A Review of Literature On Professional Development Content And Delivery Modes For Experienced Teachers

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The information and conclusions contained in this report are not necessarily reflective of the policies, views and/or requirements of the Ministry of Education of Ontario.
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EXECUTIVE SUMMARY

The purpose of this report is to present findings from a review of the literature regarding professional development content and “delivery” processes/practices for experienced teachers. The review was conducted through a search of ERIC, other education research databases, Internet, OISE/UT Education Commons resources, and a variety of materials produced by provincial, national and international associations and educational jurisdictions. The information and conclusions contained in this report are not necessarily reflective of the policies, views and requirements of the Ministry of Education of Ontario.

The key findings include:

Professional Development Practices

• There are many definitions of professional development. Most refer to both formal and informal learning experiences and processes that lead to deepened understanding and improvement of practice.
• The professional development practices for mid-career or experienced teachers are generally viewed as part of the continuum of learning of teachers throughout their careers.
• Effective professional development strongly links teacher and student learning and is guided by data.
• Research highlights that effective professional development must be personalized and responsive to the complex and unique needs and context of the learner.
• Collaboration, shared inquiry and learning from and with peers have been identified as central to professional development.
• Effective professional development needs to be sustained, ongoing, in-depth, requiring active engagement by the professional. Short term, “one-shot”, “pull-out” programs are seen to be ineffective in changing or developing practice.
• There are recent efforts to offer more systemic, comprehensive research-informed approaches to professional development in Ontario and around the world. At the same time, connecting individual learning with larger initiatives and change processes is seen as key to sustainability and support.
• A wide range of practices is seen to be effective in various settings. These practices include: collaborative learning, peer-assisted learning, teacher researcher, teacher-as-student, independent learning and integrated approaches.

Experienced Teacher Stages and Pathways

• There is no single, linear pathway or career trajectory for teachers. Instead, career paths are often cyclical and even recursive.
• Differentiation of professional development practices is critical to meeting the unique learning needs of experienced teachers due to their individual developmental and experiential career paths and contexts.
• As adult learners, motivation for professional learning is linked to relevance, meaning and choice. Thus, developing competence and a sense of self-efficacy by directing one’s efforts to meet student needs is key to teachers undertaking professional learning.
• Internationally, many jurisdictions are exploring financial incentives, career ladders, differentiation of role and other forms of recognition to encourage professional development with no strong indications that these interventions are achieving desired outcomes.
• It does appear that the use of incentives without clear connection to goals, standards and appropriate assessment is problematic.

Standards
• When compared with other professions, including law, accounting, and policing, education is the only one that does not have a universally accepted set of standards for required in-service training. However, the Ontario College of Teachers has recently created a Professional Learning Framework which is beginning to define these for Ontario.
• There are many standards and frameworks for the profession. Fewer frameworks or standards exist for professional development and learning.
• Professional standards generally identify commitment to student learning, development of professional knowledge and practice, ongoing professional learning and collaborative learning and relationships as key features.
• Some professional standards frameworks attempt to identify career stages for professional knowledge, behaviour and practice.

Assessment
• Professional development programs and activities frequently evaluate participant satisfaction but rarely professional learning or change in practice.
• Although complex to evaluate, research points to the need to connect assessment to student learning as well as teacher learning.
• Multiple measures and data sources are required in order to effectively evaluate the complex and multi-faceted nature of successful professional development. (e.g. observation, portfolios, behavioural measures, assessment data, etc.)
• Connection to program goals and standards also provides clarity.
• Attempts have been made internationally to outline evaluation frameworks with performance indicators in order to assist in evaluation and self assessment.

Considerations for Professional Development
• Important components of professional development are:
  ✓ the linking of professional development to student learning and professional standards for learning
  ✓ providing many varied learning processes and practices within a learning framework,
  ✓ incorporating assessment of both professional growth and attainment of program goals
  ✓ ensuring reflection and forward planning are part of the pd cycle
• An integrated design that focuses upon student and teacher learning, linking to the larger system and incorporating a range of possible learning activities within a job-embedded context is recommended in the literature.
• There is recognition that evidence-based knowledge and practice should form the content of professional development.
• Effective professional learning requires time, resources and supportive structures.
INTRODUCTION

On a daily basis, teachers confront complex decisions that rely on many different kinds of knowledge and judgment and that can involve high-stakes outcomes for students’ futures. To make good decisions, teachers must be aware of the many ways in which student learning can unfold in the context of development, learning differences, language and cultural influences, and individual temperaments, interests, and approaches to learning. In addition to foundational knowledge about these areas of learning and performance, teachers need to know how to take the steps necessary to gather additional information that will allow them to make more grounded judgments about what is going on and what strategies may be helpful. Above all, teachers need to keep what is best for the child at the centre of their decision-making (Bransford, Darling-Hammond, & LePage, 2005, p. 1).

