Informal coaching and mentoring and an 'informal turn' in teacher professional learning

Design/methodology/approach

This is a conceptual paper which draws on the author's research and which seeks to expand what is considered as professional learning within teacher education, namely informal coaching and mentoring. To understand how to support this professional learning, the lens of social practice is used with an emphasis on learning environments and learning practices.

Purpose

The focus in professional learning is often on formal activities such as workshops, conferences and courses. There is also a tendency to focus on formal programmes of coaching and mentoring in teacher education. Emphasising the formal means that everyday informal learning in educational settings is overlooked. Informal coaching and mentoring could be utilised to support teachers' career-long professional learning.

Findings

Coaching and mentoring can be identified in informal encounters in the staffroom, school corridors, and many places and situations. Findings are presented in relation to the importance of informal learning from and with colleagues and the role of headteachers.

Originality/value

More attention has been paid to informal learning but there is still a need for what could be termed an 'informal turn'. Understanding that informal coaching and mentoring afford professional learning opportunities to the teachers who both provide and receive coaching and mentoring can help to support their learning. Recommendations are provided on how educational settings can facilitate and support these professional learning opportunities while preserving their informality.

Keywords: Informal learning, informal coaching and mentoring, social practice, teacher professional learning

Introduction

In many professions, professional learning is measured by the number of hours that are devoted to it rather than the process or outcomes of the learning itself. Skule pointed out 'informal learning cannot be measured by means of indicators traditionally used in the field of education and training, such as participation rates, training hours, expenditures or level of qualification' (2004, p.10). A focus on measurement prioritises formal learning, such as hours on a course and, to a lesser extent, non-formal learning, for example, the number of journals read but excludes informal learning from informal coaching and mentoring such as collaborating with colleagues or observing those in a different location. This paper explores how informal coaching and mentoring can be supported in everyday work practices, what could be called an 'informal turn' in teacher professional learning. Rather than discounting formal learning, it is argued that alongside formal programmes, it is important to harness the potential of the everyday learning that takes place about, in and through work.

While participation in a workplace community can bring about learning on an individual basis, different workplaces exhibit varying degrees of support for informal coaching and mentoring, and

affordances for these activities may not be evenly distributed across the workplace. To understand how informal coaching and mentoring can be supported and led, the lens of social practice can be used with an emphasis on learning environments and learning practices. To explore the issues involved in supporting and leading informal learning this paper draws on research findings from several studies conducted by the author related to the professional learning of teachers, in particular new teachers. The paper ends with recommendations on how to facilitate and support coaching and mentoring while still retaining its informality.

The research reported in this paper is located within the sociocultural tradition with learning understood as changes in social practices. Informal learning includes learning from others, learning from one's own experience and sometimes both types of learning combined. It is not structured through learning objectives or timeframes and does not usually lead to certification. It is usually non-intentional and thus can be described as incidental learning. It can be regarded as more democratic and empowering as control is with the learner, the person being informally coached or mentored, rather than a formal training provider or tutor.

Literature review

It is important to explain the distinction between formal and informal coaching. A broad definition of formal learning includes activities which have one of the following characteristics: a prescribed learning framework; an organised learning event or package; the presence of a designated teacher or trainer; the award of a qualification or credit; and/or the external specification of outcomes (Eraut 2000). Another way of differentiating between formal and informal learning is to look at the different levels of intentionality rather than according to content or form (Gola and McNally 2008). As well as there being an unintentional learner, there can also be an unintentional or unintended teacher in informal learning (Rogers 2014). Here the unintentional or unintended coach or mentor is considered.

Informal learning is often seen as experiential learning which occurs in a particular context, and while it can be self-determined, planned and deliberate, conversely, it can also be unconscious, emotional and random (ibid). A third term, non-formal learning, will be regarded, for this work, as intentional learning or study which is not part of a formal programme or event. The direct objective or intention is to learn but the learner is in complete charge of the learning. The figure below shows how these three key terms will be used in this work in relation to coaching and mentoring.

Insert Figure 1 here

Figure 1 Formal, non-formal and informal coaching and mentoring

A distinction can be made between formal interventions that are recognised as staff development and everyday learning that takes place at work (Boud, Rooney *et al.* 2009). Informal learning can be understood as a 'lifelong process in which people learn from everyday experience whereas non-formal is seen as the organized educational activity outside formal systems' (McNally, Boreham *et al.* 2004, p.3). The term 'informal' can be used to cover everyday and organised activities and the notion of 'informal education' could include interactions with friends, family and work colleagues (ibid). The importance of non-formal and informal learning has been recognised in research in both the UK and the USA, for example:

Many teachers described interactions with colleagues as the experiences that most profoundly influenced their teaching. In some cases, the teachers participated in formal peer coaching, but frequently the interactions were more informal. (Sandholtz 2002, p.821).

