



Professional Learning and the Role of the Coach in the new Masters in Teaching and Learning Masters in Teaching and Learning (LTL); Technical Report

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Contents

Introduction.....	2
Professional Learning in the MTL Context	3
Research background	3
Some working definitions.....	3
Work-based and other types of professional learning.....	4
Progression in professional learning and development.....	5
Professional learners and their identity, dispositions, commitment to learning and growing independence.....	7
Characteristics of professional learning: what do professional learners do?	7
Context for work based professional learning	9
Principles for acting as a confident professional learner	10
<i>Effective professional learners:</i>	10
Coaching for MTL: Updating the evidence since the publication of the National Framework.....	11
A synopsis of the evidence behind the framework.....	11
Updating the evidence on coaching.....	12
Supplementary Evidence for MTL from large scale systematic reviews	13
Snapshot of the work of the national agencies.....	16
Principles for Coaching in the context of MTL	17
Core principles for coaching reviewed for MTL context	18
<i>Effective mentoring and coaching involves:</i>	18
Additional principles for coaching on the context of MTL.....	20
<i>Effective coaching for professional learning involves:</i>	20
Making effective connections with the workplace	20
Bibliography.....	21

Introduction

The *Children's Plan* (2007) and *Being the best for our children* (2008) announced the UK government's ambition to build on teachers' talents and recognise their skills by making teaching a masters level profession. The TDA has begun to develop the new Masters in Teaching and Learning (MTL) programme to realise the ambition of raising the status of the teaching profession and improve the quality of education for children and young people.

Based on the national and international research, including the McKinsey report (2007), TDA identified four core principles for quality teacher development (Day, 2008), which are particularly relevant to for MTL:

- creating the learning mindset among teaching professionals;
- providing contextual coaching;
- promoting a collaborative profession; and
- providing a framework of competencies.

Published in 2007, the McKinsey report highlighted the placement of coaches in schools to support teachers as one key factor in improving teaching and learning. McKinsey further specified that individual teachers needed to become aware of their specific development needs, to gain understanding of effective practices through the demonstration of these in authentic settings (e.g. school classrooms) and to be motivated to make improvements in their practice. In addition, early consultations recommended MTL include within its scope teachers developing collaborative working practices both in and beyond the classroom, working with wider children's workforce, parents and carers. In the same year as the McKinsey report, new large scale and systematic reviews of research (Cordingley *et al*, 2007; Timperley, 2007) both reported in some depth on the processes involved in supporting professional learning in contexts where there was evidence of the positive impact of such learning on student achievement. Research into teacher development from initial training through the first two years of practice has also emphasised the importance of helping teachers develop productive orientations to professional learning and of building the support structures around them which promote professional learning and development (Burn *et al*, 2008).

TDA's proposals for the coaching elements of the MTL have drawn on the research base behind the National Framework for Mentoring and Coaching (2004-2005) and are being developed alongside a range of consultative and evidence collection processes. CUREE was asked to undertake two evidence trails in support of the development of a specification for the coaching element of MTL. The first task was to identify evidence about the nature of professional learning and of effective support for it. Building on this, the next task was to update the research base behind the National Framework and from these two bases, to identify core principles for the work of the school based coaches in supporting advanced professional learning in the context of MTL. The overarching purpose of the evidence trails was to ensure that the specifications for the skills and role of the coaches involved in delivering the MTL were up to date and were organised around evidence about the nature of professional learning.

This paper summarises the evidence trails and offers an exploration of the results. From this platform, it also sets out recommendations regarding the principles for professional learning and for coaching within MTL.

Professional Learning in the MTL Context

Research background

A review of the literature on the nature of professional learning that was relevant to the MTL goals and givens was conducted to explore the implications of the evidence for the development of coaching and professional learning within the MTL programme. As a starting point we noted that the majority of research papers fell into one of three categories. The first category defined professional learning as synonymous with professional development. The second focused on what others do to professional learners and/or the conditions in which professional learning flourishes. The third, rather smaller, group explored the types of learning activities, the dispositions and the skills of professional learners. The purpose of this section of the paper is to synthesise across this literature in order to explore the key dimensions of professional learning.

Some working definitions

Teachers' professional learning is focused on and determined by their teaching practice and experience. In 1984 Buchmann highlighted that professional learning was concerned with the development of 'knowledge for action'. Referring to the development of the professional knowledge Eraut (1994) pointed out that it was mainly "constructed through experience and its nature depends on the cumulative acquisition, selection and interpretation of that experience".

More recently Timperley's (2007) best evidence synthesis defined professional learning by contrasting it with professional development. *Professional development* refers to "those processes and activities designed to enhance the professional knowledge, skills, and attitudes of educators so that they might, in turn, improve the learning of students", ... whereas *professional learning* implies an internal process through which individuals create professional knowledge; an umbrella term under which professional development of the 'delivery' kind is just one part.

Mutton *et al* (in press) further emphasise the role of experience in professional learning: "experience is vital since it is in the processes of planning, teaching and evaluation that all the other sources of knowledge on which one might draw come together in action and acquire meaning". Whilst the GTC professional learning framework (2003) defines professional learning as a "wide range of learning experiences, deepening and revitalising teachers' skills, abilities, values and knowledge".

For the purposes of developing the Masters in Teaching and Learning we have therefore defined teachers' professional learning as the process of developing knowledge, actions, skills, abilities and values that is embedded in teachers' practice and experience and aimed primarily at developing and improving children and young people's learning.

Professional learning is the process of teachers developing their own knowledge, actions, skills, abilities and values. Professional learning is embedded in teachers' practice and aims at improving teaching and learning for children and young people.

