INSIGHT SERIES

Leading Professional Learning

Professor Ken Jones
Education Consultant
National Academy for Educational Leadership in Wales
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1. Summary

- There is a distinction between the terms 'professional learning' and 'professional development'. The terms are often merged as PLD (professional learning and development). Leaders need to understand the difference.

- Although the literature on 'leading professional learning' is recent, the key principles have been apparent for some time.

- There are implications for school leaders in implementing all aspects of professional learning, even those that are highly focused on individuals or are 'implicit'

- Professional learning is an active, continuing process; it should be professionally critical and, in its best forms, collaborative.

- There are many forms of PLD but they are not discrete. Different approaches to PLD will be merged. This is referred to as the 'professional learning blend' and leaders have a role to play in supporting this.

- The five principles of the Cambridge Leadership for Learning Network can be applied effectively to the leadership of professional learning.

- Professional learning is multi-dimensional.

- There are a number of models of professional learning. Some are linear and suggest that the design and application of PLD can directly affect student outcomes; others contest this, arguing that school learning environments are complex and PLD will be non-linear.

- Leaders of professional learning need to ensure that there is a focus on social justice / equity.

- Structured support for professional learning is necessary, especially in complex environments, but this must not constrain learning, enquiry and critical evaluation.

- PLD is enhanced by connectivity, collaboration and networking. Digital collaboration is a rapidly growing post-pandemic phenomenon. Leaders can support this.

- Studies of well-led PLD identify critical features of effectiveness (Desimone, ASCL, Cordingley et al).

- A report for the National Academy for Educational Leadership Wales (Leadership Academy) has identified 8 hallmarks of well-led professional learning and development.

- Current reforms in Wales will require well-led professional learning and development support at all levels (national, regional and school). The Welsh Government's Curriculum for Wales Implementation Plan is useful in setting an agenda for PLD leadership and support.

- The growth of online learning, generated through necessity during school closure, illustrates how professionals can respond and learn quickly. Leaders need to reflect on the way they and others responded to immediate professional learning needs in response to the Covid 19 pandemic.

- Leaders should consider their views on the extent to which PLD can be measured using student outcomes.

2. Introduction – understanding professional learning and its links to school leadership.

a. Leadership and professional learning

i. If leaders are to support the professional learning of those they lead, they must have a secure understanding of what the term professional learning means. Our interpretation of the two elements of this paper, professional learning and leadership, has changed significantly over the past four decades. This evolution has been accompanied by changes in terminology which have made it more difficult to study the way the two have interrelated. It could be argued that studies of the leadership of professional learning are a recent phenomenon, and, using these terms they are. However, while the key principles relating to the ways leaders support professional updating have been apparent for some time (for example, in the UK in the 1980's we would have referred to the management of staff development) our understanding is now much more nuanced.

ii. Hallinger and Kulophas (2020) illustrate the increase in studies of leadership and teacher learning (LTL). They used science mapping to analyse relevant literature and found "a small, but growing corpus of knowledge". Their research identified a significant growth trajectory in the literature:

"1960s: 0 documents; 1970s: 3 documents; 1980s: 10 documents; 1990s: 38 documents; 2000s: 188 documents; 2010s: 554 documents. ... Indeed, 93% of this literature has beenpublished since 2000, and 70% since 2010" (p527).

iii. However, it is likely that this trajectory is under-representative. A glance at the early volumes of the journal Professional Development in Education (then called the British Journal of In-service Education) show numerous articles from researchers and practitioners discussing aspects of what we would now see as professional learning (see, for example, Isaac (1975) who commented: "Much staff development has nothing to do with courses but is a question of nurturing staff through the experience that they are allowed to acquire in their work within the school." (p23).

iv. Not only has the terminology changed but also leadership issues are heavily, but not always explicitly, subsumed within research into professional learning practice (see for example the many recent articles on Lesson Study (e.g. Dudley, 2019; Hervas and Medina, 2020), a form of professional learning that requires significant support from school leaders to allow space, time, contact and feedback to operate successfully).

v. The message to leaders here is that if you look for ideas solely from sources explicitly headed 'leadership' or 'professional learning' you will only scratch the surface of what exists.

b. Professional learning

i. The term 'professional development' has been in use in the USA for some time. The education reform movement of the mid 1980s in the USA saw the establishment of professional development schools. These were partnerships between schools and universities to

"rethink the preparation of pre-service education students; provide professional development for the experienced teachers ... ; model exemplary practices ..; and providesustained, applied inquiry ..." (Lieberman, 1998 pvi).

Alongside these, the term 'professional development' became commonly used to describe specific programmes of study undertaken by teachers, and usually provided by 'experts' from outside the school. Drawing on the importance of sustained engagement with new knowledge and skills, this evolved internationally into 'continuing professional development' (CPD), a term in common parlance outside education at that time.

ii.   Although other terms remain (including the outdated INSET, still used to describe school closure days), the term professional learning is now the one in common usage for policy and practice (O'Brien and Jones, 2014). The distinction between professional development and professional learning was extended by, amongst others, Timperley (2011) and Opfer and Pedder (2011), and Scotland was an early proponent of the term "career-long professional learning", incorporating the term into its professional standards and highlighting the importance of leadership in connection with this:

"GTC Scotland recognises that effective leadership depends on the principles of collegiality. All teachers should have opportunities to be leaders. They lead learning for, and with, all learners with whom they engage. They also work with and support the development of colleagues and other partners. The Standard for Career-Long Professional Learning includes a focus on teacher leadership and leadership for learning."(General Teaching Council for Scotland, 2012 p2)