Educational reform developments in Canada and elsewhere are setting bold goals for student learning. Recent research literature suggests that while many factors contribute to achieving these goals, what teachers know and are able to do is one of the most important factors influencing student learning (Darling-Hammond & Sykes, 1999; Fullan, Hill & Crevola, 2006; Wilson, Floden & Ferrini-Mundy, 2001). Teachers are the ones responsible to work creatively with their students, to translate and shape curricular goals and theoretical notions into effective classroom and school-wide practices, and to provide an environment for effective learning. Current literature also stresses that the act of teaching is becoming increasingly complex and that highly competent teachers continue to learn, are adaptive, build up a sophisticated pedagogical repertoire, and are able to apply a range of practices for varying purposes that incorporate and integrate different kinds of knowledge, used in various combinations flexibly and fluently (Bransford, Darling-Hammond & LePage 2005; Cole & Knowles, 2000; Darling-Hammond, 1998; Turner-Bisset, 2001).

Not surprisingly, there has been increasing attention to, and debate about, the essential role of deliberate, ongoing, high quality professional learning and development in supporting teachers to be responsive to changing, complex and challenging demands (Berliner, 2001; Darling-Hammond, 2000; Hawley & Valli, 1999; Joyce & Showers, 2002). Fullan, Hill & Crevola, (2006) claim, for example, that professional learning that focuses on contextually-based, personalized, data-driven instruction is one of the three central components of Breakthrough thinking that will be critical to successful educational reform and that will noticeably improve and sustain learning for students and teachers alike. In their view, teachers must be learning in their classrooms every day.

Recent literature reveals a growing interest in professional development initiatives designed to address the professional development needs of mid-career teachers. A variety of studies have been undertaken that explore the complexities of effective professional development for mid-career teachers. These studies illuminate a range of factors that need to be carefully considered when determining appropriate delivery modes, standards and/or approaches for assessing professional learning (Berliner, 2005; Elmore, 2004; Feiman-Nemser, 2001; Fullan, 2001, 2005; Guskey, 1995, 2000, 2005; Hammerness et al., 2005; Hawley & Valli, 1999; Lieberman & Wilkins, 2006; Tomlinson, 2005; Warren-Little, 1999).

Study groups and writing groups, professionally oriented graduate programs, use of action research and lesson study methodologies at school sites, career ladder schemes, differentiated certification and incentives are only some of the approaches to professional development that
have been undertaken. While many of these methods appear to have some efficacy in professional learning, there is no consensus in the literature regarding outcomes and clearly no panacea. Context, the unique professional knowledge of the teacher-learner, school and system supports and initiatives and a myriad of other factors must be considered in designing and determining high quality professional development.

The impact of infrequent, poorly designed and/or inadequately delivered approaches to teachers’ professional development is evident in the literature. Not only costly, some approaches to professional development, as Warren-Little reminds us, continue to be dominated by a “one size fits all”, transmission orientation to learning and in many ways are unproductive. “Nothing has promised so much and been so frustratingly wasteful as the thousands of workshops and conferences that led to no significant change in practice when teachers returned to their classrooms”. These strategies for professional learning, it is now understood, are no longer sufficient.

In Ontario, these developments and issues are being considered and addressed. Teacher Excellence Unlocking Student Potential Through Continuing Professional Development, the fifth mini discussion paper prepared for the Education Partnership Table (2004), focused on a continuum of ongoing professional development for teachers throughout a teacher’s career See Appendix 1). This paper set out some principles and ideas for a new teacher excellence program for Ontario teachers, acknowledged that there are many other factors beyond individual skills and capability that influence the effectiveness of teaching, and began the process of inviting discussion with their partners about how teachers can best be supported in their professional growth. The paper rejected outright “the overly formalized and controlled PLP or Professional Learning Program unilaterally imposed by the past government. The program was not respectful of teachers and exceedingly prescriptive.” The discussion paper also drew specific attention to professional development for experienced teachers and the consideration of external incentives (e.g. enhanced ability to undertake sabbaticals, masters programs, work exchange) to help keep valuable teachers “engaged and up to date”.