Other important issues relating to professional learning, that have emerged from research literature in the context of coaching for the MTL and which will be explored below, include:

- understanding the needs of professional learners in the context of the day to day concerns and aspirations of practitioners, the organisations they work in and the importance of the learning environment or context in which work based professional learning is set;

- the importance of creating opportunities for drawing on a wide range of sources of knowledge to develop the understanding of the thinking that underpins new practice;
- conceiving progression in different ways and as an iterative rather than a linear process;
- the importance of focusing on the identity of professional learners and their dispositions towards and commitment to learning and growing independence and the interaction between these factors and the powerful feelings linked with professional learning and changing identities; and
- the skills, behaviours and affective strategies that confident professional learners deploy to take increasing control of their own learning through dialogue and working with others.

Work-based and other types of professional learning

Introduction of a structured masters-level early professional development programme (MTL) is part of a strategy to maintain the momentum of professional learning and development once teachers become fully qualified. The programme delivery is expected to be predominantly practice based to benefit from teachers' work-based learning, which, as Eraut (2000b) pointed out, "arises naturally out of demands and challenges of work-solving problems, improving quality and/or productivity, or coping with change – and out of social interactions in the workplace". Learning at the workplace involves a combination of "thinking, trying things out and talking to other people" (Eraut, 2000b). Teacher professional learning, being a form of adult learning (Wald and Castleberry, 2000), occurs over time, is reflective and experimental by nature and fuelled by various sources of information, accessible to the learner, and is driven by learner around meaningful issues.

Eraut (2000a) distinguished between *formal* and *non-formal learning*. He suggested that learning becomes formal if any of the following aspects are present in the learning situation:

- 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
- the external specification of outcomes.

Formal learning can be appropriate in many contexts and its outcomes are not necessarily limited to propositional knowledge as the latter could just as well be an outcome of non-formal learning (Eraut, 2000a). Non-formal learning refers to any kind of learning that "does not take place within, or follow from, a formally organised learning programme or event" (Eraut, 2000a). Eraut (2000a) further proposes a typology of non-formal learning, including *implicit* learning, *reactive* learning and *deliberative* learning. Recently, Hodkinson (2008) argued that there was no clear difference between formal and informal learning. Hodkinson, like Eraut, points to the complexity and multi layered nature of professional learning. Based on previous research into formal and informal workplace learning, Tynjala (2008) proposed the following typology of professional learning:

- "incidental and informal learning, which takes place as a side effect of work;
- intentional, but non-formal learning activities related to work (mentoring, intentional practising of certain skills or tools, for example); and
- formal on-the-job and off-the job training" (Tynjala, 2008).

Lave and Wenger's (1991) study gave impetus to a number of models and theories of *workplace learning*. Their work challenged the prevailing orthodoxy which linked adult learning to participation in formal education or training.

Based on the ethnographic studies of how people learn at work, Lave and Wenger (1991) proposed two inter-related concepts *legitimate peripheral participation* and *communities of practice*, which allowed them to explain how novices progress to full participant status. Their vision of learning as a “collective and relational process involving the co-participation of newcomers with more experienced others” (Fuller, 2006) became a foundation for theories of apprenticeship and learning in non-specialist educational settings.

Recent research into learning at work suggests that it “should not be seen as an inferior or limited form of participation” (Fuller, 2006). Situated, work-based experience is an important part of learning and, in particular, skills formation; but the opportunities and challenges of crossing the boundaries between the workplace and other sites for learning and sources of knowledge and expertise (e.g. HEIs in the case of teacher learning) can provide a broader range of learning opportunities and stimuli for learning (Fuller, 2006; Eraut, 2000a). Young (2004) further argues that not all knowledge can be viewed as situated or context-specific. Some kinds of knowledge or models of understanding set out to offer more generic support to practitioners. For example Fuller (2006) proposed to provide access for professional learners “to theories and concepts which go beyond the immediate, ‘know how’ required to perform tasks in particular workplaces”, thus integrating workplace learning with learning from other sources.

A different aspect of crossing the boundaries between different sites of learning was highlighted by Wallace (1998), who warned about “the myth of automatic transfer: the assumption underlying many so-called ‘experiential’ courses in professional learning that simulations are valid ways of conveying skills and that what is developed and practiced in the simulation context will, or should, naturally transfer back to the real life professional setting without much or any additional attention to learning”. Joyce and Showers (1988) found that theoretical input should be accompanied by demonstration, opportunities to try out new knowledge/theory in practice, getting feedback and being supported by coaching to make the biggest impact on improving teachers’ performance. Cordingley *et al* (2007) also found that effective teacher learning and development comprised both the introduction of new knowledge and skills by specialists and a range of measures for supporting and embedding their use – including coaching, collaboration, modelling and experimentation.

Far from being ‘inferior’ or ‘limited,’ workplace learning provides rich opportunities for increasing knowledge and skills which are relevant for teachers’ context and make an impact both on practice and on pupil outcomes. To be most effective, professional learning needs to be a synthesis of workplace learning (context-specific) and learning from other sources (relatively context-free theories and concepts). Workplace learning requires support via for example coaching.

Progression in professional learning and development

Models for progression have been formulated based on research evidence, but as the existence of a variety of models suggests, the evidence is open to interpretation. Progression has been conceived of in different ways, and recent research sounds a note of caution about regarding progression as a linear process.

The various models of progression in the literature help illustrate its dimensions based on, for example:

- Levels of competencies as a practitioner
- The depth of analysis/problematisation
- The breadth of the spheres of attention/focus

Eraut (2000) proposed the Dreyfus and Dreyfus (1980) five-stage model of skill acquisition as an appropriate lens through which to discern progression in teacher development.

