlights the importance of role models and mentors; the third signals the importance of being stretched, and of engaging with a range of operational and strategic issues. What is clear in all three quotations is that the experience was developmental, by which we mean that, while it includes an element of 'time served', it went beyond this to include the development of new knowledge, understanding, skills and/or capabilities:

So, I started out as a history teacher ... most of my early career was in a school that had quite a bit of deprivation. I would say it was a good grounding to have that understanding of the barriers that young people can face, and families can face. And then, so in those days, it

was teacher, principal teacher, assistant head, deputy head, head. So, I've gone through the old-fashioned way, if you like, and which means that I've had the experience of each layer in the system. (Secondary headteacher, Scotland Rural-Coast)

If it hadn't been for her [former principal] and her leadership and encouragement, I never would have done it. You know, you don't know. But she saw something and encouraged me to do it. (Primary headteacher, Scotland City)

Huge learning curve again in terms of, you know, a ... much more strategic role ... Much more involvement with Education Scotland, leadership at authority level. You were expected to go with things and go out and change aspects of the system, and I loved it. I loved it. Operationally it was very demanding as well ... I had all these big jobs, and it was really tough actually, when I think back, it was really tough, but I loved it. (Secondary headteacher, Scotland City)

These examples suggest that developmental experience is the bedrock of headship formation, socialisation and preparation, but, in practice, new headteachers vary widely in terms of the breadth, depth and impact of their experience. One example of a headteacher who had consciously curated her career and experience in order to prepare for headship was Ruby, a secondary head in England Coast. She explained, 'I've just been really lucky as well throughout my career ... because I've just been exposed to so many elements of school leadership.' She described how she had worked in one school for many years, but had taken on a range of academic and pastoral roles, including outward-facing roles supporting other schools and providing CPD. 'Then I decided, if I was ever going to go into headship, I probably needed to get another school under my belt.' In the new school, she took on further roles, such as timetabling, school-wide behaviour and Designated Safeguarding Lead, and worked externally as an Ofsted inspector. She did not want to take on timetabling at the time, but she acknowledged that the experience was 'probably one of the best things I ever did really in terms of that side of school life. Because what they don't teach you ... or the bit you get the least exposure to, is things like staffing and recruitment and finance.' Not all of this learning was deliberate or even positive: 'I've also had two really negative leadership experiences with two people that I've worked with in the past. So, that's been quite ... that's probably had more of an impact on me than the positive experiences.' Five years earlier, she had applied to become headteacher of the school in which we interviewed her, but she was not successful. Instead, she took on the headship of a smaller school where she had been working for some time. Four years later (that is, the year before we interviewed her), she reapplied to the current (much larger) school when the headship was readvertised. She reflected: 'I wouldn't have been ready when I first applied for it. ... I think actually to have come in here at that time, now knowing what I know, I would have just drowned, totally drowned, but I came in with loads of experience this time.' This developmental experience, acquired prior to, but in thoughtful preparation for, headship had enabled Ruby to feel confident and well-equipped for the role. Interestingly, she had not felt the need to undertake NPQH, because she believed that her experience had prepared her in other ways.

Discussion

As noted earlier, the purpose of this article is to examine headship preparation arrangements in England and Scotland, informed by Shulman's (2005a, 2005b) notion of signature pedagogies.

Our findings show that the two programmes reflect quite different policy intents, leading to different professional learning experiences for leaders. Policymakers in England have worked hard to ensure that the new NPQs present coherent and specific instructions to teachers and leaders on what they need to know and need to be able to do, based on their interpretation of the (they argue, limited) 'what works' evidence available. The NPQ national providers were selected on the basis that they were ideologically aligned to the then government's approach, but national and local providers have sought to contextualise the content while working within the requirement to deliver the prescribed curriculum. We quote a headteacher who had undertaken the new version of NPQH, and who had valued its focus on 'practical skills'.

In contrast, policymakers in Scotland set out to collaborate with local authorities and universities to design and run a master's-level programme that would encourage self-reflection and a more open-ended professional conversation about leadership and change. On the ground, interviewees from local

authorities, universities and schools clearly reflected this policy intent, for example, in how they described the programme content and approach. The vast majority of leaders who had completed Into Headship described it as valuable, not least because it offered space for 'big picture' thinking, although a small number raised questions about the demands of study on busy leaders.