There has been a strong tradition of ongoing professional development in a variety of forms in Ontario. However, evidence, both locally and globally, suggests that focused attention to effective professional development for experienced teachers is essential in efforts to improve student learning and reform schools. This review maps what current literature says about professional development content and delivery modes for experienced teachers and addresses the following themes: Teachers’ Stages and Pathways; Standards and Frameworks; Delivery Methods and Practices; Assessment; Effective Professional Development Programs: A Synthesis of Characteristics; and Sample Models; and Concluding Reflections. Supporting References and Appendices are also provided.
PROFESSIONAL DEVELOPMENT
FOR EXPERIENCED TEACHERS

Professional development is understood and described in different ways. Joyce et al. (1976, p. 6), for example, defined professional development as “formal and informal provisions for the improvement of educators as people, educated persons, and professionals, as well as in terms of the competence to carry out their assigned roles.” Gall and Renchler (1985, p. 6) described professional development more specifically as “efforts to improve teachers’ capacity to function as effective professionals by having them learn new knowledge, attitudes and skills.” Fullan (1995, p. 265) defined professional development as “the sum total of formal and informal learning pursued and experienced by the teacher in a compelling learning environment under conditions of complexity and dynamic change.” Indeed, Fullan, Hill and Crevola (2006, p. 21) have begun to intentionally use “professional learning” to refer to the ongoing, focused daily learning of teachers individually and collectively, finding professional development a “more narrow conceptual term.” Day’s (1999, p. 27) definition perhaps best highlights teachers’ continuous professional learning within the broader context of change and its interconnected elements. According to Day,

Professional development consists of all natural learning experiences and those conscious and planned activities which are intended to be of direct or indirect benefit to the individual, group or school, which constitute, through these, to the quality of education in the classroom. It is the process by which, alone and with others, teachers review, renew and extend their commitment as change agents to the moral purposes of teaching; and by which they acquire and develop critically the knowledge, skills and emotional intelligence essential to good professional thinking, planning and practice with children, young people and colleagues throughout each phase of their teaching lives.

Not surprisingly, professional development for teachers is often located in one or more paradigms. Generally scholars criticize the “deficit” paradigm articulated by Gall and Renchler above that characterizes professional development as targeted to compensating for a lack in skills or knowledge and viewing teachers as empty vessels “to be filled” Garmston (1991, p. 64). Some locate it within a “professional growth” paradigm that characterizes development as more self-directed arising from the learner’s interests and needs (Feiman-Nemser, 2001). Some locate it within an “educational change” paradigm which views development as focused upon bringing about change (Fullan, Hill & Crevola, 2006; Warren-Little, 2001). Still others position professional development within a “problem solving” paradigm which links development to making improvements to address identified issues like student achievement needs (Ball & Cohen, 1999; Joyce & Showers, 2002; McLaughlin & Zarrow, 2001). Guskey (1994, p. 63) emphasizes and connects the growth and problem-solving notions of professional development, suggesting it is “increasingly seen as a process, not an event, …that the process in intentional…and is a systematic effort to bring about positive change or improvement.” Many other researchers call for a similarly integrative view of professional development (Day et al., 2005; Goodall et al., 2005; Lieberman & Miller, 2000, 2001).

Professional development for experienced teachers is most often discussed in the literature as a segment or phase within a career long or continuing professional development (CPD) process. Within the continuum of teacher development, professional development for experienced teachers includes different components and takes many forms. Fullan, Hill & Crevola, (2006) claim, for example, that professional learning that focuses on contextually-based, personalized, data-driven
instruction is one of the three central components of *Breakthough* thinking that will be critical to successful educational reform and that will noticeably improve and sustain learning for students and teachers alike. In their view, teachers must be learning in their classrooms every day. Coherence is a critical feature of successful professional development approaches. Goals and standards, processes and practices, and assessment approaches of professional development need to have transparent, meaningful, and manageable standards and demonstrable outcomes that align and are integrated with student learning, organizational and societal learning needs and purposes.