- *Novice* – rigid adherence to taught rules/plans, discretion or perception of the context
- *Advanced beginner* – guidelines for action based on attributes or global characteristics of situations recognisable only after prior experience
- *Competent* – coping with crowdedness, sees actions at least particularly in terms of long term goals, conscious
- *Proficient* – sees situation holistically, sees what is most important in a situation, sees deviations from normal patterns, decision making more fluid, uses maxims for guidance when meaning varies from context
- *Expert* – no longer relies on rules, guidelines or maxim, intuitive grasp of situations based on deep tacit understanding; analytical approaches used only in novel situations and to justify conclusions, visions of what’s possible

A more elaborate model of development comprising two ‘sectors’ – teacher performance and pupil performance – was devised by Hargreaves (1993). Each sector consisted of five segments closely related to their counterpart in the other sector.

teacher performance sector	pupil performance sector
i classroom management	i pupil behaviour and conformity
ii pedagogy	ii pupils’ ability and motivation
iii continuity and coherence	iii pupil progression
iv school structure and cultures	iv social context of pupils
v the school in the context of the education system	v wider social, economic and political environment

Hargreaves proposed there was progression within as well as between segments – the trainee entering the first segments as a novice developing to an advanced level, before entering further segments at the novice stage.

Recent research on the development of teachers from their initial training through their first two years of practice has shed light on the more complex, and potentially non-linear nature of progression (Burn *et al*, 2008). While some common progressive patterns were identified, such as teachers increasingly planning for flexibility as they realise the difficulty and sometimes undesirability of sticking rigidly to lesson plans, other aspects of professional learning remained a constant focus over the three years. Management of lessons and behaviour management remained a focus for learning for the majority of teachers over the time of the research. The authors concluded that their data did not support the model suggested by Kagan of beginning teachers first resolving the issue of classroom management before moving on to focus on other aspects of student learning, and that progression should be understood as a much more iterative process.

Progression in the context of MTL could helpfully be viewed as an iterative, non-linear process involving teachers mastering the practicalities of teaching and learning as well as increasing their reflective skills, and control over their learning and commitment to it.

Professional learners and their identity, dispositions, commitment to learning and growing independence

One of the givens for the development of MTL is that professional learners should take an active role in their own learning and that progression through MTL should be negotiated by a partnership between professional learners, their coaches and their HE tutors. Teachers' growing responsibility and ability to control their own learning is important in building "the learning mindset" and developing teacher performance in the long term. Zeichner argued that without teachers taking control over their development and becoming committed to their learning "...it is miseducative, no matter how successful the teacher might be in the short run" (Zeichner, 1996).

Teachers' dispositions and commitment to continued learning are emphasised as factors to be taken into account in planning for professional learning by both Hodkinson and Hodkinson (2005) and Burn *et al* (2008). Amongst the factors that could have an impact on teachers' commitment to learning, Day *et al* (2006) pointed out *personal factors* (values, beliefs, life events and circumstances and thus feelings), *situated factors* (school leadership, culture, colleagues, working conditions and pupils) and *professional factors* (roles, CPD, external policies).

Exploring the issue of student teachers' capacity to continue learning in new contexts, Hagger *et al* (2008) found that student teachers' orientations towards risk and their aspirations played an important role in sustaining learning. Student teachers whose aspirations for their pupils were limited and who assumed that their practice and skills would automatically flow from increased experience, tended to "plateau". Hagger *et al* (2008) suggested that encouraging new teachers to experiment in their own teaching and to take risks could counteract this and "build secure foundations for their life long learning and professional development" as well as help them become competent classroom practitioners. Experimenting, taking risks and making decisions in the classroom are inevitably connected with teachers' feelings and emotions, which need to be considered and taken in to account along with their knowledge and behaviour when discussing issues of teacher competence and its development (Leat, 1993).

Commitment to professional learning and taking control over it are at the core of MTL programme as important factors of teacher progression both in their practice and their learning. Teachers' identities and dispositions have an impact on their learning and commitment to it as does the culture of the organisation which in effect creates the learning environment for work based professional learning. Encouraging teachers to experiment and take appropriate risks helps them progress in their learning and practice.

Characteristics of professional learning: what do professional learners do?

There is a growing body of evidence about the skills, behaviours and characteristics of professional learning.

The National Framework for Mentoring and Coaching identified five core skills for professional learners:

- *understanding their own learning needs and goals;*
- *observing, analysing and reflecting upon their own and the coach's practice;*
- *discussing practice and core concepts professionally with a coach;*
- *thinking and acting honestly on developing skills; and*
- *responding proactively to specialist expertise to acquire and adapt new knowledge.*

Subsequent research and development work (CUREE, 2007) has unpacked these outline skills to illustrate what they look like in context suggesting that professional learners:

- *understand their own learning needs and goals* through building awareness of internalised knowledge, skills and beliefs, identifying appropriate goals and steps towards them and using the support of their coach to do so;
- *observe, analyse and reflect upon their own and the coach's practice* which involves observing practice directly and/or via recordings, securing evidence of and feedback on their practice and their students' learning, reflecting on and analysing available evidence, and identifying specific learning goals for observing others, etc;
- *discuss practice and core concepts professionally with a coach* through making previous practice explicit and reflecting on it, revealing and exploring anxieties to enrich reflection; by giving themselves time to develop responses, anticipating possible outcomes of their plans for development, seeking out searching questions and being alert to helpful intentions behind even poorly framed questions;
- *think and act honestly on developing skills and understanding* by, for example broadening self-awareness through questioning their beliefs and assumptions with the coach, making use of praise and criticism and managing their feelings constructively, agreeing a formative review process to refine goals; and
- *respond proactively to specialist expertise to acquire and adapt new knowledge* through being curious about expertise, experimenting with modelled behaviours in their own context, comparing their own and modelled expertise.