Marsick (1987) notes that the ability to reflect on one's action seems to be vital for informal learning. Schön (1983, 1987) refers to this as 'reflection-in-action' and 'reflection-on-action'. There are those who argue for the importance of everyday or 'informal' learning and those who advocate for the provision of 'formal' learning in professional development programmes (Webster-Wright 2009, p.707). Neither position encompasses all the learning a new professional will experience. Learning at the beginning of any career will include informal conversations with colleagues, formal organised events and non-formal learning such as personal reflection.

Formal learning is less important than anticipated in studies of early career professionals who receive more advice from colleagues around them than from their official mentor (Eraut 2007). It has been found that listening to colleagues' experiences and the observation of colleagues is an important part of new teachers' learning (Meirink, Meijer *et al.* 2009). Most learning in the workplace is informal and involves a combination of learning from others, learning from personal experience and learning from both at the same time (Eraut 2004). However, this learning is not prioritised, nor its significance emphasised for new teachers (Shanks 2018).

The informal learning of new teachers can be understood as a mutually beneficial relationship between their work and their learning (Eraut, Alderton *et al.* 2000). The whole working process is also a learning opportunity. An additional and essential source of learning for new teachers can be informal spontaneous collaboration. The informal learning of beginning teachers links to the crucial importance of access to and support from spaces, places and people (McNally, Boreham *et al.* 2004). If the central importance of informal learning for new teachers is recognised it can then be supported in a more holistic and organised way.

While the term 'professional learning' has come to replace that of 'professional development' there is still a focus on formal learning (Webster Wright, 2009). However, professional learning should not be regarded as falling into different dichotomies of either completely formal or informal, social or individual, on-the-job or off-the-job, top-down or bottom-up. Rather than excluding formal learning, the argument put forward in this work is that, in the past and up to now, policymakers, national bodies, local authorities, school managers and teachers themselves have placed too much emphasis on organised events (Evans, 2018). A shift is required in terms of what we mean by professional learning for people in the workplace so that both formal and informal learning, as well as group and individual learning, are included. Although learning in formal contexts is important, by concentrating on it alone much of the learning that takes place in the workplace is undervalued (Eraut, Alderton *et al.* 2000, Evans 2018).

One shortcoming in Lave and Wenger's (1991) seminal account of situated learning is that it fails to include a role for formal education in the newcomer's learning (Fuller and Unwin 2003). This leads to an incomplete description of the learning someone engages in at the beginning and throughout their career. In educational research literature, there has been much debate around informal and formal learning (Edwards and Miller 2007, Rogers 2014, Evans 2018), but the informal/formal binary distinction does not exist in real-life situations for new professionals:

most new recruits were clearly recognised as 'learners', as in formal settings, but more likely to be given advice and feedback informally by those around them than by those designated as their mentors (Eraut 2007, p.408).

It is necessary to explain what is meant by the term 'informal coaching and mentoring' as often coaching and mentoring will be regarded as quite different activities with coaching more directive and formal and mentoring less directive and less formal. Here the terms are used together as informal discussions about work which may include both more and less prescriptive advice and so a broader term can better encapsulate the content of those discussions. The term 'informal coaching and mentoring' is a way to categorise and highlight the importance of informal discussions, help and advice between colleagues. Unlike formal mentoring programmes it is not necessary for someone to be more experienced than the other colleague to take part in informal coaching and mentoring so it includes

peer to peer support as well. This informal coaching and mentoring can be regarded as a form of social learning (Rogers 2014). As with the tailors of Liberia (Lave and Wenger 1991) there can be informal learning, informal coaching and mentoring happening all the time without it being noticed or being labelled as such.

The historical nexus between teaching and learning reinforces the assumption that significant learning experiences or activities require external direction (Webster-Wright 2009). However, it is possible to understand the everyday workplace as a learning environment. It may not be useful to describe workplaces as informal learning environments as the word 'informal' can be regarded as negative, imprecise and ill-focused (Billett 2002). There are a series of criticisms relating to the formal/informal distinction: defining something by what it is not; it does not provide a basis to understand the nature of the learning; it presupposes a link between formal teaching and learning, and the absence of teaching in the workplace may lead to the assumption that workplace learning is of lower quality (ibid). However, to differentiate informal coaching and mentoring from formal programmes of coaching and mentoring the word 'informal' is helpful.