An interpretation of the term professional learning is summarised by Jones (2015):

'Professional learning' involves active learning: it is a continuing process; it focuses onenquiry, analysis, reflection, evaluation, further action; it should be professionally critical; in its best forms it is collaborative; and it enables an approach which is not confined to a linear interpretation of future events and ways of working' (Jones, 2015).

iii. Embedded in the term 'professional' is the willingness and ability to keep up to date and to maintain a sense of expertness in one's chosen field. This involves continuing learning – a process which is neither finite nor easily defined by outcomes. It is implicitly autonomous: professionals take responsibility for their own learning and seek out ways to improve their knowledge and skills (Fenwick, 2014; Mulcahy, 2014). Leaders should support and enable this and, where appropriate, may require engagement with particular approaches to professional learning.

iv.   The two terms professional learning and professional development are often conjoined to PLD (professional learning and development) or PDL (professional development and learning) (CUREE, 2020). Together, they include all forms of professional learning engagement so will encompass school-embedded approaches such as mentoring, coaching, lesson study, practitioner enquiry, as well as formal external engagement such as short courses, online learning, networking and award-based programmes.

v.   Evans (2019) provides a deeper discussion of terminology and the underlying concepts, emphasising that much professional learning is informal or implicit. She argues that professional learning lies along a continuum from informal to formal. Leaders may intentionally or unintentionally support informal learning, for example by modelling behaviours or using conversation to give professional advice. She interprets 'implicit' professional learning as "occurring without the learner's … awareness or consciousness of her/his learning or development" (p6) sometimes referred to as 'unintentional' learning. It is important for leaders to be aware of these often hidden aspects. A question, prompt or comment made to someone can stimulate interest, professional curiosity and action. In this context, the importance of leaders and others engaging in dialogue cannot be overstated.

c.   A professional learning blend

i.   A key role of leaders at all levels is to actively encourage both formal and informal/implicit learning. By being aware that there are many facets of professional learning, leaders can support others in extending their learning opportunities and by showing that they too are professional learners they can motivate others. It is important for leaders to emphasise that professional learning is more than formal courses and events or structured activity such as mentoring in the same way that student learning occurs beyond lessons in the classroom.

ii. In Wales, this multi-faceted approach is referred to as a professional learning blend (as distinct from blended learning). A report for the Welsh Government, written before the 2020-21 pandemic, stated:

"A 'professional learning blend' can now be best understood as a combination of many forms of learning experiences including formal and informal, individual and group,workplace-based and located in personal professional spaces, face to face and online, synchronous and asynchronous. An approach can therefore be developed that engages learners using a variety of tools and techniques, including: online provision; individual reflection and enquiry; engagement with professional learning networks; observation of teaching and learning in other classroom environments; mentoring and coaching; and engagement with best practice through local, national and international visits."(Jones et al, 2020)

iii. As indicated later, the need for new approaches to professional learning during the 2020-21 Covid 19 pandemic put a new perspective on the meaning of professional learning and on the importance of leadership at all levels to secure access to new and non-standard forms of learning for both staff and students.

d. Leadership for (professional) learning

i. The Leadership for Learning Network (University of Cambridge, 2021) has set out five principles (see Appendix A) and these can be naturally aligned with principles for the leadership of professional learning. The LfL Network has worked with the Lastinger Center for Learning at the University of Florida and with the journal Professional Development in Education to develop research and understanding of new approaches to leading professional learning (Swaffield and Poekert, 2020).

ii. The leadership for learning Cambridge Network principles are:

1. **maintaining a focus on learning as an activity in which: …** everyone (including teachers, teaching assistants, headteachers) is a learner and the conditions for learning are highly sensitive to context and to the differing ways in which people learn

2. **creating conditions favourable to learning … in which: …** physical and social spaces stimulate and celebrate learning … safe and secure environments enable everyone to take risks, cope with failure and respond positively to challenges

3. **creating a dialogue about professional learning in which…** factors which inhibit and promote learning and leadership are examined and addressed. Different perspectives are explored through networking with researchers and practitioners across national and cultural boundaries.

4. **encouraging sharing of leadership in which …** structures support participation, everyone is encouraged to take the lead as appropriate to task and context and collaborative patterns of work and activity across boundaries ofsubject, role and status are valued and promoted.

5. **creating a shared sense of accountability in which …** a systematic approach to self-evaluation is embedded at classroom, school and community levels; there is a focus on evidence and its congruence with the core values of the school; national policies are recast in accordance with the school's core values; the school chooses how to tellits own story taking account of political realities.

iii. These principles provide an excellent foundation for building and maintaining a positive professional learning culture and can be re-interpreted and applied at all levels within an education or school system.