Reflecting on evidence from teaching and learning practice and theory, analysing and evaluating it is supported as an important source of and goal for professional learning by many researchers. Day (1993) and more recently Leat (2008), Lofthouse (2008), emphasise how working with colleagues, coaches and mentors, and using various tools, particularly video, can ensure the quality of professional learning and provide opportunities to develop educational theory rooted in practice. Eraut (2001) stressed the importance of developing self-awareness through collecting evidence from others on the effects of their actions as a requirement for effective professional learning. The four systematic reviews of research about the effectiveness of CPD (Cordingley *et al* 2003, 2005, 2007) have also found that reflective practice that is not coupled with experimentation is not linked with positive effects for pupils.

There is robust evidence that collaboration is a powerful tool in promoting, sustaining and supporting professional learning. A systematic review on the impacts of collaboration (Cordingley *et al*, 2003) found

that in all but one of the 15 studies on which findings were based, the teacher collaboration was linked with improvements in both teaching and learning; many of these improvements were substantial. The efficacy for professional learning of discussing and exploring beliefs, values, vision and practice is supported by much recent research (e.g. Bolam 2005; Hord 2008). A review of the evidence about the impact of networking (Bell *et al*, 2006) found that peer collaboration was widely used to support the transfer of knowledge and practice, while expert contribution “ranged from training to strategic advice and facilitation”. The Children’s Plan (2007) featured collaboration at all levels as one of the factors for improving the quality of teaching and learning, stating the need to “develop a diverse system in which institutions work together, learn from each other and thereby drive up the quality across the board”.

Cordingley *et al*, (2007) and Timperley (2007) found that specialist input can be considered an important source of teacher learning. Specialists help teacher learners engage with the relevant theoretical and practical knowledge base and support them in a number of ways, most importantly by modeling, workshops, observation and feedback, etc.

Analysing and critically reflecting on the evidence and practice, collaborating with others, including specialists, are important characteristics of teacher professional learning.

Context for work based professional learning

Understandably, given that it is easier to observe and research, there is rather more evidence about the support that is needed for professional learning and about the environments in which it flourishes than about the learning process itself.

Professional learning communities (PLCs) are seen by many researchers and practitioners as the ideal context for teacher learning. The *Effective Professional Learning Communities* project, led by Louise Stoll and funded by DfES, NCSL and GTC, published a research report in 2005 (Bolam *et al*, 2005) showing that PLCs can make a difference both to teacher and student learning. Subsequently a range of materials and tools has been created to promote the development of PLCs in the UK.

DuFour (2004) provides a useful summary of the functions of professional learning communities as “groups of educators, administrators, community members and other stakeholders who:

- collectively, systemically... identify and solve problems as they emerge;
- create places of action and experimentation; and
- are willing to test ideas that do seem to hold potential for improving student achievement”.

Professional learning in PLCs is more often collective than individual (Bolam, 2005) and involves reflective enquiry, dialogues about reflection and various other kinds of collaboration. Keay and Lloyd (2007) see as an additional benefit the potential for self-regulatory quality assurance of professional learning and development in professional learning communities.

Hodkinson and Hodkinson (2005) suggest three dimensions which influence the professional learning of secondary school teachers, namely their *dispositions*, school (department) *cultures* and *management and frameworks*. Two of these are contextual: “the practices and cultures of the subject departments; and the management and regulatory frameworks, at school and national policy levels”. The evidence exploring the impact of frameworks and standards on professional learning is at present rather limited

but it is possible to conclude that how the frameworks, e.g. performance management, are used and interpreted sets the context for and influences professional learning and may have the effect of increasing or decreasing PLs' sense of agency, self-regulation and accountability.

A major systematic review (Robinson, 2007) of the types of school leadership which improved student learning outcomes found that the most effective leaders both promoted and participated in professional learning themselves. They optimised resources and structures; and evaluated and sustained professional learning within the school.

The positive environment of professional learning communities and other networks of collaborating professionals encourages and supports teacher learning. The school leaders support professional learning best when they both promote and participate in it themselves.

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wing section, we have tried to encapsulate the evidence summarised here in a series of draft principles for professional learning within (and possibly beyond) the MTL context. Each of the four proposed principles is fleshed out through a series of practical examples.

Principles for acting as a confident professional learner

In the light of the evidence set out above, we have identified four draft principles for acting as confident and proactive professional learners in education settings. Following refinement in the light of consultation, we believe it will be helpful to map them onto a graphic illustrating the underpinning learning cycle. Once the principles are settled we would also expect to set them in the context of another illustrative heuristic illustrating the links between the internal process for the individual, collaborative experiences which act as a scaffold and catalyst for such internal learning and the organisational and cultural context in which it is situated.

Effective professional learners:

Collaborate with others - make their beliefs and values, their knowledge and practice and their plans and ideas explicit and available for shared scrutiny and development. For example they will:

- take part in structured dialogue, rooted in evidence from their practice, which articulates existing beliefs and practices enabling PLs to reflect on them;
- build professional and thoughtful relationship with their coach, their tutor and with other colleagues in order to grow the trust they need to think and act honestly as they develop their knowledge and skills; and
- seek out opportunities to observe and work with experts, specialists and other professional learners to extend their knowledge and skills and embed new learning and practice.