Rather than define formal learning and then state that informal learning is all other learning, Dale and Bell (1999), as cited in Pickerden (2004), have given a more specific definition of informal workplace learning as being learning that:

takes place in the work context, relates to an individual's performance of their job and/or their employability, and which is not formally organised into a programme or curriculum by the employer. It may be recognised by the different parties involved, and may or may not be specifically encouraged (Pickerden 2004, p.2).

Difficulties arise in how to record, authenticate, recognise and value informal learning in the workplace. It is harder to study or reward because it is less visible than formal learning (Marsick and Watkins 1987). One potential difficulty for practitioners is that formal qualifications are more highly valued than 'a woolly portfolio' (Friedman and Phillips 2004, p.369). However, it could be that the learning is un-measurable because it is in the control of the learner. This poses a problem as to how to appreciate informal learning, take account of it and support it without, in effect, formalising the learning (Sangrà and Wheeler 2013). The fact that informal learning is not transparent makes it seem inferior (Hager 2004 and 2011). There is the possibility that by attempting to foster learning through formalising it, the intervention hinders the very process it is seeking to promote (Boud, Rooney *et al.* 2009). It will have to depend on individual circumstances and the wishes of the individual whether they want their learning to be recognised officially in any way such as being assessed and certificated. Marsick (1987) concluded that informal learning must not be formalised into the transmission of 'the quick fix' and that learning must be supported so that it can be 'instrumentally dialogic and self-effective' (p.207).

So, what is the connection between informal workplace learning and coaching and mentoring? Everyday interactions at work which help someone improve their performance and/or skills could be termed informal learning and also might be understood as informal coaching or mentoring. For example, in the staffroom at lunchtime a teacher mentions an incident and a colleague asks some probing questions and suggests possible solutions, this could be seen as informal coaching. Or a more experienced colleague gets the teacher to identify how the incident unfolded and what they could have done differently as a type of informal mentoring.

This leads us to the inherent difficulties in supporting, leading and researching the informal learning of teachers because it may not be planned, measured, talked about or even done consciously. Eraut (2004) found that learning in the workplace is absorbed from others, for example in informal conversations rather than through formal observations and teachers feel they are learning through teaching their classes. If informal learning is the most important way of developing skills and competencies for work, then a mechanism for measuring this informal learning, which takes place while people carry out their ordinary work activities, is needed (Skule 2004). There is a scarcity of

research data on informal learning at work such as observing, listening, and learning from others (Felstead, Fuller *et al.* 2005, Evans 2018). Many surveys ask about involvement in events and/or activities to find out about learning in the workplace (Kennedy, McKay, *et al.* 2008), this means that learning that happens without being noticed during work is not recorded. Felstead, Fuller *et al.* (2004) point out that surveys on learning at work ask about activities that occur in a set period and, therefore, exclude ongoing activity that cannot be distinguished from work. Thus, survey questions give greater emphasis to deliberative, conscious, planned interventions and are less likely to gather the equally, if not more important, learning activities that occur naturally as part of ordinary work. These learning activities could include informal coaching and mentoring. Felstead, Fuller *et al.*'s (2005) study showed that social relationships and mutual support in the workplace were rated as being of more importance than qualifications and attendance on courses and the authors called for survey designers to be more innovative in question construction in order to capture this workplace learning. This informal mentoring and coaching benefits not only the mentee but can also generate professional learning for the mentor or coach (Shanks, 2017).

By recognising and supporting this 'informal turn' in teacher professional learning, organisations could improve workplace practices through the development of new and different strategies (Boud, Rooney *et al.* 2009). The informality of interactions between colleagues and the ensuing learning means that traditional indicators for education and training cannot be used to measure it. Rather than attempting to create new measures, factors that are conducive to informal learning can be identified and an evidence-derived, general conceptualisation of the workplace learning environment can be developed (Skule 2004). Rather than seeing one type of learning as superior, it is preferable to understand and appreciate the differences between each type of learning: 'formal, informal and everyday learning are critical for individual workers' capacity to carry out and develop their jobs' (Boud, Rooney *et al.* 2009, p.333).

Up until very recently, informal learning was neglected in official documents and teacher standards in favour of more formal learning (McNally, Boreham *et al.* 2004). In a study of new teachers in Scotland, the concept of 'relational conditions', for example 'letting go', 'dropping in', 'always there' and 'one of the team', was important for new teachers who lived between the extremes of 'total abandonment' and 'rigidly controlled, stifling support' (McNally, Boreham *et al.* 2004, pp.4-5). Warren's (1997) earlier study found that probationer teachers felt supported 'through informal contact rather than the formal induction programme' (p.60). McNally, Boreham *et al.* (2004) highlight that the early experiences of teaching are largely informal with strong emotional and relational elements associated with forming their teacher identity.