Underpinning and shaping any particular learning process is ongoing consideration of multiple and interconnected factors including: student and teacher learning and performance; the learning context; the realities of the day-to-day work of teachers; research and knowledge bases that inform the act of teaching; teacher’s interests and level of development; independent and collaborative learning activities and processes that are responsive to teachers’ different ways and levels of learning and knowing; accountability and ways of assessing professional growth; meaningful, and manageable standards for teachers; alignment among personal, school and system goals; and attention to broader change processes (e.g. a sustained timeframe, varied forms of pressure and support).
TEACHERS’ STAGES AND PATHWAYS

Professional development for experienced teachers is usually not given exclusive attention in the professional development literature. More often, it is discussed as a segment or phase within a career long or continuing professional development process. There is an implicit developmental aspect to these phases and stages that may not entirely capture the complexity and intricacy of ongoing professional learning.

Studies of professional learning suggest that experienced teachers have varied and unique professional needs according to personal and professional circumstances, histories, and contexts and not merely due to career length or life stage. Matching appropriate professional development provision to particular professional needs (immediate and developmental) must be taken into account. This “fit” is critically important in ensuring that there is a positive impact for student learning within the context of the classroom and school (Goodall et al., 2005).

As well, widely held psychological stage theories outline distinctive and qualitative differences in thinking and cognition at various stages of development (e.g. Kohlberg’s moral development; Erikson’s Psychosocial theory; Hunt’s Cognitive Developmental Theory; Maslow’s Hierarchy of Needs). These psychological theories underscore the growing sophistication and capacity to move beyond the self as learners mature. These understandings of adult development and learning support the professional development research that suggests that teachers’ self-actualization and self-affirmation needs are key aspects of their personal learning and professional development.

A number of frameworks have been developed specifically to help understand the stages of teachers’ professional development throughout the course of a career (e.g. Berliner, 1994; Feiman-Nemser, 1983; Fessler, 1995; Glaser, 1996; Guskey, 1995; Hammerness et al., 2005; Huberman, 1995; Steffy & Wolfe, 2001). These frameworks suggest potential career cycle trajectories, with varying needs at different stages. They also remind us that the sequence and timing of these stages may be variant, uniquely individual, and recursive and spiraling rather than linear.

Huberman (1995), for example, connected research on life cycle stages with teachers’ professional development needs. He explained that in the time between Phase 1 or “career entry” to the final phases of “serenity” or “disengagement”, the phases of “diversification and change” (phase 3) and “stock-taking and interrogation” (phase 4) at mid-career are the most variable and extensive. In the third phase, teachers are aiming to increase their skills and effectiveness and to look beyond the classroom to collaborative projects and activism. In the fourth phase, typically between 12 - 20 years of experience according to Huberman, the teacher engages in self-questioning and may consider a career change as part of a broader “life review”. If the answers to the questions are positive, then serenity and continued growth can follow. If disappointment or dissatisfaction occurs, then conservatism or even disengagement can be the outcomes. Huberman further discovered that career teachers tend to associate three actions or relationships with their most satisfying experiences in mid-career:
1. undertaking a role shift (e.g. becoming a literacy lead, instructional leader, etc.);
2. experiencing strong rapport with special classes or groups of students;
3. experiencing significant results from their teaching activities in their particular context, in other words, impacting student learning and achievement.

Steffy and Wolfe (2001) have proposed a six-phase career life cycle, in which movement forward is propelled by the mechanisms of reflection and renewal or impeded by withdrawal. In this
The initial phases are:

Novice Phase: when preservice students first encounter the practicum experience as part of Teacher Ed program.

Apprenticeship Phase: when teachers receive responsibility for planning and delivering instruction to students independently – until integration and synthesis of knowledge, pedagogy and confidence emerges – usually induction period and into second or third year of teaching.

Mid-career professionals fall into the next 2 or potentially 3 phases.

Professional Phase: as confidence grows through experience, teachers begin utilizing student feedback to develop their skills, very much linking their learning and growth to that of their students.

Expert Phase: at this stage, teachers achieve the highest standards set in professional standards frameworks.