Take and manage risks - explore the costs and benefits of changes to practice and make informed judgements before taking action. For example they will:

- suggest and uphold ground rules that address in power and accountability in their relationships;
- seek out learning environments that encourage risk-taking and innovation and where they can experiment to gather evidence from practice; and
- understand and articulate how their learning will contribute to improved learning outcomes for children and young people in their context.

Grow in independence - take increasing responsibility for their own learning and reflection. For example they will:

- develop their understanding of a range of theory that underpins and explains new practice so they can adapt and interpret it for different contexts;
- find and use time and other resources to protect and sustain their learning on a day-to-day basis; and
- take increasing control over their learning as their knowledge, skills and self-awareness grow.

Critically analyse and evaluate evidence – collect and analyse evidence of and feedback on their practice and their students' learning. For example they will:

- identify aspirational goals for themselves and their students that build on existing knowledge and skills and align with relevant evaluation frameworks in their context;
- draw on a wide range of sources of knowledge and evidence, including research and scholarship;
- use evidence based models and protocols to reflect on their own context and thinking and provide a range of possible explanations for the outcomes of developing practice; and
- use successes and mistakes, planned and unplanned events and formal and informal meetings for gathering evidence for their learning.

Coaching for MTL: Updating the evidence since the publication of the National Framework

In 2005 the National Framework for Coaching and Mentoring was published by the then Department for Education and Skills (DfES), following a year long period of consultation, development and research by the Centre for the use of Research and Evidence in Education (CUREE). The framework had been commissioned by the then DfES to build upon the outcomes of three large scale systematic reviews of the impact of CPD on students and on their teachers (Cordingley *et al*, 2003; 2005; 2005) and to contextualise the outcomes of these reviews in the context of coaching and mentoring practice in England.

A synopsis of the evidence behind the framework

The National Framework arose principally from the evidence from three reviews of the research about the impact of collaborative and individually oriented CPD on teachers and teaching and on student learning and achievement. They encompassed a systematic procedure which collectively involved scanning 4000+ titles and abstracts, retrieving 300 + full studies and conducting 45+ data extractions before using a methodological weighting system to carry out three syntheses of the evidence. There was consistency across the reviews in relation to a number of positive links between collaborative, sustained CPD and teachers':

- self confidence e.g. in taking risks;
- self efficacy – their belief in their ability to make a difference;
- willingness to continue professional learning;
- willingness and ability to make changes to practice;
- deeper knowledge and understanding of subject and pedagogy; and

- wider repertoire of strategies and ability to match to needs.

There were also positive links with pupils’:

- motivation to learn;
- performance e.g. test results, specific skills e.g. maths and literacy, decoding, reading, problem solving;
- responses to specific subjects & curricula;
- organisation of work;
- use of collaboration as a learning strategy;
- questioning skills and responses; and
- skills in selecting and using wider range of learning activities.

Although the Framework was built from the foundations of the evidence from these reviews, the research work of informed commentators, including Adey (2002) and Joyce and Showers (2003), was also brought to bear as were the lessons from the evaluations of national programmes DfES (2004), Primary National Strategy: Intensifying support programme (2004), and Earl *et al*’s evaluation of the National Literacy and Numeracy Strategies (2003). The experiences and development work of a number of national agencies in England (GTC, Becta, NCSL, TDA, SSAT, DfES amongst them) were also investigated collaboratively with key representatives. All of these agencies subsequently adopted the principles outlined in the Framework.

Updating the evidence on coaching

The important role that coaching plays in supporting the achievement of diverse improvement goals has been underlined by a recent evaluation of the Collaborative Coaching and Learning Model in Boston (Cavan, 2008). The study found “clear evidence that the CCL policy direction adopted by BPS [Boston public schools] is effective in terms of a positive influence on student achievement, staff development, development and retention”. The evaluation found a number of cultural and organisational issues – such as the relationship of the coach with SMT, recruiting the right people etc which are relevant to the design and development of the coaching element of the MTL programme.

In the research context, in addition to the Cordingley *et al* (2007) and Timperley (2007) reviews, we have also taken account of a range of other new evidence relating to the tracking of the professional learning of new entrants to the professions, the leadership of effective professional learning contexts and the detailed process involved in taking learning about teaching to masters level. For example, Burn, Mutton and Hagger’s work (2008) found “relatively few issues that were of concern to the beginning teachers in their PGCE and/or induction years and had effectively been resolved and put behind them by their second year in teaching”. Day *et al* (2006), Ofsted (2006), Bolam and Weindling (2006) all highlighted leadership (*inter alia*) as a critical factor in effective professional development, highlighting the importance of the role of the coach in connecting appropriately with other in-school perspectives and priorities. Leat *et al* (2008) extended and deepened the evidence around coaching conversations by constructing reviewing tools and an analytic framework for reviewing coaching sessions and thus

enhancing coaching skills while Lofthouse and Wright's (2008) paper has brought fresh insights into supporting observations.