3. The multi-dimensional nature of professional learning

i.   If we take a leadership perspective of professional learning, we can see that a multi-dimensional approach becomes necessary (Jones, 2020). This begins with the recognition that the individual professional is central to the process (Dimension 1). Teachers develop (active); no professional should say that they are being developed (passive). Leaders don't develop others, they support their development. This isn't just semantics, it is part of the emotional intelligence that leaders at all levels should possess. It is also important for leaders to recognise that for some aspects of professional learning this support needs to be as close to the individual as possible, so teacher leadership becomes extremely important.

ii. Leaders should aim to be inclusive. Anyone involved in supporting students' learning should be as well prepared as possible. This includes teachers on supply and teaching assistants who are often omitted from organised staff learning activities.

iii. Dimension 2 is the individual's engagement with approaches to learning. Leaders can create space and opportunity for others to engage in professional learning experiences and, as indicated above, they can prompt individuals to blend their learning into coherent ways of working. Although the process is complex (see later), there will be many times when direct training will be needed.

iv. Dimension 3 is the application of what has been gained from professional learning. Has it changed the way colleagues support the learning of others (including leadership where this is a focus of the professional learning)?

v.   The fourth dimension is space: where might professional learning take place? Leaders can influence this by enabling staff mobility, for example by encouraging lesson observation within and outside the school. High quality school-based professional learning is essential, but leaders need to provide opportunities for staff to engage with professionals outside their classrooms and schools wherever possible. The growth of online professional learning has made this more accessible (on a global scale as well as locally) and the creation of professional learning communities has provided networks which give teachers a wider perspective. The challenge lies in sustaining these interactions and avoiding the 'quick fix' solution which sometimes seems more manageable.

vi. The fifth dimension is time. We mustn't expect instant responses to professional learning unless it is from specific training to meet an immediate need (such as using online learning technology for teaching during the pandemic). In one form, time can be seen as a resource over which leaders have some control. In other forms, professionals will use their own time to learn and even if leaders can't control this (well-being is an important consideration) they can influence and motivate by stimulating professional curiosity and enquiry.

vii. There are other dimensions and leaders may benefit from reflecting on how they manage professional learning support and by identifying which aspects of these dimensions they can control or influence.

4. Models of professional learning

i. Kennedy (2014 a) provided a framework for analysing models of continuing professional development. Originally published in 2005, her article identified nine models of CPD (including training, coaching and mentoring, and action research) and classified them into three categories. She updated this article nine years later (Kennedy, 2014 b) and gives a useful overview of changes in thinking and the interpretation of professional learning and development over the intervening period.

ii. Included within the category headed "Transmissive", Kennedy (2014b) lists training models, deficit models and cascade models. Her second category, "Malleable" includes award-bearing, standards-based, coaching/mentoring and community of practice models. Her final category, "Transformative" has collaborative professional inquiry as the only model. Her revised spectrum of models of CPD is useful to school leaders in examining the variety of approaches that exist, or that may need to exist, within or across schools and the purposes they might serve.

iii. Boylan et al (2018) provide a more recent analysis of professional learning models. He draws out significant differences between linear path models, complex process models and cognitive models. His analysis highlights the ways in which thinking around professional learning and development has changed, moving from simple training models (simplified as: get the design of the training right and changes to teaching will follow) through to complexity-informed thinking (the appreciation that teaching and learning take place in complex situations and that it is too simplistic to expect pre-determined student outcomes from all professional learning activities). As discussed later, this doesn't mean that some models are right or wrong, but it should enable leaders to appreciate that achieving changes to teaching and learning involves more than putting together a list of 'what works'.

iv. Models have also been created to guide national policy and practice. One of these was the National Model of Professional Learning in Scotland (Education Scotland, 2019). This model builds on the concept of career-long professional learning and includes criteria for leaders:

Leaders of and for learning…

1. Develop the strategic vision to lead and support learning for all

2. Develop a learning culture and ethos based on trust, honesty, challenge and support; one which supports and promotes the growth of professional capital through professional learning

3. Support and provide time for meaningful engagement in sustained professional learning and development with opportunities to share

4. Lead learning conversations underpinned by coaching approaches to stimulate, challenge and support thinking

5. Have professional courage

6. Enact collaborative and enquiring approaches to practice

7. Encourage, challenge and question to ensure development and progress

8. Are committed to and recognise the importance of developing individual and collective knowledge

v. In Wales, the term National Approach to Professional Learning is preferred to National Model (Welsh Government, 2019). The Approach comprises eight elements including (within the school context) the individual professional learning journey, schools as learning organisations and the professional learning blend. Each of these has implications for school leaders, as well as for individual educators. For the National Approach to have full impact, the components of education reform within the National Mission will need to be treated as a coherent whole. Professional learning, listed as *Enabling Objective 1: developing a high-quality education profession* (Welsh Government, 2017 p 25-27) will need to be guided by the implementation of *Enabling Objective 2: inspirational leaders working collaboratively to raise standards* (Welsh Government, 2017 p28-29) for the mission to be fully realised.

5. Leading professional learning in complex environments

a. The need for equity in complexity

i. We know now that most professional learning, and the most effective professional learning, is likely to be embedded within the workplace. However, as Poekert et al (2020) argue: "… teachers have continued to report ineffective or irrelevant professional learning opportunities … Worse still, the achievement gaps and education debts between historically marginalised groups of students and their more affluent peers persist" (p541).

ii. Harris and Jones (2020) comment: "Inequity is one of the greatest challenges facing most education systems today. It is a risk to economic prosperity, a barrier to social cohesion and most importantly, a human tragedy" (p 1). They add: "Inequity is also the root cause of so many educational challenges globally but in many of the contemporary debates about education it often takes a back seat" (p2).

iii. When considering the ways in which leaders support professional learning, we need to keep equity clearly in mind, not only in relation to the ways in which professional learning impacts on student experiences but also in relation to the access that individual staff have to professional learning opportunities. The articles by Poekert et al (2020) and by Torrance et al (2021) provide important insights into the ways in which school leaders should be addressing issues of social justice, not only by making inequity visible for professionals within their schools but also by re-evaluating the focus on social justice leadership within their own experiences.