This learning is part of work:

by locating much important learning in workplace settings and emphasising the influence of social relations within those settings and the influence of managers and the microculture of the workplace, the symbiotic relationship between working and learning becomes apparent (Eraut, Alderton *et al.* 2000, p.258).

The individual agency of the learner must also be taken into account as 'informal learning is highly contextualised and individualistic in the sense that it is based on the cognitive, affective and behavioural development of the teacher' (Turner 2006, p.317).

Leading informal professional learning

Terms such as 'formal', 'informal', 'non-formal' and 'incidental' have been used to describe workplace and other learning (Unwin and Fuller 2003, Boud and Garrick 1999). These terms may seem less important if it is possible to agree that learning at work should be supported more and managed in a better way. A key individual is the headteacher or rector who has a pivotal role in the workplace learning of new teachers and is central to the creation of a climate that is favourable to learning (Flores 2001, Stanulis and Burrill 2004, Draper and O'Brien 2006). Headteachers can call new teacher meetings and encourage teacher collaboration in their schools (Greenlee and Dedeugd 2002). Feedback from superiors and management support for learning are two of seven learning conditions that were found to promote informal learning in the workplace (Skule 2004). It has been argued that school administrators and experienced teachers could do more to support new teachers' development and enhance their time in schools (Johnson and Birkeland 2003). New teachers want people who are there for them and who are accessible, willing and able to listen to them and provide help when they need it (Hobson 2009). This help could include informal coaching and mentoring.

If it is accepted that informal learning is important, then it can be argued that managers and headteachers need to re-imagine how learning happens at work (Boud, Rooney *et al.* 2009). Support for learning is more connected to the skills of managers and the quality of their relationships with staff than with the hierarchical design of the organisation (Ashton 2004). In the Becoming A Teacher (BAT) study, a six-year longitudinal research study exploring beginner teachers' experiences of initial teacher education and early professional learning in England, organisational decisions about the importance of learning in the workplace and who was in charge of the learning process had a significant impact on the support available for the learner (Hobson 2009). As well as headteachers supporting the new teacher it also helps if there are 'supportive workers who take initiative and suggest learning and training opportunities' as they can support the management in the development of an expansive learning environment (Gustavsson 2009, p.255). These 'supportive workers' can be understood as people who are informally coaching or mentoring their colleagues.

To understand how those in leadership positions can support and lead professional learning the lens of social practice can be used with an emphasis on learning environments and learning practices. To explore the issues involved in supporting and leading informal learning this paper draws on research findings from several studies conducted by the author related to the professional learning of teachers, in particular new teachers.

New teacher professional learning

In a research study on the professional learning of new teachers in Scotland questionnaire respondents were more likely to rate 'discussions with colleagues' as one of their most useful experiences than 'having a mentor' and formal learning opportunities were rated as most useful by a very small number of respondents (Shanks, Robson and Gray 2012). Colleagues were rated as more important than the official mentor in terms of who to approach about everyday classroom practice of preparation, assessment and subject knowledge. This may be because school and centrally appointed mentors may not teach the same stage or subject as the new teacher they are mentoring.

In interviews with new teachers, participants referred to both the informal and formal learning they had undertaken. How they had been learning was noted as well as what they said they were learning. There were many informal ways that the new teachers were learning, such as peer work and peer assessments; observing and shadowing; chatting with other staff and sharing ideas; and visiting other schools (ibid). It is not possible to say how effective this learning was, but this was what the new teachers felt they were learning from. Many of the examples could be classified as informal coaching or mentoring. The teachers' formal learning activities included central mentor meetings, training events in school, a university Masters programme and local authority probationer (new teacher) days (ibid). For the interviewees, the most important learning activity appeared to be working with other teachers. This included talking with teachers to solve problems; being observed and receiving feedback; being part of an Assessment is for Learning group; observing other teachers; central mentor meetings with other new teachers; reflection; and 'getting on with it' (ibid). Four out of ten interviewed teachers said being observed by other teachers (not their official mentor) and receiving their feedback was one of the most, if not the most, useful learning activities for them. The other

with stage partners or talking to colleagues and studying for a Masters degree. While observations and feedback can be seen as a hybrid of formal and informal learning, the data highlights the preeminence of informal learning in terms of how new teachers understand their learning to become or improve as a teacher. Discussions with colleagues were mentioned by the interview participants in all of their interviews as well as in their official documentation to become a registered teacher.