CUREE's ongoing research and development work has also enhanced our knowledge of the skills teachers need to make good use of coaching opportunities, (CUREE, 2007) and extended CUREE's original work (2004) on the benefits for the coaches themselves in learning and practising coaching skills. This point was confirmed by participants at the national seminar who had experienced at first hand the power of learning for the coaches facilitating national programmes. A review of the leadership of CPD in networks (Cordingley and Temperley, 2006) has emphasised the importance of networks in securing access to specialists for CPD. Like Leat, Fogelman *et al* (2006) offer a reflective framework for teachers working collaboratively or with specialists to create new approaches, understandings and resources. They also elaborated on the processes necessary for effective coaching and noted that coaches facilitate collaborative construction of understanding, support enactment of new practice in classrooms, reflection on practice and adaptations of materials and practices. Research published by GTC on strategic CPD in schools (2007) concluded, *inter alia*, that strategic approaches to CPD involved aligning school, departmental and individual staff priorities and setting them in the context of national and local priorities and resources. It also highlighted the importance of locating the leadership of CPD at senior management level and using a mix of specialist expertise and collaborative coaching. Alongside this Bolam and Weindling's meta-analysis of CPD research for GTC (2006) found mentoring and coaching to be a key component of effective CPD, together with promoting participation in award-bearing courses.

One particular challenge has been the need to secure evidence relating to the context of MTL – a three year programme which can be pursued over the first 5 years of teaching. What do we know about how CPD needs to evolve in these early years of practice? Burn *et al* (2008) make the point that more does not necessarily mean better in their discussion of taking teacher learning through to the next year of teaching: "Teachers will not become more effective in their second year of teaching simply because they are gaining more experience than ever before. Of crucial importance is **the way in which they approach that experience**: the extent to which they see it as – or indeed plan for it to serve as – a learning opportunity; the extent to which they aspire to improve on it; and the range of sources, beyond as well as within their own classrooms, that they use to inform, interpret and respond to it". A key implication for MTL here is that although these factors are significantly affected by the standard operating procedures and culture of the school in which they are working, they are not necessarily determined by them. With a positive learning mind set, work based professional learning can flourish even in a relatively arid professional learning community.

Supplementary Evidence for MTL from large scale systematic reviews

Last year saw the publication of the fourth systematic review into CPD linked to positive student outcomes (Cordingley *et al*, 2007). This was timely in the light of the MTL proposals as the review focused explicitly on the nature of the expert or specialist contribution to teacher learning and the evidence was consistent with current practice in advanced professional learning in relation to HEI academic input into teacher CPD. The review identified three main areas of specialist support to initiate and embed change so that it benefits pupils as well as teachers:

- specialist knowledge of a particular subject area and/or effective pedagogical approaches;
- specialist knowledge and skills in framing, initiating and sustaining the CPD process; and

- an understanding of the dynamics, challenges and facilitators of professional learning in practical ways within the fast paced dynamics of day to day school life.

The studies from which the evidence was drawn were all set within the context of CPD processes which might well be described as a mix of (mostly in-school) specialist coaching supplemented by in-school peer and co-coaching.

The key finding in relation to the role of specialists was that they both introduced new knowledge and/or skill *and* they employed a repertoire of support mechanisms to help embed learning and bring about changes in teachers' practice. From the instruction element teachers gained new knowledge, skills and understanding. They learned more about their subject. They learned how to learn about teaching and learning and hence to widen their approaches to teaching. Coaching techniques and strategies for supporting teachers' learning were present at many stages and in different contexts. They included the use of modelling, workshops, observation and feedback – plus strategies for supporting peer working, usually in the teachers' own schools and classrooms. These featured, in particular, as important strategies for motivating teachers in making changes and building ownership. The reviews highlighted the following strategies used by professionals in coaching contexts (whether or not that is what they were labelled) for supporting teacher learning:

- support for engaging with underpinning rationale;
- activities that structure and sustain discussion about experiments with new approaches;
- an environment for exploring and refining beliefs in light of evidence;
- a mix of content, process, theoretical, practical and evaluative skills;
- an ability to tailor processes and the rhythm of development and learning activities to the school working patterns;
- scaffolding growing independence;
- encouraging, enabling and structuring peer support;
- focusing professional learning through the lens of needs of specific pupils;
- building skills in evaluating impact; and
- enabling alignment with other priorities.

Timperley's (2007) systematic review identified seven elements as important for promoting professional learning in ways that impacted positively and substantively on a range of student outcomes:

- providing sufficient time for extended opportunities to learn and using the time effectively;
- engaging external expertise;
- focusing on engaging teachers in the learning process rather than being concerned about whether they volunteered or not;
- challenging problematic discourses;
- providing opportunities to interact in a community of professionals;

- ensuring content was consistent with wider policy trends; and
- in school-based initiatives, having leaders actively leading the professional learning opportunities.

She found that ‘experts’ need more than knowledge of the content of changes in teaching practice that might make a difference to students; they also need to know how to make the content meaningful to teachers and manageable within the context of teaching practice. Of particular relevance for MTL coaching purposes, the review found that external experts who expected teachers to implement their preferred practices were typically less effective than those who worked with teachers in more iterative ways, involving them in discussion and the development of meaning for their classroom contexts.

“Expecting teachers to act as technicians and to implement a set of ‘behaviours’ belies the complexity of teaching, the embeddedness of individual acts of teaching, and the need to be responsive to the learning needs of students”. Effective support for CPD participants involved support in processing new understandings and their implications for teaching. Sometimes this involved “challenging problematic beliefs and testing the efficacy of competing ideas”.

Timperley’s work also draws attention to the importance of challenging prevailing discourses: usually based on assumptions that some groups of students could not learn as well as others and/or emphasising limited curriculum goals. “The challenge to discourses typically involved iterative cycles of thinking about alternatives and becoming aware of learning gains made as a result of changed teaching approaches”.