Distinguished Phase: occurs when particular “gifted” educators begin to influence decisions at city, state and national levels (Steffey and Wolfe (2001) suggest that professional development for these three stages should include collaboration and personalization through activities such as study teams, peer coaching, PD seminars to examine assumptions, and serving as a mentor or coach); and the final phase following a career characterized by learning and renewal is the Emeritus Phase: retirement after a lifetime of achievement in education.

Feiman-Nemser (2001, p. 1048) also proposed a continuum of professional learning and highlighted the need to be attentive and responsive to teachers’ needs at different stages based upon key learning tasks.

Looking at the central tasks of learning to teach over time, we see important threads of continuity related to subject matter knowledge, inquiry and repertoire development. The use of terms like “deepening”, “refining”, and “extending” to frame these tasks implies that learning to teach involves continuing growth and development in core aspects of teaching. At the same time, each phase in the continuum has a special agenda.

In particular, in the mid to late career stages of experimentation and consolidation and mastery and stabilization, the tasks for continuing professional development must:

- extend and deepen subject matter knowledge for teaching;
- extend and refine repertoire in curriculum, instruction and assessment;
- strengthen skills and dispositions to study and improve teaching; and
- expand responsibilities and develop leadership skills.

While specifying the areas of focus for these learning tasks, she underscores the importance of matching of appropriate professional development provision with particular, individual, contextualized professional needs.

Other studies have focused more directly on “novice” and “expert” teachers and their specific professional learning needs at these different stages (Sabers, Cushing, & Berliner, 1991; Berliner 1994, 2001). In particular, Berliner (1994, 2001) studied the development of expertise over time and proposed five broad steps to expertise. These include: Novice, Advanced Beginner, Competent Performer, Proficient Performer, and Expert. Not all professionals will become Expert or even Proficient Performers. Associated with these higher levels of performance is the teacher’s capacity,
to attend to specific aspects of the classroom that are linked directly to the intellectual work of students, to generate more detailed observations and hypotheses about what they see, to qualify their observations and interpretations, to weigh the relative importance of certain kinds of information, and to take into account the complexity of problems which exist in classrooms (Hammerness et al., 2005, p. 379).

Hammerness et al. (2005, p. 385-386) emphasize teachers’ different needs at different stages in relation to a variety of elements, including a vision of their teaching practice; understandings about teaching, learning, and children; dispositions about how to use this knowledge (e.g. inquiry as stance); practices that allow teachers to act on their intentions and beliefs (e.g. simulations, cooperative learning); and tools (conceptual and practica) that support their efforts and forefront the importance of considering learning in local and broader communities. This framework suggests a more personalized, needs-based approach for the design and delivery of professional development.

Rather than conceptualizing the process of teacher development as moving in lockstep through a series of universal stages (regardless of setting or experiences), teacher educators are now emphasizing the interrelationships between teachers’ learning and development and the context of teachers’ learning. In turn, they are beginning to focus upon the particular features of those contexts and experiences that might help teachers develop these capabilities. This perspective parallels the development of learning theory over the past twenty years, as psychologists have moved from behaviourists’ quest for a direct relationship between stimulus and response, to cognitive psychologists exploration of how individual learning unfolds, to the broader focus offered by sociocultural theory on the contexts and conditions that promote leaning (Hammerness et al., 2005, p. 389).

Other studies (Anderson, 1997; Bennett, Anderson, & Evans, 1997; Hall & Loucks, 1981; Joyce & Showers, 2002) have considered more explicitly teachers’ professional development needs in relation to the development of their specific teaching skills or teaching repertoire. The Concerns-Based Adoption Model (CBAM), which had its origins in the 1970s and 1980s, is perhaps the most empirically grounded model for understanding the implementation of educational innovations and significantly influenced research on the professional development of teachers (Anderson, 1997). CBAM (Hall & Loucks, 1977; Hall & Loucks, 1981) centered on teachers’ stages of concern (SoC) in relation to curriculum innovation to teachers’ level of use (LoU) of that innovation. They showed the relationship between stage of concern and level of use, suggesting that level of use increases as teachers become increasing concerned about the innovation. It became a helpful model for thinking about appropriate inservice practices given varying levels of concern. Joyce and Showers (2002) describe how teachers go through “an iterative process of learning - experimenting, and reflecting as they develop new skills for use in their classrooms. An underlying message of this literature is that professional development needs are further complicated by what it means to be an expert teacher across subject areas, different panels, and in different contexts.