iv. Poekert et al (2020) reference research by Lee and Hallinger (2012) which found that "principals from less hierarchically organised societies may allocate more time for instructional leadership and spend more time interacting with families and the school community" (p548). While the professional learning culture of the school is a key factor in reducing inequity, schools and school leaders exist within a wider cultural society.

v. Poekert et al draw attention to:

"the danger in culturally blind use of best practice and performance data to inform teaching. Without a culture of enquiry to '… redress the … deeply rooted structures and practices that maintain outcome disparities for minoritised groups' …opportunitiesto capitalise on student generated ideas, foster sense-making, and pursue meaningful and equitable learning outcomes will be missed" (p552)

vi. In this context it is important to see schools and school leaders within the local, regional and national systems of which they form part. In Wales, for example, the national education system is in the process of an "education reform journey" with schools developing as learning organisations and forming Tier 3 of a triple layer model in which Tier 2 includes the four regional consortia, the inspection agency and higher education, and Tier 1 is the Welsh Government (Welsh Government, 2017 p10).

vii. The National Mission Action Plan (Welsh Government, 2017) and its curriculum implementation plan (Welsh Government, 2021) are examples of ways in which national systems can provide guidance for policy and practice in identifying school professional learning priorities.

b. The need for structure in complexity

i. Schools are complex organisations. A key role of leadership is to make sense of this complexity and generate professional learning cultures which are not only equitable but also optimistic, critically self-evaluative and self-improving. Good leadership is the key to achieving all of these, but it is tempting to reduce complex learning environments to more-easily managed systems.

ii. Leaders should be able to identify formal and informal structures within their schools. Formal positions of professional learning support, such as induction coordinator / mentor, should be clearly but flexibly defined. Informal professional support should be celebrated and disseminated where appropriate.

iii.   The uncritical use of formal structures and leadership roles, the over-reliance on policy, and the focus on professional development programmes and outcomes (as opposed to critically reflective, collaborative, professional learning cultures) may lead to 'frozen' systems which are slow to react to change and inhibit interaction, a fundamental requirement of high-quality professional learning.

iv.   Leaders should identify borders or barriers within their schools (such as departments or age-related teams) which inhibit interaction and sharing of professional learning.

v.   When leaders see their schools as ecosystems which are composed of inter-related actions and complex challenges, the way they lead professional learning takes on a new perspective. It is too easy to identify 'collaboration' as the solution to professional learning leadership; but unless leaders (at all levels) see themselves as "facilitators of connectivity" (Murray, 2017), supporting agency and appropriate criticality, professional learning is likely to be limited in its scope and application.

c. Digital networking and connective collaboration

i.   School leaders may claim to use 'distributed leadership' when they mean devolving responsibility for implementing centralised policy, defined by predetermined values with pre-ordained targets and outcomes. It is important to note that in some circumstances this may be the most equitable way of ensuring improvement in the short term. However, recent thinking advocates the creation of complex adaptive systems (Le Fevre et al, 2016; McMillan and Jess, 2021) in which the balance between professional freedom and order is maximised.

ii.   Research into professional learning in education and other professions is identifying a 'complex turn' (Strom and Viesca, 2020) or 'ecological shift' (Daly et al, 2020). The creation of 'adaptive space' for individual professionals and teams is becoming more apparent as connected networks of interaction emerge.

iii.   Even though digital networking has been common practice for some time (through, for example, Facebook, WhatsApp and Twitter) its development as a professional learning tool in education has been slow to be realised on a significant scale (Nochumson, 2020; Fancera, 2020).

iv.   Jones et al (2019) provide a pre-pandemic perspective of the use of digital technologies, social media and interactive learning within the professional learning blend, but we need to re-think our approach to professional interaction and to the role of leaders in stimulating potentially global interaction in the post-pandemic age.

v.   It is an understatement to say that the use of the internet has transformed approaches to student and professional learning since 2020. Murray (2017) argues that the growth of digital networks suggests a need for change in all leadership practice. He states:
"Leadership studies must reconsider its traditional assumptions as it struggles tonavigate complexity and distributed power in such a connected environment … Leadership is not about designated people in positions of authority but about the collaborative processes that unfold as institutions and groups adapt to changes in their environments … the task of the leader is to construct an environment (throughcommunication) that can facilitate [the emergence of] "interdependent entities interacting with one another, typically in a non-linear way," (p515).

vi.   He argues: "This is no longer the knowledge age, or information age—this is the age of connectivity" (p518) and "… just as active learning pedagogies have moved away from the "sage on the stage" to a more de-centered model of teaching, so is the complexity leadership perspective advocating for a shift from the 'one-to-many' model to a 'many-to-many' model" (p522).

vii.   The implications for leading professional learning are significant, because "… rather than imagining … control as static, it may be more productive to think of … control as a dynamic oscillation: leading and stepping back, instructing and learning, all done simultaneously and asynchronously… leadership in the complex, digital, networked age emerges as a collective practice" (p523).