Leadership was a strong feature of the Timperley review findings. It is clear from the literature that coaches will need to have strong school support. Bolam and Weindling (2006) identify the key role of heads and senior staff in promoting and supporting CPD. Ofsted (2006) found that resource allocation, performance management, balancing between national and school priorities and treating workforce development as CPD should be integrally planned. CPD should have clearly specified outcomes, based on student learning and assessment mechanisms and schools should recognise the need for specialist subject contributions. The provision of coaches and mentors and tailoring development to the best possible sources (including in-school training) were all highlighted in the report. Ofsted also found wide variation in the way schools on their own use mentoring and coaching and that insufficient use is made of coaching and mentoring as a form of CPD. Robinson’s (2008) extensive systematic review of the type of school leadership which had the most impact on student outcomes found unequivocally that leadership involvement in both leading and participating in professional development, thus modelling professional learning, had the most statistically significant impact. It is this clear from the interaction that MTL coaches will have an important role in connecting the professional learning of participants with school and CPD leadership more generally – and that the more positive the leadership of CPD, the easier that role will be.

What is clear from the most recent research evidence is that the TDA’s specified ‘givens’ in relation to the design and delivery of the MTL are consistent with the evidence. The givens are that the MTL will be practice-based and:

- modular, progressively building on ITT and induction to develop higher levels of professional skills;
- focused on developing practice through enquiry and the use of evidence;
- personalised to meet participants’ learning needs;
- validated by HEIs;

- primarily school-based;
- jointly delivered by HEIs and schools;
- by trained coaches and tutors provided for all participants; and
- through participants undertaking some study in their own time.

Snapshot of the work of the national agencies

As we found during the research and development work prior to building the original National Framework, practice on the ground is sometimes ahead of or at least progressing in a different direction to the research. The time lag – sometimes years – between actual field work and the publication of reports and journal articles is considerable. We therefore wanted to ensure that MTL development was grounded in both the practices and the delivery experiences of some of the key national stakeholders for MTL. To this end we carried out a mini enquiry with two key officers of all of the national agencies that set out to make explicit use of coaching as a development tool. We also explored professional learning and coaching practice in two other professions: the army and medical supervision. The evidence gathering process was designed to be useful at the point of data collection in developing shared understanding and commitment to MTL. It comprised short, semi structured interviews complemented by an iterative process of summarising the different key approaches to coaching. Many of the national agencies have been using approaches to coaching in their work with teachers and have valuable insights to offer on successes and challenges.

The data collection culminated in a national symposium, intended to help build a shared picture of what is already happening in terms of advanced work-based professional development and learning across education agencies. It also offered an opportunity to draw on the lessons from advanced work based professional development and learning in other professional areas: medical supervision and the military.

TDA is seeking to focus coaching for MTL around the emerging evidence base about the nature of professional learning. At present it is fair to say that the coaching efforts of national agencies are focused more on the transfer of new knowledge and skills. Nonetheless colleagues from National Agencies were keen to explore the issue of professional learning and the role of coaching in supporting it together in general as well as in the context of MTL. They highlighted through their discussions:

- an interest in increasing the ways in which agencies work together in supporting CPD to create a shared approach to supporting professional learning that is coherent from the school perspective;
- the importance of linking individual learning and development goals with organisational and national priorities, and of the role SLTs need to play enabling this coherence;
- the need for coaching to be tailored to the individual's needs and development agenda rather than the coach's;
- the importance of designing coaching approaches to increase practitioners' ownership of their own professional learning and the potential role of peer support/ co-coaching in securing this;
- the need to link professional learning with students' learning;
- the need to share responsibility for managing risk and developing appropriate ways of approaching and managing risk in learning between national agencies, SLTs, coaches and practitioners;

- the need to ensure that professional learning and development are seen as a positive experience, and that the connections with and buffer zones between professional learning and management are important but can be problematic and so need handling carefully;
- the need to work together to ensure that professional learning and development become an integral, non-elective part of teaching;
- a recognition of the benefits of the coaching process not only for the professional learner but also for the coach due to the opportunities to develop their own learning and practice via observing others, reflecting on the practice with them, engaging with multiple sources of knowledge and evidence, etc.;
- understanding that a coach should be seen as a professional learner as well, both in terms of the specific requirements placed on them and the acceptance that they would continue developing and learning when coaching and the benefits they would get from participating in MTL programme;
- the need for protocols, tools and engagement with evidence to help ensure that the quality of dialogue in professional learning is probing and challenging;
- in terms of creating capacity/making the most of resources:
 - professional learners need to develop skills which mean they can
 - co-coach each other and so use peer support to extend and embed specialist contributions, and
 - be proactive in get the most from their coach;
 - coaches still need to understand when specialist input is necessary and how to access this;
 - leaders need to exploit the potential of networks; and
 - national agencies need to understand existing coaching provision across the piece and work together to create capacity.

Principles for Coaching in the context of MTL

In summary the evidence trawl and the consultation mechanisms have both reinforced and complemented the evidence on which the original framework was built. None of the evidence undermines in any way the previous findings. However the specific context of MTL calls for an emphasis on advanced professional learning. We are aware that local interpretations of the National Framework for different contexts have involved a degree of selective emphasis. By contrast we want to argue that Coaching for advanced professional learning generates a need for a strong emphasis on *all* of the principles from the perspective of the coach. From the [perspective of the professional learner we suggest that there needs to be a particular emphasis on the principles relating to evidence, theory, experimenting and use of specialist expertise.

In the light of the research and national agency initiatives explored in this paper and of what we know about professional learning and of the MTL 'givens', we have identified two areas where core principles from the national framework for mentoring and coaching can and should be expanded and a series of points where it seems to be helpful to illustrate how the framework will need to be contextualised for MTL.