Based on this analysis, we argue that there is no clear signature pedagogy for the preparation of headteachers which applies across both England and Scotland. Each nation adopts quite distinct approaches to identifying participants, and then to educating and assessing them. While it is possible to trace some similarities between the two programmes, these would hardly fulfil Shulman's requirements that a signature pedagogy should be 'intuitive' ('the forms of instruction that leap to mind when we first think about the preparation of members of particular professions' [Shulman, 2005a, p. 1, emphasis added]) and 'pervasive' ('cuts across institutions and not only courses' [Shulman, 2005b, p. 9]).

Assessing the two programmes separately, it is interesting to explore whether and how they reflect Shulman's (2005a, 2005b) core features, in terms of surface, deep and implicit structures. As shown in Table 3, Into Headship has a wide range of surface structures, such as how participants are selected by local authorities, the 360° assessment, the university modules, the national modules and conferences, local mentoring, in-school projects/verification and so on. Our interviews with current and former participants did not reveal any one, or any sub-set, of these structures as dominant in terms of their learning, although the university modules and assignments were mentioned most often. Considering the deep structure of Into Headship (that is, the assumptions about how best to impart knowledge and know-how), we can see that there is some explicit teaching of 'content' in the university and national modules, but that this is balanced with opportunities for self-reflection on personal experience (for example, 360° assessment) and the application of knowledge in practice (for example, in-school project). We heard from local providers that the university modules were taught by academics and serving practitioners together, suggesting an effort to balance theory and applied perspectives. Thinking about the implicit structure of Into Headship (that is, the underpinning morals and beliefs that it conveys), we consider its partnership structures (bringing together national and local, policymakers and universities, local authorities, school mentors and individuals), the emphasis on shared values (as defined in the GTCS Headship Standards) and the agentic enactment of national policy to be important features. Furthermore, Into Headship conveys both explicit and implicit expectations around the role of school principals and the ways in which they should act as community-engaged professionals with a commitment to social justice. Finally, if we consider what Into Headship does not emphasise, while there are many things we could highlight, it is the lack of emphasis on 'what works' evidence that strikes us most strongly when contrasted with NPQH.

NPQH has fewer standard surface structures, essentially the core content (know that/know how to) and assessment process, although we heard that national and local providers work in different ways to augment these by offering more flexible community discussions and group coaching. As an aside, we note that previous iterations of NPQH included a wider set of features, including a placement in another school, which interviewees had generally valued. The deep structure of the current NPQH reflects a clear set of assumptions: that school leaders need to know the same things about effective teaching as teachers (the 'golden thread'); that leadership development is primarily about communicating and incorporating evidence derived from 'robust' studies of effective teaching and school improvement; and that effective school leadership is based on the application of technical domain-specific knowledge and skills in order to improve tested academic outcomes. The implicit structure of NPQH reflects England's more marketised and accountability-focused system, for example, with commissioned providers that are inspected by Ofsted (Greany and Higham, 2018). Finally, if we consider what NPQH is not, we see the rejection of 'generic leadership', and of research and evidence that has not been derived from 'what works' studies, and the near absence of structured discussion around professional values and purposes.

This assessment might support an argument that the two programmes represent reasonably coherent 'national' signature pedagogies for headship preparation, although we are not convinced that either is really 'intuitive' in Shulman's terms (Shulman, 2005a, 2005b). Drawing on Brooks et al.'s (2023) distinctions, we might characterise the English version as a knowledge-first approach, where 'the knowledge that [leaders] need is foregrounded, but situated externally to them' (p. 5) with an emphasis on technical applied knowledge, while the Scottish version is closer to a person-first approach, where 'the new [leader] is positioned as a competent but as yet uninitiated member of the [leadership] community' (p. 6), reflecting a commitment to strengthening collective professional values and agency.