Literature (Hammerness, 2005; Huberman, 1995) has also focused on personal identity formation as a critical factor in defining professional learning needs of experienced teachers. In addition to developing knowledge and skills, this approach stresses that teachers are developing along in other ways (e.g. as practitioners, as change agents, as nurturers and child advocates, as moral agents, etc.). In other words, professional development is happening within the broader process of
identity formation that will guide their focus and work decisions.

**An important caveat.** While these various stage theories and career cycle models offer insights in relation to our understanding of professional learning needs of experienced teachers, an important caveat in the literature must be acknowledged. Professional learning is not a linear process and relying on predictable stages of teacher development in order to design professional development cannot acknowledge context, unique personal needs or even individual development in valuable ways. As well, career development most certainly cannot be quantified by a designated number of years (Hammerness et al., 2005; Richardson & Placier, 2001). Frameworks for describing teacher development that suggest more complex paths in learning to teach, as well as differences in teachers’ concerns and capacities when they have different kinds of preparation need to be taken into account. The efficacy of utilizing career stages or phases is further complicated by the fact that many studies of these frameworks were conducted at a time when most initial teacher education and district induction programs were “fairly weak interventions”. Thus, many of these career stage frameworks may have underestimated the potential of new teachers to practice in more sophisticated ways (Darling-Hammond, 2000; Hammerness et al., 2005; Zeichner, 2000). Yet, the literature “does not suggest that new teachers can immediately develop the kind of expertise that a master teacher develops over years of experience. Such learning about teaching, students, culture, development, and subject matter develop over time” (Hammerness et al. p. 381). Thus experience and development of expertise and sophistication in knowledge and skills are integrative and interactive and cannot be captured completely by stage theories.

Indeed, after completing a critical review of stage models of professional development across professions, Dall’Alba and Sandberg (2006, p. 406) advocate for a new way to describe professional learning over a career. Their alternative model includes “horizontal and vertical dimensions”. The horizontal dimension relates to the skill progression that accompanies experience; the vertical dimension refers to variation in embodied understanding of practice. The combination of horizontal and vertical dimensions of professional skill development in (this) model allows for a range of development trajectories. Professional development is not a simple linear or stepwise progression. Experienced teachers have varying levels of prior learning, work experience and professional preparation, and have frequently worked in a range of different contexts. Individual teachers display a personal profile along a continuum of practice related to their competence and confidence in particular aspects of their role over the period of a career. This reality might best be captured in a framework that uses a profile approach to learning and practice throughout a career rather than a staged representation. A profile approach reflects a range of areas of professional learning within a continuum of development rather than a simple temporal framework of experience. This approach is essentially neither sequential nor lock step and is dependent on individual strengths and needs, as well as application and context.
DELIVERY METHODS AND PRACTICES

The general orientation of the new approach to professional development is more constructivist than transmission-oriented – the recognition that both prospective and experienced teachers (like all learners) bring prior knowledge and experience to all new learning situations which are social and specific. In addition, it is now generally understood that teacher learning takes place over time rather than in isolated moments in time, and that active learning requires opportunities to link previous knowledge with new understandings (Cochran-Smith & Lytle, 2001, p. 45-46).

The literature suggests the limitations of traditional forms of inservice “training” and “one shot workshops” and the need for a richer repertoire of professional development practices and modes of delivery for all teachers (Brown-Easton, 2004; DfEE, 2001; Feiman-Nemser, 2001; General Teaching Council for England, 2005; Guskey, 2000a; Lieberman, 1995; Lieberman & Miller, 2000, Lieberman & Wilkins, 2006; Little, 1993, 1999).

Lieberman (1995, 2001), for example, suggests that there are many worthwhile ways to engage in professional learning in and out of school. She indicates that direct teaching of new ideas through courses, workshops and conferences has merit, particularly to develop awareness of new research or methodologies. Job-embedded learning, or “learning in school” through peer coaching, mentoring, action research, planning teams and critical friendships offer strong opportunities to implement and practice, while “learning out of school” through networks, school-university partnerships and visits to other settings, all provide multiple perspectives and new questions that broaden and deepen understanding.

Guskey (2000a, p. 22-29) reviewed seven core professional development practices and identified advantages and shortcomings for each. An abbreviated version is provided below.