Core principles for coaching reviewed for MTL context

Effective coaching for MTL is context specific; it involves a partnership with the professional learner and the HEI tutor. It is organised around work based professional learning and is focused on setting up goals and harnessing learning processes that are aligned with the needs and aspirations of the professional learner and the school.

Effective mentoring and coaching involves:

1 a learning conversation – Structured dialogue, rooted in evidence from the professional learner’s practice, which articulates existing beliefs and practices to enable reflection on them. For example coaches: ensure PLs debrief their experiments with new approaches both when they work and when they don’t, and

- create opportunities for PLs to communicate their developing understanding to others in order to increase their commitment and deepen understanding.

2 a thoughtful relationship – developing trust, attending respectfully and with sensitivity to the powerful emotions involved in deep professional learning. For example coaches will:

- use active listening to recognise PLs’ skills and to enable them to hear and evaluate their own contributions
- encourage PLs to be explicit about their aspirations and anxieties with fellow learners and with their coach, and
- celebrate PLs’ successes in weathering emotional ups and downs.

3 a learning agreement – establishing confidence about the boundaries of the relationship by agreeing and upholding ground rules that address imbalances in power and accountability. For example coaches will:

- help PLs understand how professional learning relates to key professional frameworks and processes such as performance management and the national standards and the connections and boundaries between them.

4 combining support from fellow professional learners and specialists – collaborating with colleagues to sustain commitment to learning and relate new approaches to everyday practice; seeking out specialist expertise to extend skills and knowledge and to model good practice. For example coaches will:

- make explicit the value of specialist practice knowledge and brokering access within and beyond school, and
- approach learning as an interdependent, collaborative process.

5 growing self-direction – an evolving process in which the learner takes increasing responsibility for their professional development as skills, knowledge and awareness increase. For example coaches will:

- help professional learners make choices, speculate about and explore consequences and develop solutions
- encourage PLs to extend their sphere of attention to connect with the wider school and the community, and
- extend PLs’ knowledge of roles and responsibilities within the school and how they might contribute.

6 setting challenging and personal goals – Identifying goals that build on what learners know and can do already, but could not yet achieve alone, whilst attending to both school and individual priorities. For example coaches will:

- help learners see planning and formative assessment of their learning as tools for managing complexity
- help learners understand how professional learning relates to progress through key professional frameworks, e.g. the standards, the SDP
- help PLs take an active role in personalising their learning in partnership with their coach and tutor, and
- in the context of MTL learning goals will be negotiated between professional learners, their coaches and HEI tutors.

7 understanding why different approaches work – developing understanding of the theory that underpins new practice so it can be interpreted and adapted for different contexts. For example coaches will:

- ask questions relating to how in-school evidence compares with larger scale evidence
- draw on a wide range of sources of knowledge and developing understanding of the thinking that underpins new practice
- pursue in-depth analysis and multiple possible scenarios rather than settling for first possible explanations
- use research about PL to inform coaching processes, goals and outcomes
- use research about teaching and learning and the curriculum to support the development of practice, and
- help professional learners to access opportunities to see new ideas in context and to work out the implications for practice in collaboration with their colleagues.

8 acknowledging the benefits to the mentors and coaches – recognising and making use of the professional learning that mentors and coaches gain from the opportunity to mentor or coach. For example coaches will:

- be explicit about their own progress in learning about coaching and about masters level work as they collaborate with the professional learner and the HE tutor, and
- recognise and be explicit about their own vulnerabilities and successes as a professional learner within the coaching relationship.

9 experimenting and observing – creating a learning environment that supports risk-taking and innovation and encourages PLs to seek out direct evidence from practice. For example coaches will:

- support PLs in presenting evidence from analysis of the learning process for diagnostic purposes (to create a virtuous cycle of learning) and for development and accountability purposes
- prompt efforts to test out and interpret knowledge and approaches from elsewhere
- help PLs collect and use the multiple types of evidence available in school, including pupil perspectives and video, for interpreting and adapting new knowledge and ideas
- support (practically and emotionally) PLs in using evidence critically to ask questions and track progress against their goals from the outset, and
- establish a rhythm of collaborative planning and debriefing as a way of managing the risks involved in creating new practice knowledge and managing complexity.

10 using resources effectively – making and using time and other resources creatively, to protect and sustain learning, action and reflection on a day to day basis. For example coaches will:

- use enquiry skills to collect evidence that is useful at the point of collection as well as in answering questions
- ask probing questions and give time for considered replies
- develop PLs' self-awareness and reflection by encouraging openness to evidence, reflection and self, and
- help PLs connect with the wider school, network, educational and professional community.

Additional principles for coaching on the context of MTL

We have identified 2 additional principles that we believe should be added to the 10 principles in the National Framework for mentoring and coaching in the light of new evidence and in the context of MTL:

Effective coaching for professional learning involves:

Helping participants learn how to learn about teaching and learning – Offering professional learners a range of tools and protocols for developing their thinking about their learning including, for example: thinking about their own aspirations for development through the lens of their aspirations for their pupils

- evaluating the connections between their own learning, their practice and their pupils' learning
- offering information, ideas and evidence as tools PLs can use to increase their control over their own learning, and
- enabling PLs to be explicit about their openness to exploring new knowledge where they need support and their readiness for self direction where they don't.

Making effective connections with the workplace

Connecting effectively with the school leadership in order to mobilise ongoing development work as a vehicle for professional learning, for example:

- making creative use of peer to peer learning opportunities within CPD days, departmental meetings, the networks in which the school participates and significant school developments, and
- help PLs understand their learning and progress in the context of their own history and culture of the profession as a whole as well as the local school priorities and culture.

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