Brooks et al.'s (2023) distinction between knowledge- and people-first pedagogies is helpful, but it arguably underplays the role of experience in leadership development and headship preparation, as demonstrated by our findings. We included the example of Ruby, who had managed her career – partly deliberately and partly through happenstance – in ways which had developed both depth and breadth of experience, making the NPQH qualification unnecessary for her. Ruby was by no means the only leader we interviewed who had carefully curated her career and reflected on her experience in such ways, but neither was such agentic and reflective self-awareness universal; indeed, some of our interviewees described a headlong rush to reach headship, with little attention to developing breadth or depth. Others seemed to have fallen into headship almost by accident, with little thought as to how their experience had prepared them.

Conclusions

When we compare NPQH and Into Headship, we find no clear signature pedagogy that is common to both programmes. Instead, we suggest that each programme could be seen as a distinct 'national' signature pedagogy, although we are not convinced that either really has the intuitive and pervasive reach that Shulman expects. These 'national' pedagogies both reflect and seek to reinforce the surface, deep and implicit features of each system, and the expectations of headteachers within them. This assessment leads us to make three final observations.

First, we note that the headship programmes are funded, designed and steered by the national government in each country. This level of policy-driven oversight is distinct from the professions that Shulman largely focused on, such as medicine, law and the clergy, which generally develop and govern their own professional standards. One implication is that when governments change, the ideology of schooling and leadership can also change, which might explain why Scotland and England have developed such different models. It also helps to explain why the programmes have gone through so many iterations over time, as new ministers and governments have sought to embed their own priorities and ideologies. One implication of so much change – especially when driven from outside the profession – may be that there is limited scope for a signature pedagogy to emerge and become embedded in the ways that Shulman observed elsewhere. Another might be that policy-driven development might be likely to focus on the intellectual and technical aspects of leadership – the head and hand in Shulman's tripartite scheme – leaving the moral and ethical (heart) aspects underdeveloped except where these are specifically prioritised, as in Scotland (Greany, 2024).

Second, we ask what kind of signature pedagogy might best recognise and enhance the diverse range of developmental leadership experiences that aspiring headteachers bring with them. We have argued that prior developmental experiences were more significant than formal programmes in shaping headteacher formation and socialisation, but that leaders varied widely in how far they curated and reflected on their experiences. Shulman's work focused mainly on the ways in which novices are inducted into their different professions, although he did also address development over time. Aspiring headteachers are not neophyte teachers, they can draw on a diverse range of leadership experiences, so there is a risk that imposing a singular pedagogy might become unhelpfully constraining, but this need not be the case, given Shulman's view that signature pedagogies are inherently dynamic and adaptive, characterising them as pedagogies of uncertainty, engagement and formation (Shulman, 2005a, 2005b). The challenge is thus to find consistent but flexible approaches which can ensure that all new headteachers have sufficient breadth and depth of developmental experience, including the skills and disposition to reflect on their strengths and areas for growth. This might involve supporting local schooling systems to develop the next generation more deliberately, by providing structured opportunities for experiential development and reflection, including via networks (Collins, 2013; Greany and Kamp, 2022). At the national scale, programmes might need to focus less on communicating one-size-fits-all content, and more on helping different leaders to diagnose and curate their different forms of experience, and to explore the intellectual and moral implications of this for their practice.

Third, we acknowledge that efforts to develop existing leaders' experiences risk entrenching the equity and diversity issues we highlighted above, given that the teaching workforce also lacks diversity in most school systems. For this reason, we argue that there is a strong case for more targeted efforts to overcome structural inequalities. Exploring such approaches in detail is beyond the scope of this article,

but we plan to return to these issues in future outputs from the ReSSLe project, for example, to consider how leadership development experiences differ by gender and ethnicity.

Therefore, we see the main contribution of this article as both empirical and conceptual. No previous research has drawn on policy, provider and practitioner perspectives to compare the English and Scottish headteacher preparation programmes in this way. At a conceptual level, while other authors, including in this special issue, have drawn on Shulman's ideas to explore school leadership development, we are not aware of work which examines 'national' signature pedagogies or that moves beyond a binary knowledge-/people-focused approach to consider the interactions between formal provision and experience in leadership formation and socialisation.

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Declarations and conflicts of interest

Research ethics statement

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Consent for publication statement

The authors declare that research participants' informed consent to publication of findings – including photos, videos and any personal or identifiable information – was secured prior to publication.

Conflicts of interest statement

The authors declare no conflicts of interest with this work. All efforts to sufficiently anonymise the authors during peer review of this article have been made. The authors declare no further conflicts with this article.