6. Some hallmarks of well-led professional learning and development

i.   Accepting that education environments are complex, leaders at all levels in schools have a job to do, whether this is defined formally or is assigned or assumed informally. They need to make a difference to improve and support the way their students learn. There are many ways of doing this but, as leaders, they must communicate their own way and values, and work with others to achieve them in practice.

ii. The strategic use of professional development is essential for this. But it is important not to confuse this with the broader, more critical approaches of professional learning. Modifying your approach after discussion with those closer to the action is not weak leadership. Leaders must therefore be aware of the complexities of their own contexts but work simply and strategically to take others forward with the well-being of staff and students in mind.

iii. Harris and Jones (2019) draw attention to the need for impact and to the contested views on professional learning and development. It is important to keep this in mind and for leaders to use research evidence critically and adapt findings to their own situations. The reality of school leadership requires clear appreciation of LfL principle 5 above: "…the school chooses how to tell its own story taking account of political realities".

iv. The differences between leading professional learning and professional development are not either/or. It is both sensible and essential to be aware of and critically adapt research on what has worked for others. High quality leadership will therefore have impact (on professionals and on students) clearly in mind but will allow some movement at the level of practice to take into account micro-complexities. Langdon (2017) calls this a "nuanced dance".

v.   One of the most quoted studies of effective professional development is that by Desimone (2009). She provided a framework of five critical features of effectiveness which she later applied to one form of PLD, coaching (Desimone and Pak, 2017). Desimone's five critical features of effective professional development are:

- Content focus
- Active learning
- Coherence
- Sustained duration
- Collective participation

This is a useful framework for leaders looking for impact, but it is important to use the categories flexibly (for example, 'content' for educators in early years settings takes on very different connotations to that for upper secondary teachers).

vi. The Association of School and College Leaders (2018) produced a guidance paper with key features of well-led professional development and learning. They were:

- *The duration and rhythm of effective CPDL support requires a longer-term focus: at least two terms to a year or longer*
- *Participants' needs should be carefully considered. This requires stepping away from a 'one size fits all' approach,*
- *Professional development processes, content and activities should be aligned*
- *CPDL content should consider both subject knowledge and subject-specific pedagogy*
- *Effective professional development is associated with specific activities.*
- *External input from providers and specialists must challenge orthodoxies within a school*
- *Teachers should be empowered through collaboration and peer learning:*
- *Powerful leadership … is pivotal …. School leaders should not leave the learning to teachers, they should be actively involved themselves.*

vii. Cordingley et al (2020) provide a later overview for leaders of professional development and learning. They highlight the following actions for school leaders (p5):

- *Model and promote evidence-rich professional dialogue*
- *Embed and reinforce openness to professional learning in school systems*
- *Contribute to embedding CPDL in day to day practices*
- *Ensure that CPDL focuses on teacher development and well-being*
- *Ensure CPDL processes align with school values*
- *Use specialist knowledge to identify the contribution of specialist expertise*
- *develop the skills and pedagogic content knowledge of CPDL facilitators*
- *Ensure curriculum development acts as a driver of professional learning.*
- *Recognise that CPDL is enacted though professional relationships*

viii. In 2020, the National Academy for Educational Leadership Wales commissioned research into the leadership of professional learning in Wales. The initial report (Burrowes, 2020) identified a number of "hallmarks" which research evidence suggests characterise well-led professional learning and development, and these are being used as the basis for more detailed research into the leadership of PLD in Wales. The hallmarks of well-led professional learning and associated comments drawn from the research are given below. They provide structure for leaders to use and adapt to their own situations. Well-led professional learning and development will be:

a. *Centred on supporting all learners and mindful of well-being*

Leaders of professional learning understand how different professionals learn and enable them to access the most appropriate learning experiences (Welsh Government, 2020; Evans, 2019). They appreciate that professional learning is more than single events or activities and emphasise that the process of learning, embedding, reflecting and refining is a continuing one (Timperley, 2011; Jones, 2015). They acknowledge (formally and informally) the leadership potential of others and enable everyone to take an active part in peer-to-peer professional learning. They encourage creative and blended approaches to professional learning (Jones et al, 2020) and generate awareness of the need for equity and social justice in education (Forde and Torrance, 2021; Harris and Jones, 2019). They are sensitive to the well-being of all learners when introducing change through professional learning and implementing new initiatives (Day, 2016; MacDonald Brown, 2020; Scott et al, 2021).

b. *Bespoke to and driven by practitioners*

Leaders recognise that many people contribute to the education of learners and can contribute to professional learning of educators. The importance of listening to students and of learning with students is not overlooked (Margolis, 2017). Some educators, for example supply teachers, part-time staff and learning support assistants are sometimes marginalised by professional learning leaders. Additional arrangements may need to be made to ensure that they are included; they also have a great deal to offer mainstream professional learning. Individual professional learning is strongly influenced by, but not restricted to, the day-to-day contexts and priorities of individuals. Future development and career needs will also be considered. Leaders support individual practitioners in taking ownership of their own professional learning (Welsh Government, 2020) in the context of school, national, wider professional and personal priorities (Welsh Government, 2017; Welsh Government, 2019).

Leaders stimulate professional conversations to make visible the contributions that individuals make to others' learning. They encourage those closest to individual practitioners to generate this support through mentoring, coaching or critical enquiry (Lofthouse, 2020) and provide further support to those taking on mentoring roles.

Leaders acknowledge that individuals will not be committed to one school for the whole of their careers and will encourage broader professional learning such as leadership development, wider networking and deeper professional engagement such as a Master's programme (Welsh Government, 2021). Each practitioner's 'starting point', experience and aspirations for their pupils informs differentiated, personalised engagement with professional learning (e.g. learning for induction, enhancing mentoring skills, extending highly accomplished teachers) (Porritt, Spence-Thomas and Taylor 2017; Carpendale, et al, 2021).

Professional learning is differentiated and allows new practice to be developed as well as building on existing experience (consolidation) (Jones, 2020). The identification of professional learning needs is aligned with schools' appraisal, performance management or objective-setting processes (ASCL, 2018).