<table>
<thead>
<tr>
<th>Method</th>
<th>Advantage</th>
<th>Shortcoming</th>
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<tr>
<td>Training – presentation,</td>
<td>efficient for sharing info with</td>
<td>little individualization or choice</td>
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<tr>
<td>workshop, demonstration,</td>
<td>large groups</td>
<td>often need feedback and coaching to supplement</td>
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<tr>
<td>simulation, discussions,</td>
<td>shared knowledge base and vocabulary</td>
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<td>seminars, colloquia, etc.</td>
<td></td>
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<tr>
<td>Observation/Assessment</td>
<td>positive impact on observer</td>
<td>takes time, trust, and must separate observation and</td>
</tr>
<tr>
<td>- observation and receiving</td>
<td>and observed through</td>
<td>evaluation – need to be focused and well-planned</td>
</tr>
<tr>
<td>feedback e.g. peer</td>
<td>discussion and feedback</td>
<td></td>
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<tr>
<td>coaching and supervision</td>
<td>lessens isolation</td>
<td></td>
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<tr>
<td>Improvement Processes</td>
<td>enhances knowledge and also</td>
<td>may only involve small group</td>
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<tr>
<td>curriculum/program design</td>
<td>collaborative capacity</td>
<td>may tend toward tradition and not innovation</td>
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<tr>
<td>development or review, to</td>
<td>generally are invested in it</td>
<td>need access to research to guide decisions/actions</td>
</tr>
<tr>
<td>implement new instructional</td>
<td>due to local context and/or</td>
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<tr>
<td>strategies or to solve</td>
<td>authentic problems</td>
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<tr>
<td>problems</td>
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A Review of Literature On Professional Development For Experienced Teachers
Study Groups
- study regarding common issue or concern – may have several groups studying different aspects of issue
- lessens isolation and bring focus and coherence to learning – also focuses on ongoing learning
- individual involvement may vary or be discouraged by dominant members
- may become opinion-focused instead of research focused

Inquiry/Action Research
- 5 step AR process of selecting a problem and determining an action to take
- tends to build knowledge and increase skills of problem solving, empowers teachers in their practice and learning
- takes significant individual effort, initiative and time

Individually Directed Activities
- identify individual needs create personal plan – assess success of plan
- flexible, choice, individualization, geared to personal reflection and analysis
- may be reinventing the wheel or repetitive work if no collegial sharing is built in – less likely to be connected to SIP and other areas of PD

Mentoring
- regular meetings of more and less experienced pairs about practice and improvement
- both individuals learn as mentors become more meta cognitive and also develop adult communication skills
- time and resources, also connecting to other learners or school plans and initiatives

Literature is beginning to identify professional development practices and modes of delivery that seem to be of particular value to mid-career teachers. These practices recognize that as professionals learn, their knowledge bases become broader and also more specialized and that their capacity to increase and extend their knowledge and skills also grows. (Brown-Easton, 2004; Joyce and Showers, 2002) In an extensive review of the research, at least six distinctive orientations to effective professional development practices are apparent. These include: collegial learning; peer-assisted learning; teacher researcher/practitioner; teacher-as-student; independent learning and integrated approaches. Within each, a variety of strategies and delivery modes exist. The majority of cases are grounded in real issues in teaching and learning and, most often, involve some level of collaboration and inquiry. The following section provides a brief overview of these distinctive orientations.

Collegial learning. This orientation emphasizes the involvement of experienced teachers in study groups, coming together to discuss ideas and issues related to aspects of classroom practice and student learning. Brooke et al. (2005) outline a writing project that provided an opportunity for students to belong to an after school writing group, at the same time allowing teachers to come together to talk and read and write about ways to improve their teaching of writing. McTighe and Emberger (2006) discovered the effectiveness of a supportive peer review process involving experienced teachers in an examination of a study group focused upon improved assessment practice. Feiman-Nemser (2001) describes “Descriptive Review”, when teams of teachers collaboratively discuss and problem-solve the instructional and program needs of individual learners, and participate in study groups and shared classroom observation as collaborative strategies that are highly effective for experienced teachers.