References

- Aravena, F. (2020). Principal succession in schools: A literature review (2003–2019). *Educational Management Administration & Leadership*, 50(3). [CrossRef]
- Arnold, J. & Mundy, B. (2020). Praxis pedagogy in teacher education. *Smart Learning Environments*, 7(8). [CrossRef]
- Black, W. R. & Murtadha, K. (2007). Toward a signature pedagogy in educational leadership preparation and program assessment. *Journal of Research on Leadership Education*, 2(1), 1–29. [CrossRef]
- Boon, Z. S. L. (2022). Coaching: An approach for leadership development in the Singapore education system. *International Journal of Mentoring and Coaching in Education*, 11(1), 89–103. [CrossRef]
- Breakspear, S., Peterson, A., Alfadala, A. & Khair, M. (2017). *Developing agile leaders of learning: School leadership policy for dynamic times*. WISE Foundation.
- Brooks, C., McIntyre, J. & Mutton, T. (2023). Learning to think, perform and act with integrity: Does teacher education have a signature pedagogy, and why does this matter? *London Review of Education*, 21(1), 1. [CrossRef]
- Burton, L. J. & Weiner, J. M. (2016). They were really looking for a male leader for the building: Gender, identity and leadership development in a principal preparation program. *Frontiers in Psychology*, 7, 141. [CrossRef] [PubMed]
- Close, P. (2013). Developing political astuteness: A leadership coaching journey. *School Leadership & Management*, 33(2), 178–96. [CrossRef]
- Collins, M. (2013). Local solutions for national challenges? Exploring local solutions through the case of a National Succession Planning Strategy. *Educational Management Administration & Leadership*, 41(5), 658–73. [CrossRef]

- Creech, A., Zhukov, K. & Barrett, M. (2022). Signature pedagogies in collaborative creative learning in advanced music training, education and professional development: A meta-synthesis. *Frontiers in Education*, 7, 929421. [CrossRef]
- Daniëls, E., Hondeghem, A. & Dochy, F. (2019). A review on leadership and leadership development in educational settings. *Educational Research Review*, 27, 110–25. [CrossRef]
- Darling-Hammond, L., LaPointe, M., Meyerson, D., Orr, M. T. & Cohen, C. (2007). *Preparing school leaders for a changing world: Lessons from exemplary leadership development programs*. School Leadership Study. Final Report. Stanford Educational Leadership Institute.
- Department for Education. (2020a). *Headteachers' standards 2020*. Department for Education.
- Department for Education. (2020b). *National professional qualification (NPQ): Headship framework*. Department for Education.
- Dicke, T., Kidson, B. & Marsh, H. (2022). *The Australian principal occupational health, safety and wellbeing survey*. Australian Catholic University.
- Education Scotland (n.d.). *Programmes*. Accessed 9 August 2025. <https://education.gov.scot/professional-learning/professional-learning-programmes-webinars-and-events/programmes/?orderAlias=default>.
- Filipkowski, C. (2023). School leader development with action learning. *Action Learning: Research and Practice*, 20(1), 17–37. [CrossRef]
- Fluckiger, B., Lovett, S. & Dempster, N. (2014). Judging the quality of school leadership learning programmes: An international search. *Professional Development in Education*, 40(4), 561–75. [CrossRef]
- General Teaching Council for Scotland. (2021). *The Standard for Headship*. General Teaching Council for Scotland.
- GOV.UK (2020). *National professional qualification (NPQ) courses*. Accessed 9 August 2025. <https://www.gov.uk/guidance/national-professional-qualification-npq-courses>.
- Greany, T. (2018). Balancing the needs of policy and practice, while remaining authentic: An analysis of leadership and governance in three national school leadership colleges. *Wales Journal of Education*, 20(2), 63–98. [CrossRef]
- Greany, T. (2024). Moral purpose in performative times: Do school leaders' values matter? *British Journal of Educational Studies*, 72(5), 587–606. [CrossRef]
- Greany, T. & Higham, R. (2018). *Hierarchy, markets and networks: Analysing the 'self-improving school-led system' agenda in England and the implications for schools*. IOE Press.
- Greany, T. & Kamp, A. (2022). *Leading educational networks: Theory, policy and practice*. Bloomsbury.
- Gronn, P. (1999). *The making of educational leaders*. Cassell.
- Hallinger, P. & Bridges, E. M. (2017). A systematic review of research on the use of problem-based learning in the preparation and development of school leaders. *Educational Administration Quarterly*, 53(2), 255–88. [CrossRef]
- Hargreaves, A. & Fink, D. (2006). *Sustainable leadership*. Jossey-Bass.
- Harris, A. & Jones, M. (2015). Transforming education systems: Comparative and critical perspectives on school leadership. *Asia Pacific Journal of Education*, 35(3), 311–18. [CrossRef]
- Harris, A., Jones, M. & Adams, D. (2016). Qualified to lead? A comparative, contextual and cultural view of educational policy borrowing. *Educational Research*, 58(2), 166–78. [CrossRef]
- Heffernan, A. & Niesche, R. (Eds.). (2020). *Theorising identity and subjectivity in educational leadership*. Routledge.
- Jenkins, D. M. (2012). Exploring signature pedagogies in undergraduate leadership education. *Journal of Leadership Education*, 11(1), 1–27. [CrossRef]
- Jensen, B., Downing, P. & Clark, A. (2017). *Preparing to lead: Lessons in principal development from high-performing education systems*. National Center on Education and the Economy.
- Kelly, T. (2022). Signature pedagogies: A cautionary tale. *Imagining SoTL*, 2(1), 10–18. [CrossRef]
- Kılınc, A. & Gümüş, S. (2020). What do we know about novice school principals? A systematic review of existing international literature. *Educational Management Administration & Leadership*, 49(1). [CrossRef]
- Korkut, C. I. & Llaci, S. (2016). School leader self-development. *International Journal of Science, Innovation and New Technology*, 1(15), 19–26.
- Lasater, K. (2016). School leader relationships: The need for explicit training on rapport, trust, and communication. *Journal of School Administration Research and Development*, 1(2), 19–26. [CrossRef]