There is value in less formal approaches to professional learning, based on influence rather than authority, with 'teacher leaders' acting as instigators of change and inspiring colleagues towards improved educational practice (Margolis and Strom, 2020; Nguyen, Harris, and Ng, 2019). Such professional learning leadership is built on peer relationships, respect and trust rather than any formal authority, but it will require the support of school leaders to legitimise it and allow it to flourish (Dodman, 2021). *Planned strategically with a longer-term focus*

School-wide programmes of professional learning and development need to be planned systematically to ensure their alignment with school improvement objectives and the coherence of activities across phases, departments or subject areas. Professional learning plans should create a regular 'rhythm' of opportunities, follow-up, consolidation and support activities which, together, form a coherent whole (ASCL 2018; Cordingley et al. 2020). Sustainable professional learning needs a longer-term focus (at least two terms or a year) to allow learning to become embedded in practice and sufficient time for improvements in pupils' experience to become apparent (Porritt, Spence-Thomas & Taylor 2017; ASCL 2018).

Senior leaders need to give high priority to the development of coherent and realistic professional learning plans. They also need to ensure that, as far as possible, the resources necessary to implement those plans are available and, where resources are not available, motivation is not adversely affected.

c. Rooted in professional enhancement and school improvement

Professional enhancement is a priority for school leaders themselves. They make transparent their own continuing engagement with professional learning to show that it is the norm, not a series of one-off experiences. They aim to create a culture in which staff see themselves as learners and evaluators of the ways in which they support pupil learning (Daly, 2020; Morris et al, 2020;). The professional learning culture they establish in the school is enabling, interactive, collaborative and professionally critical (Estyn, 2017; Woods and Roberts, 2018). The key principles and expectations of professional learning are understood and consistently applied. The process aims to be sustainable and manageable within available resource provision and designated 'professional learning facilitators' (Perry and Booth, 2021; Le Fevre et al, 2015) may be assigned responsibility for this.

Leaders appreciate that improvement is not doing the same better. Appropriate goals are set with continuing review of pedagogy and leadership as the focus, but leaders recognise that professional learning is rarely a linear process and that, with the exception of specific training, learning may have many outcomes (Boylan et al, 2018). Colleagues regularly discuss, review and evaluate their teaching and leadership. They engage in critical professional enquiry, focusing on what is important to them as professionals as well as what is listed as school or government priorities (Lambirth et al, 2021; Welsh Government, 2019). Professionals seek viewpoints from different sources (leaders, colleagues, pupils) to provide perspectives on their work and are prepared to change course if necessary (Harris, Jones and Crick, 2020). Perspectives generated through professional learning may challenge the status quo and leaders engage openly with transformative approaches to practice.

Given current curriculum reforms in Wales, the importance of professional learning in supporting curriculum development and implementation is of national as well as local significance. School leaders in Wales have a particular challenge in balancing individual and school priorities within changing national imperatives (Welsh Government, 2017; Cordingley et al. 2020).

d. Focused on the application of professional learning

Whether professional learning takes the form of individual study, practitioner enquiry, lesson observation, engagement with professional learning communities or, preferably, a blend of these, professional learning requires a commitment from individuals in the form of time. This may be short, medium or long term, and leaders are aware of this and support where possible.

Resources rarely permit all approaches to be supported, but leaders and practitioners look creatively at ways to translate learning into practice (Roy et al, 2021; Harris and Jones, 2019).

Leaders acknowledge that schools are complex systems and that the impact of professional learning is often long term and often not measurable in a traditional sense (Strom and Viesca, 2021; Malone et al, 2021). However, individual professionals are responsible for evaluating the ways that their learning has or has not impacted on their own practice and especially on the learning of their students. Used appropriately and critically, the Professional Standards for

Teaching and Leadership, and engagement with professional enquiry can provide useful evidence to enable this (Welsh Government, 2020; Roy et al, 2021).

As far as possible, leaders provide access to relevant resources to support with applying the learning into practice and help to create time for planning, space for applying, opportunities for reflection, adapting and analysis of impact (OECD, 2018).

e.   *Designed to enable innovative approaches to learning and pedagogy*

At all points in the school system areas of specialist expertise are required. This may be in working in Early Years settings, educating those with additional learning needs, providing subject knowledge and skills for older learners or leading and managing teams at all levels. Enabling professional learning support focused on these areas is an essential part of leaders' responsibilities.

Opportunities to support the development of pedagogical knowledge, curriculum design, subject knowledge and approaches to assessment are sought from within and outside the school.

Such professional learning is planned and unplanned, formal and informal (Evans, 2019). It is continuing and career-long (GTC Scotland, 2012). From a well-being perspective, it is important that leaders create space for themselves and colleagues to consolidate what has been learned rather than constantly seek evidence of change (Jones, 2020). This is difficult at times when there is radical change occurring in the system when the value of 'what went on before' will be questioned.

However, leaders move on from continuing consolidation at times of rapid change and identify opportunities for new approaches to teaching and learning. This requires transformative rather than transmissive forms of professional learning (Kennedy, 2005; 2014) and may be disruptive to existing processes. Leaders are aware of these distinctions and consider how compatible the change is with the core values of the school and the likely impact of change arising from transformative professional learning.