Leading informal coaching and mentoring during Covid-19 lockdowns

In a more recent study, the impact of the Covid-19 pandemic on new teachers' professional learning was investigated (Carver and Shanks 2021). A surprising finding was how new teachers took on informal coaching and mentoring roles and became leaders in relation to new remote teaching practices. The table below shows how these findings developed over time during Covid-19 lockdowns. The new teachers discussed supporting their more experienced colleagues with online teaching and communications. They created videos for colleagues and pupils on how to use different tools and they enjoyed the novelty of being experts. These new teachers supported their colleagues as informal coaches and mentors. They moved from reacting to the lockdown situation to being proactive and supporting others.

Insert Table 1 here

Table 1 The aspects and phases of new teachers' reflexivity developed in response to the challenges of emergency remote teaching (adapted from Puentedura 2010 in Shanks and Carver 2021, p.10).

Answering the 'silly questions'

At work, when people want to know something, they will, without thinking, move towards certain people whom they believe have the capacity (and perhaps goodwill) to help them (Unwin and Fuller 2003). It takes time for new teachers to find out to whom they can go to for help and advice about different topics and who they should leave alone. In essence they are looking for the people who are willing to take on the role of being their informal coach or mentor. Being able to 'ask the silly questions', and to drop in whenever necessary was important for new teachers who were able to do this in their school and this practice was sorely missed by those who felt they could not (Shanks, Robson and Gray 2012). The acts of dropping in or being there have been developed into the concept of relational conditions (McNally, Boreham *et al.* 2004). This refers to the relationships between people in the workplace and to what extent they support each other. An important location for everyday learning at work is at 'the points of intersection between work and social spaces', therefore, it is necessary 'to abandon simplistic dichotomies between work, social and learning space' (Solomon, Boud *et al.* 2006, p.3).

The importance of workplace learning and the importance of informal feedback from those around new professionals in the workplace rather than their designated mentor have been documented (Eraut, Alderton *et al.* 2000, Eraut 2007). This was found to be the case in one of my own research studies with colleagues other than the mentor playing a pivotal role in the new teachers' learning (Shanks 2018). Learning takes place while people are busy carrying out their work duties (Billett 2002). For new teachers in particular casual, incidental learning is an inevitable part of their learning (McNally 2006). New teachers want opportunities to share concerns with colleagues or discuss teaching issues (Kelchtermans and Ballet 2002, Johnson and Birkeland 2003). It has been found that new teachers in supportive environments are more likely to ask for advice and also to overcome difficulties more effectively (Flores 2001).

This leads us to consider how we ensure that teachers, teachers in promoted posts and, in particular, headteachers understand the need for time and space for this informal coaching and mentoring to

happen. Teachers need to know they have colleagues they can turn to. By understanding the importance of this informal coaching and mentoring, it can be facilitated without formalising it and undoing its informality. Its essence and usefulness are to be found in its informality and 'incidentality'.

Conclusion

Informal learning can be seen as a continuous practice rather than a series of events (Hager and Hodkinson 2009). Interconnected issues of work, identity and learning appear to represent an underappreciated and neglected area for research, policy and practice (Billett and Somerville 2004). A greater understanding, firstly, of what makes and supports effective professional learning is needed and, secondly, an appreciation that a learning framework on its own will not necessarily improve professional learning, instead the inter-relationship of all the different elements involved is crucial (Livingston and Robertson 2001). It is important to focus on the learning of new teachers rather than their 'development' and to take a holistic rather than a fragmented approach to this field. Thus, there can be a move away from the continuing professional development of teachers to the concept and support for 'authentic professional learning' (Webster-Wright 2009, p.727).

Slowly, the concept of professional development, with its deficit overtones, has been replaced by the more positive term of professional learning, however this learning is still firmly rooted to time-limited, face-to-face or online events such as twilight talks, one-day workshops, conferences or short courses. It is taking a long time to make this informal turn and move towards the idea that professionals are constantly learning whether that is on purpose or not. This learning includes informal coaching and mentoring from peers and more senior colleagues.

How then, can we embrace, recognise and support informal coaching and mentoring? Firstly, we need to open up our understanding of what constitutes professional learning. This conception should include discussions with colleagues about difficult (or wonderful) incidents, discussions before and after observation of each other's practice when informal coaching and mentoring is taking place without the explicit intent to coach or mentor. It is informal rather than formal, when someone steps in to support a colleague rather than having been assigned a formal role.