- Lee, C. (2020). Courageous leaders: Promoting and supporting diversity in school leadership development. *Management in Education*, 34(1), 5–15. [CrossRef]
- Liu, Z., Venkatesh, S., Murphy, S. E. & Riggio, R. E. (2021). Leader development across the lifespan: A dynamic experiences-grounded approach. *The Leadership Quarterly*, 32(5), 101382. [CrossRef]
- Lofthouse, R. (2019). Coaching in education: A professional development process in formation. *Professional Development in Education*, 45(1), 33–45. [CrossRef]
- Martin, G. E., Danzig, A. B., Wright, W. F. & Flanary, R. A. (2013). *School leader internship: Developing, monitoring, and evaluating your leadership experience*. Routledge.
- Master, B., Schwartz, H., Unlu, F., Schweig, J., Mariano, L., Coe, J., Lin Wang, E., Phillips, B. & Berglund, T. (2024). Developing school leaders: Findings from a randomized control trial study of the Executive Development Program and paired coaching. *Educational Evaluation and Policy Analysis*, 44(2), 257–82. [CrossRef]
- Meyer, H. D. & Shannon, B. (2010). Case writing as a signature pedagogy in education leadership. *Journal of Educational Administration*, 48(1), 89–101. [CrossRef]
- Murphy, G. (2020). Leadership preparation, career pathways and the policy context: Irish novice principals' perceptions of their experiences. *Educational Management Administration & Leadership*, 51(1), 30–51. [CrossRef]
- Nakai, P. (2005). The crucial role of coaching in servant-leader development. *The International Journal of Servant-Leadership*, 1(1), 213–28. [CrossRef]
- Nicolaidou, M., Karagiorgi, Y. & Petridou, A. (2016). Feedback-based coaching towards school leaders' professional development: Reflections from the PROFLEC project in Cyprus. *International Journal of Mentoring and Coaching in Education*, 5(1), 20–36. [CrossRef]
- Nirit, P. & Dorit, T. (2024). Signature pedagogies and professionalism: An exploratory study on novice principal mentoring. *Educational Management Administration & Leadership*. [CrossRef]
- Ortiz, I. & Cummins, M. (2022). *End austerity: A global report on budget cuts and harmful social reforms in 2022–25*. <https://reliefweb.int/report/world/end-austerity-global-report-budget-cuts-and-harmful-social-reforms-2022-25> (Accessed 9 August 2025).
- Parker, M., Patton, K. & O'Sullivan, M. (2016). Signature pedagogies in support of teachers' professional learning. *Irish Educational Studies*, 35(2), 137–53. [CrossRef]
- Perry, T. & Morris, R. (2023). *A critical guide to evidence-informed education*. McGraw-Hill.
- Pont, B., Nusche, D. & Moorman, H. (2008). *Improving school leadership*, Vol. 1: Policy and practice. OECD Publishing.
- Ray, B. (2018). Educational leadership coaching as professional development. *School Leadership Review*, 12(1), 5.
- Robertson, S. (2017). Transformation of professional identity in an experienced primary school principal: A New Zealand case study. *Educational Management Administration & Leadership*, 45(5), 774–89. [CrossRef]
- Sappington, N., Baker, P. J., Gardner, D. & Pacha, J. (2010). A signature pedagogy for leadership education: Preparing principals through participatory action research. *Planning and Changing*, 41, 249–73.
- Shulman, L. S. (2005a). Signature pedagogies in the professions. *Daedalus*, 134(3), 52–9. [CrossRef]
- Shulman, L. S. (2005b, 6–8 February). *The signature pedagogies of the professions of law, medicine, engineering, and the clergy: Potential lessons for the education of teachers* [Paper presentation]. Math Science Partnerships (MSP). National Research Council's Center for Education, Irvine, California.
- Simkins, T., Coldwell, M., Close, P. & Morgan, A. (2009). Outcomes of in-school leadership development work: A study of three NCSL programmes. *Educational Management Administration & Leadership*, 37(1), 29–50. [CrossRef]
- Sugiyama, K., Cavanagh, K. V., van Esch, C., Bilimoria, D. & Brown, C. (2016). Inclusive leadership development: Drawing from pedagogies of women's and general leadership development programs. *Journal of Management Education*, 40(3), 253–92. [CrossRef]
- Thessin, R. & Clayton, J. (2013). Perspectives of school leaders on the administrative internship. *Journal of Educational Administration*, 51(6), 790–811. [CrossRef]
- Thomas, C., Koehn, J. & Turner, J. (2024). Promising practices for leadership development: Exploring a collaborative professional learning and coaching program. *Canadian Journal of Educational Administration and Policy*, 204, 88–103. [CrossRef]
- Thomson, P. & Greany, T. (2024). The best of times, the worst of times: Continuity and uncertainty in school leaders' work. *Educational Management Administration and Leadership*. [CrossRef]