In the context of on-going curriculum reform in Wales, practitioners expand their pedagogical and assessment skills (Harris, Jones and Crick, 2020; OECD 2018) and school leaders support this with a particular focus on exploring how professional learning might be used to link pedagogy and curriculum development as a means of building coherence. *Designed to develop knowledge and pedagogy*

Pedagogy should be at the heart of professional learning and development in schools. This is broader than lesson content and includes an understanding of the rationale for the curriculum (important in implementing the new Curriculum for Wales) and an awareness of issues of equity (Welsh Government, 2019)

f.   *Built on a critical view of research, professional enquiry and external expertise*

Professional practice is informed by research. Much of this is written for an academic audience and is context-related, but increasingly individuals have access to small and large-scale findings from practitioner research online (see, for example, the CollectivED Working Paper Series). Social media can provide a useful medium for keeping up to date on research, but a critical eye is essential (Carpenter and Krutka, 2015). The senior leader does not have to be the 'expert' in accessing and using research, and others (especially student teachers or newly qualified colleagues) may be better leaders in this.

Professional enquiry is a useful tool for teachers and leaders. The Professional Standards for Teaching and Leadership in Wales state: "There is structured engagement in an action research community and evidence of practice informed by wider reading and research findings on a national and international scale" (Welsh Government, 2020).

The professional learning culture of the school encourages and supports this, but the process is critical, shared and acted upon, using evidence to inform planning and practice. The focus of professional enquiry is not confined to school priorities, though it is inevitable that the focus will align with these in most cases (Welsh Government, 2019).

Whilst much professional learning can be organised and delivered within the school community, there is also a place for external input, in tandem with internal specialists. School leaders are clear about what support is needed and the contribution that external expertise can make to securing depth in professional learning and to embedding learning into school practices (Cordingley et al 2015; Cordingley et al. 2020).

g. *Strengthened by professional collaboration*

Within schools, leaders aim to create the conditions for colleagues to work together and to share ideas openly. Beyond the school, leaders generate collaboration between staff with similar interests in other institutions (Woods and Roberts, 2018).

School leaders look beyond their own school communities to build networks of knowledge, research and practical expertise (Brown and Poortman, 2017).

Leaders are aware of borders and barriers that exist to impede open collaboration. These may be departmental boundaries (restricting inter-departmental collaboration) or phase-related boundaries (for example, impeding primary and secondary teacher collaboration) (Zeng and Lo, 2021).

Collaboration forms a visible part of professional learning. Critical engagement with professional learning communities within and beyond the school is a powerful element of professional learning (Estyn, 2017; OECD, 2018; Kools and Stoll 2016).

Leaders create the conditions for practitioners to work together and to share ideas openly. They build collaborative, supportive and collegial professional relationships, within their own schools, and they model and promote professional dialogue themselves (Cordingley et al 2015; Estyn 2017). Leaders ensure that practitioners have the skills and mindset necessary to learn through collaborative approaches (ASCL, 2018). Staff reflect together on how to make their own learning more powerful and learn how to work together as a team. Staff feel comfortable seeking advice from each other, and trust and mutual respect are core values. The school allocates time and other resources for collaborative working and collective learning.

Leaders ensure that structures for regular dialogue and knowledge exchange are put into place. New staff receive induction support and all staff have access to coaching and mentoring support. Coaches and mentors also have opportunities to learn with and from each other (Lomax, J, 2020).

h. *Planned strategically over short, medium and longer terms*

Some professional learning support will be planned systematically by leaders to ensure alignment with local and national policy priorities and coherence across phases, departments and/or areas of learning. Individuals also have a professional learning journey in mind, though this does not exclude informal professional learning which may be ad hoc and opportunistic but extremely motivational and effective (Cordingley et al. 2020).

Leaders give high priority to the development of coherent and realistic professional learning plans, which create regular opportunities, follow-up, consolidation and support activities which together, form a coherent whole (Roy et al, 2021).

Some professional learning needs a longer-term focus (at least two terms or a year) to allow learning to become embedded in practice and sufficient time for improvements in pupils' experience to become apparent. This is taken into consideration when evaluating the impact of professional learning support (Jones, 2021).

7. Implications for leaders

i. The education system in Wales is in the process of significant curriculum reform (Welsh Government, 2017). Implementation of the proposed changes will require focused professional learning and development, and this will need to be led effectively at national, regional and school levels.

ii. At the national level (Tier 1), the Welsh Government has published its Curriculum for Wales Implementation Plan (Welsh Government, 2021). The plan emphasises:

"… the need to sustain and expand co-construction: through the National Network – anopen platform where teaching professionals, experts, stakeholders, policy makers and enabling partners will be brought together to identify and address the barriersto, and opportunities for, curriculum implementation – we will bring practitioners into the heart of policy to ensure they have a stake in decisions made nationally aboutCurriculum for Wales and its implementation" (unpaginated).

It continues;

"we want to see a system where leaders and professionals have the support and spaceto design and implement their curricula. This space is essential to giving professionals the time to think about the learning that really matters and why, and toempower them to innovate using their professional skills and judgement".

iii. Working within the principles outlined above, leaders of professional learning can plan courses of action over the short, medium and long terms. The Implementation Plan echoes the key elements of high-quality professional learning. In articulating shared ways of working, it lists:

- Development through co-construction
- Equity in co-construction
- Space and time to think and engage
- Clear understanding of 'why' things are learned and done
- Critical engagement with expertise
- Operating as learning organisations

achieved through

- Leadership at all levels of the education system

These are all characteristics of effective PLD.

iv. There can be a tension between centrally determined policy which directs the agenda for professional development and the transfer of ownership of professional learning to schools and teachers. The language of the implementation plan would seem to give school leaders and teachers a high level of agency. School leaders will need to ensure that they take ownership of this and ensure that compartmentalisation within and between schools is replaced by movement and interchange of ideas.