There are problems in researching informal learning because it may not be planned, measured, talked about or even done consciously. There is difficulty in determining the source of learning when trying to pinpoint it (Evans 2018). Learning may be absorbed from others, either through informal discussions or more formal observations, from ideas at university, but a person's sense of developing as a teacher is often attributed simply to their personal experience of teaching classes, which is a kind of personal learning (Eraut 2004) or learning through doing (Eraut, Steadman *et al.* 2004).

In some teacher induction programmes the emphasis on appointed mentors does not recognise the reality that new teachers approach many people for support, for example, their subject colleagues, the teacher next door, the teacher who shares the same year group and so on. Often this is because their official mentor has too many other responsibilities, being a departmental head, depute headteacher or headteacher. If mentors are 'forced to fit mentoring in around the edges of full-time teaching, they lean toward "fixing" novices' problems rather than treating them as occasions for joint problem solving or shared inquiry' (Stanulis and Burrill 2004, p.15). Rather than leaving everything to the official mentor and the informal support of other colleagues, other support mechanisms for new teachers would be useful, especially for those teachers who are not supported in their schools by their colleagues. This could include formal structures to facilitate peer support, whole-school support and the creation of networks for teachers who work in smaller schools. To improve teacher induction, Higher Education Institutions and schools 'need to think less about rigid systems of bureaucratic accountability' and 'think more about self-organising networks of mutual co-operation which are geared pedagogically at producing rounded professionals' (Edwards and Mutton 2007, p.509).

One shortcoming that has been highlighted concerning Lave and Wenger's (1991) account of learning is that it does not consider the role of formal education institutions in a newcomer's learning process (Fuller and Unwin 2003). However, the reverse is true in terms of teacher induction with little recognition given to the informal learning that takes place (Shanks 2018). This informal learning is too important to be ignored by policymakers or excluded by researchers (McNally 2006).

The profile of workplace learning has greatly increased with policymakers, employers and trade unions placing renewed emphasis on workplace learning in the global economy (Senker and Hyman 2004). Researchers have come to see that the workplace is an important site for learning and research into learning (Webster-Wright 2009, Rogers 2014). However, relatively little is still known about workplace learning, in particular, the informal or non-formal learning that goes on in workplaces and more indepth research is required to open up the largely hidden world of workplace learning (Fuller and Unwin 2004, Evans 2018). This paper has called for this hidden world to have more attention paid to it so that new teachers can be supported in their transition into the teaching profession.

Further research is required concerning schools and other workplaces. For example, an investigation into different workplaces looking at the informal everyday learning that takes place when colleagues discuss work practices with each other. Such studies could compare different sites where similar work takes place to see which factors (if any) increase the level of informal learning and informal coaching and mentoring. These studies would provide evidence of what measures national bodies, local government, schools, headteachers, mentors and colleagues could adopt to help new teachers learn in the workplace and make a successful transition from student teacher to fully qualified teacher.

By creating space, expectations, and openness to this 'informal turn' in teacher professional learning, new teachers and other education professionals can be ready to accept the affordances for learning and attune to their learning environment in the workplace. A teaching workforce on the lookout to learn and who are ready and willing to informally coach and mentor is the sort of teaching profession that is needed to support new members in this lonely profession of teaching.

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References

Ashton, D.N. (2004). The impact of organisational structure and practices on learning in the workplace. *International Journal of Training and Development*, *8*(1), pp. 43-53.

Attard Tonna, M. and Shanks, R. (2017). The importance of environment for teacher professional learning in Malta and Scotland. *European Journal of Teacher Education*, 40(1), pp. 91-109.

Billett, S. (2002). Critiquing workplace learning discourses: Participation and continuity at work. *Studies in the Education of Adults, 34*(1), pp. 56-67.

Billett, S. and Somerville, M. (2004). Transformations at work: Identity and Learning. *Studies in Continuing Education*, *26*(2), pp. 309-326.

Boud, D. and Garrick, J. (eds) (1999). Understanding Learning at Work. Florence, Kentucky, USA: Routledge.

Boud, D., Rooney, D. and Solomon, N. (2009). Talking up learning at work: Cautionary tales in co-opting everyday learning. *International Journal of Lifelong Education, 28*(3), pp. 323-334.

Carver, M. and Shanks, R. (2021). New teachers' responses to COVID-19 in Scotland: doing surprisingly well?. *Journal of Education for Teaching*, *47*(1), pp. 118-120.

Draper, J. and O'Brien, J. (2006). *Induction: Fostering career development at all stages*. Edinburgh: Dunedin Academic Press.

Edwards, A. and Mutton, T. (2007). Looking forward: rethinking professional learning through partnership arrangements in Initial Teacher Education. *Oxford Review of Education, 33*(4), pp. 503-519.