- Thomson, P. & Hall, C. (2016). *Place-based methods for researching schools*. Bloomsbury.
- Van Veelen, R., Slegers, P. J. C. & Endedijk, M. D. (2017). Professional learning among school leaders in secondary education: The impact of personal and work context factors. *Educational Administration Quarterly*, 53(3), 365–408. [CrossRef]

- Walker, A., Bryant, D. & Lee, M. (2013). International patterns in principal preparation: Commonalities and variations in pre-service programmes. *Educational Management Administration & Leadership*, 41, 405–34. [CrossRef]
- Weathers, J. M. & White, G. P. (2015). Executive coaching of school leaders in a mid-sized urban school district: Development of a model of effective practice. In K. L. Sanzo, J. P. Scribner & I. E. Sutherland (Eds.), *Leading small and mid-sized urban school districts* (pp. 191–222). Emerald Group Publishing.
- Woods, P., Simkins, T., Donnelly, C., Hamilton, T., Jones, K., Potter, I. & Torrance, D. (2020). *Educational leaderships, management and administration in the UK: A comparative review*. BELMAS.
- Yendel-Hoppey, D. & Franco, Y. (2014). In search of signature pedagogy for PDS teacher education: A review of articles published in 'School-University Partnerships'. *School-University Partnerships*, 7(1), 17–34.
- Zhang, W. & Brundrett, M. (2010). School leaders' perspectives on leadership learning: The case for informal and experiential learning. *Management in Education*, 24(4), 154–8. [CrossRef]