v. Motivation and trust will be central to this so that there is enthusiasm for change and trust in others to support critical reflection. Teacher leadership, close to the classroom, will be essential for this to happen so an important foundation action for leaders is to identify where this leadership exists (formally and informally) and to support it.

vi. The development of learning-centred leadership (and of learning-centred leaders) will be another key priority, so support for critical practitioner enquiry and instructional leadership will be key.

vii. Leaders will need to be sensitive to teachers' attitudes. Willingness to engage in professional learning and readiness for change will be important professional attributes, but will only materialise if teacher collaboration is able to exist in a trusting environment.

viii. Research by Liu, Hallinger and Feng (2016) gives an interesting insight into the impact of principal leadership on the professional learning of teachers in China, a country which has introduced a series of curriculum reforms that have required teachers to make changes to their professional practice. The survey instrument used by Liu, Hallinger and Feng was derived from wide reference to international literature and the section on teacher professional learning includes useful criteria for leaders of professional learning in schools (p89). Reproduced as Appendix B here, the criteria are listed under the headings collaboration, reflection, experimentation and reach(ing) out to the knowledge base and may be used as a useful self-evaluation tool for positional and non-positional leaders in schools.

8. Conclusions

i.   At no point has the need for new approaches to pedagogy and leadership been more apparent than during the Covid 19 pandemic of 2020 and 2021. Schools were closed, online learning became essential rather than peripheral, teacher interaction was reduced and the inequity of students, especially those who were seen as vulnerable, had never been more apparent.

ii. These circumstances could never be addressed by a single approach to professional learning. The use of new technologies provided at least two challenges for educators: how to use the technologies and how to utilise them most effectively for teaching and learning. For leaders there was an additional challenge: how to ensure that individual students (and individual staff) were not disadvantaged because of home circumstances during lockdown. Leaders needed to be as sensitive to the well-being of staff who may have been caring for others or finding it difficult to utilise technology from home as they had to be for the students who had minimal learning support during this time.

iii. It is impossible to quantify the professional learning that has taken place during the pandemic. What is clear is that this learning was blended, not simply by mixing online and face-to-face contact, but by bringing together the multi-faceted approaches to learning in a seamless way. Leaders can learn from this so that the new approaches to pedagogy and professional learning rapidly acquired during the pandemic can be refined and re-developed in more normal times.

iv. Kennedy (2016) argued: 'We need to replace our current conception of "good" PD as comprising a collection of particular design features with a conception that is based on more nuanced understanding of what teachers do, what motivates them, and how they learn and grow' (2016, p. 964). That, in a nutshell, is the role of leaders.

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Appendices

Appendix A
Leadership for Learning: The Cambridge Network

The five Leadership for Learning (LfL) principles

1   **Leadership for learning practice involves maintaining a focus on learning as an activity** in which: … everyone is a learner (Everyone' includes students/pupils, teachers, teaching assistants, headteachers, the school as an organisation) … the efficacy of learning is highly sensitive to context and to the differing ways in which people learn

2   **Leadership for learning … involves creating conditions favourable to learning** … in which: … physical and social spaces stimulate and celebrate learning … safe and secure environments enable everyone to take risks, cope withfailure and respond positively to challenges

3   **Leadership for learning … involves creating a dialogue about LfL** in which: … factors which inhibit and promote learning and leadership are examined and addressed … different perspectives are explored through networking with researchers and practitioners across national and cultural boundaries.

4   **Leadership for learning … involves the sharing of leadership** in which: … structures support participation in developing the school as a learning community … everyone is encouraged to take the lead as appropriate to task and context … collaborative patterns of work and activity across boundaries of subject, role and status are valued and promoted

5   **Leadership for learning … involves a shared sense of accountability** in which: … a systematic approach to self-evaluation is embedded at classroom, school and community levels … there is a focus on evidence and its congruence with the core values of the school … national policies are recast in accordance with the school's core values … the school chooses how to tell its own story taking account of political realities

Appendix B

Survey items Learning-Centered Leadership

(Liu, Hallinger and Feng (2016) p89)

Teacher Professional Learning

a. **Collaboration**

1. I work together with colleagues to plan educational activities
2. I work together with colleagues to modify subject matter for students
3. I work together with colleagues to share teaching experiences
4. I work together with colleagues to discuss ways to improve the curriculum and instruction
5. I participate in meetings with colleagues to decide how the school evaluates student achievement and the curriculum
6. I participate meetings with colleagues to discuss students' learning

b. **Reflection**

1. I modify instructional methods on the basis of feedback from colleagues
2. I maintain previous reports about learning and teaching for learning purposes
3. I reflect individually after observing colleagues' lesson to improve my teaching
4. I record my teaching problems for learning purposes
5. I update my instructional files according to the situation to improve my teaching
6. I record my learning experience in professional learning projects
7. I adapt my teaching methods in response to pupils' reactions
8. I reflect on my own teaching practice
9. I analyze the reasons of failures or successes in my teaching
10. I collect more information to analyze and verify pupils' feedback

c. **Experimentation**

1. I experiment with new teaching ideas
2. I try out new teaching methods in my lesson
3. I apply new methods to solve teaching problems
4. I test alternative teaching materials in class to stimulate students' interest
5. I try out new applications of ICT in my lessons

d. **Reach Out to the Knowledge Base**

1. I collect learning feedback from students
2. I search online information resources for ways to develop my teaching
3. I observe other teachers' lessons to learn
4. I read educational/subject matter pedagogical literature to obtain the new ideas
5. I ask for help from colleagues
6. I maintain professional learning linkages with other schools.