Edwards, R. and Miller, K. (2007). Putting the context into learning. *Pedagogy, Culture & Society,* 15(3), pp. 263-274.

Eraut, M. (2007). Learning from other people in the workplace. *Oxford Review of Education, 33*(4), pp. 403-422.

Eraut, M. (2004). Informal learning in the workplace. *Studies in Continuing Education, 26*(2), pp. 247-273. <u>http://dx.doi.org/10.1080/158037042000225245</u>

Eraut, M. (2000). Non-formal learning and tacit knowledge in professional work. *British Journal of Educational Psychology*, *70*(1), pp. 113-136.

Eraut, M., Alderton, J., Cole, G. and Senker, P. (2000). Development of knowledge and skills at work. In: F. Coffield, ed, *Differing visions of a learning society, Research findings*. Bristol: The Policy Press, pp. 231-262.

Eraut, M., Steadman, S., Furner, J., Maillardet, F., Miller, C., Ali, A. and Blackman, C. (2004). Learning in the Professional Workplace: Relationships between Learning Factors and Contextual Factors, *American Educational Resarch Association Conference*, 12th to 16th April 2004, AERA.

Evans, L. (2019) Implicit and informal professional development: what it 'looks like', how it occurs, and why we need to research it, *Professional Development in Education*, 45(1), pp. 3-16, DOI: <u>10.1080/19415257.2018.1441172</u>

Felstead, A., Fuller, A., Unwin, L., Ashton, D., Butler, P. and Lee, T. (2005). Surveying the scene: learning metaphors, survey design and the workplace context. *Journal of Education and Work, 18*(4), pp. 359-383.

Felstead, A., Fuller, A., Unwin, L., Ashton, D., Butler, P., Lee, T. and Walters, S. (2004). *Applying the Survey Method to Learning at Work: A Recent UK Experience*. Learning as Work Research Paper, No.3. Leicester: Centre for Labour Market Studies, University of Leicester.

Flores, M.A. (2001). Person and Context in Becoming a New Teacher. *Journal of Education for Teaching*, 27(2), pp. 135-148.

Friedman, A. and Phillips, M. (2004). Continuing professional development: developing a vision. *Journal of Education and Work, 17*(3), pp. 361-376.

Fuller, A. and Unwin, L. (2003). Learning as Apprentices in the Contemporary UK Workplace: creating and managing expansive and restrictive participation. *Journal of Education and Work*, 16(4), pp. 407-426.

Gola, G. and McNally, J. (2008). *Informal learning in the professional workplace: new teachers and social workers*. University of Stirling.

Greenlee, B.J. and Dedeugd, I.S. (2002). From hope to despair: the need for beginning teacher advocacy. *Teacher Development, 6*(1), pp. 63-74.

Gustavsson, M. (2009). Facilitating expansive learning in a public sector organization. *Studies in Continuing Education*, *31*(3), pp. 245-259.

Hager, P. (2011). Theories of Workplace Learning. In: M. Malloch, L. Cairns, K. Evans and B.N. O'Connor, eds, *The SAGE Handbook of Workplace Learning*. London: SAGE, pp. 17-31.

Hager, P. (2004). The conceptualization and measurement of learning at work. In: H. Rainbird, A. Fuller and A. Munro, eds, *Workplace learning in context*. London: Routledge, pp. 242-258.

Hager, P. and Hodkinson, P. (2009). Moving beyond the metaphor of transfer of learning. *British Educational Research Journal*, *35*(4), pp. 619-638.

Hobson, A.J. (2009). On being bottom of the pecking order: beginner teachers' perceptions and experiences of support. *Teacher Development*, *13*(4), pp. 299-320.

Johnson, S.M. and Birkeland, S.E. (2003). Pursuing a "Sense of Success": New Teachers Explain Their Career Decisions. *American Educational Research Journal*, 40(3), pp. 581-617.

Kelchtermans, G. and Ballet, K. (2002). The micropolitics of teacher induction. A narrativebiographical study on teacher socialisation. *Teaching and Teacher Education*, *18*(1), pp. 105-120.

Kennedy, A., Mckay, J., Clinton, C., Fraser, C., Mckinney, S. and Welsh, M. (2008). *Early Professional Development in Scotland: Teachers in years 2-6.* Glasgow: University of Strathclyde.

Lave, J. and Wenger, E. (1991). *Situated learning: Legitimate peripheral participation.* New York: Cambridge University Press.

Livingston, K. and Robertson, J. (2001). The Coherent System and the Empowered Individual: continuing professional development for teachers in Scotland. *European Journal of Teacher Education*, 24(2), pp. 183-194.

Marsick, V.J. (ed.) (1987). Learning in the Workplace. Beckenham, Kent: Croom Helm.

Marsick, V.J. and Watkins, K. (1987). Approaches to Studying Learning in the Workplace. In: V.J. Marsick, ed, *Learning in the Workplace*. Beckenham, Kent: Croom Helm, pp. 171-198.

McNally, J. (2006). From informal learning to identity formation: a conceptual journey in early teacher development. *Scottish Educational Review, 37* (Special edition), pp. 79-89.

McNally, J., Boreham, N., Cope, P., Gray, P. and Stronach, I. (2004). Informal Learning in Early Teacher Development, *BERA Annual Conference 2004*, 16th to 18th September 2004, BERA.

Meirink, J.A., Meijer, P.C., Verloop, N. and Bergen, T.C.M. (2009). How do teachers learn in the workplace? An examination of teacher learning activities. *European Journal of Teacher Education*, *32*(3), pp. 209-224.

Pickerden, A. (2004). The extent to which informal learning is a neglected dimension of learning at work, *Conference of the ECLO*, May 2004, European Consortium for the Learning Organization.

Puentedura, R. (2010). SAMR and TPCK: Intro to advanced practice.

Rogers, A. (2014). *The base of the iceberg: Informal learning and its impact on formal and non-formal learning*. Verlag Barbara Budrich.

Sandholtz, J.H. (2002). Inservice training or professional development: contrasting opportunities in a school/university partnership. *Teaching and Teacher Education*, *18*(7), pp. 815-830.

Sangrà, A. & Wheeler, S. (2013). New Informal Ways of Learning: Or Are We Formalising the Informal? *Revista de Universidad y Sociedad del Conocimiento*, *10*(1), pp. 107-115. DOI: 10.7238/rusc.v10i1.1689

Schön, D.A. (1987). Educating the Reflective Practitioner. San Francisco: Josey-Bass.

Schön, D.A. (1983). *The Reflective Practitioner, How Professionals Think in Action*. Aldershot: Basic Books, Inc.

Senker, P. and Hyman, J. (2004). Editorial. *International Journal of Training and Development, 8*(1), pp. 3-7.

Shanks, R. (2018). Vital but neglected: The informal learning of new teachers in Scotland. In *Informal Learning at Work* (pp. 100-133). Routledge.

Shanks, R. (2017), "Mentoring beginning teachers: professional learning for mentees and mentors", *International Journal of Mentoring and Coaching in Education, 6*(3), pp. 158-163. <u>https://doi.org/10.1108/IJMCE-06-2017-0045</u>

Shanks, R. & Carver, M. (2021). *New teachers' responses to Covid-19: Building on initial teacher education for professional learning* (Education & Covid-19 series). British Educational Research Association. <u>https://www.bera.ac.uk/publication/new-teachers-responses-to-covid-19-building-on-initial-teacher-education-for-professional-learning</u>

Shanks, R., Robson, D. and Gray, D. (2012). New teachers' individual learning dispositions: a Scottish case study. *International Journal of Training and Development*, *16*(3), pp. 183-199.

Skule, S. (2004). Learning conditions at work: a framework to understand and assess informal learning in the workplace. *International Journal of Training and Development*, *8*(1), pp. 8-20.

Solomon, N., Boud, D. and Rooney, D. (2006). The in-between: exposing everyday learning at work. *International Journal of Lifelong Education*, 25(1), pp. 3-13.

Stanulis, R.N. and Burrill, G. (2004). Preparing Highly Qualified Teachers Who Keep Content and Context Central: The Michigan State University Induction Program, *AERA Meeting, San Diego*, 12th to 16th April 2004, AERA.

Turner, C., (2006). Informal learning and its relevance to the early professional development of teachers in secondary schools in England and Wales. *Journal of In-Service Education*, *32*(3), pp. 301-319.

Unwin, L. and Fuller, A. (2003). Learning as apprentices in the contemporary UK workplace: Creating and managing expansive and restrictive participation." *Journal of Education and Work*, 16(4), pp. 407-426, <u>https://doi.org/10.1080/1363908032000093012</u>

Warren, K.L.J. (1997). *An Investigation into the Induction of Newly Qualified Secondary School Teachers in the North-East of Scotland*. Master of Education edn. Aberdeen: University of Aberdeen.

Webster-Wright, A. (2009). Reframing Professional Development Through Understanding Authentic Professional Learning. *Review of Educational Research, 79*(2), pp. 702-739.