Peer-assisted learning. In this orientation, experienced teachers are involved in a mentoring-like role (e.g. working with new teachers, associate teacher working with initial teacher candidates). Many studies of mentoring indicate the value of the process in terms of learning for the mentor as well as for the protégée (Feiman-Nemser, 2001; Sanders et al., 2005; Workman, 2005; Weasmer, 2003). Mentors articulate that the development of the skills required to analyze and reflect upon their own practice, to respond to the insightful questions and concerns of protégées and the skills of listening, questioning and offering suggestions, all provide tremendous growth. Glazer & Hannafin (2006) promote the “Collaborative Apprenticeship” model for situated professional
development within school settings. In this model, an expert or mentor leads a community of teachers toward the design and development of learning activities, from introduction to mastery. This model has reciprocal impacts on affect, belief, cognition, environment, culture and personality and is a form of community of practice where knowledge, skills and strategies are socially negotiated through interaction. “Lesson Study” is another example of this orientation in which research-based lessons focused on an area of interest or need for the teachers are undertaken, often in collaboration with experienced teachers or university partners. Investigations of lesson study by Rock and Wilson (2005) and Blum et al. (2005) discovered participants experience growth in understanding of the teaching and learning process, articulate desire for continued collaboration, and value the professional reading and research that is part of the design and improvement process. These same results, along with increased practice and transfer of new knowledge and skills have been demonstrated through coaching activities as well (Joyce and Showers, 2002).

**Teacher-researcher/practitioner.** This orientation emphasizes the involvement of experienced teachers in “action research” or “professional inquiry” in which collected data is used to improve student and teacher learning and performance. Wlodkowski (2003, p. 40) stresses the importance of contextualized, job-embedded learning for experienced teachers through action research. Cochran-Smith and Lytle (1999, 2001) and McLaughlin and Zarrow (2001) make a strong case for the use of teacher inquiry and its transformative possibilities for teachers and for systems. They call for a true partnership of universities and districts for valuing and recognizing the power of practitioner research and productive partnerships leading to deep understanding of teaching and learning for all partners (Leithwood, McAdie, Bascia & Rodrigue, Eds., 2006). Throughout the past several years, teacher inquiry and research projects have proliferated and demonstrate the power of teacher inquiry from a variety of perspectives: practitioner-based collaborative action inquiry (York, 2005), teachers as investigators and problem generators (Sheerer, 2000), teacher inquiry and personal ethnography, (Donnelly et al., 2005), participatory action research (McIntyre, 2003) and inquiry groups (Duncan-Andrade, 2004; Evans & Reynolds, 2004).

**Teacher-as-student.** Literature continues to emphasize the need for academic rigour and the infusion of research and evidence-based practice in the professional development of all teachers. Universities and Faculties of Education continue to provide a range of courses and professional programs and graduate degree programs (e.g. Additional Qualifications courses, Summer Institutes M.Ed., Ed.D.) to support ongoing professional development for experienced teachers as do various professional associations and organizations (OAJE, OASCD, OHASSTA, OPC, OTF). Sandholz (2001) highlights the importance of “school-university partnerships” working in new ways to nurture ongoing teachers’ professional learning. Miller (2001) describes partnership activities that serve districts and universities by addressing areas of shared concern and interest such as New Teacher Induction Programs, joint publications, think tanks and seminars and production of shared resources such as instructional videos. Professional Development School sites, for example, are possibilities as school-university partners work in new ways, e.g. teachers can help to design the collaborative teacher ed program, co-teaching university courses, interdisciplinary team teaching, grant and proposal writing, making conference presentations, teacher research, seminars, etc. Sheerer (2000) points out that professional development practices need to emphasize mutual collaboration including partnership with schools, faculties of education, and school districts. Collaborative professional development is premised on the plan that both university and school and district partners come together to “interpret research, inquire about practice and deliberate” on a variety of topics, including culturally sensitive practices, etc.

**Independent Learning.** Deojay and Pennington (2000) encourage forms of professional development that link individual student performance with professional learning and also offer
teachers control over their own learning by using a problem-solving framework. By focusing upon a “real –life” problem in practice, such as the needs of an individual student or group of students, teachers then design their own professional learning and activities. The model suggests that teachers: determine the learning needs and strengths of a student; design an action plan for the student; and evaluate the plan and communicate its outcomes. Throughout all 3 steps the teacher identifies and directs their personal learning by asking questions and undertaking PD – talking with colleagues, grade level or issue oriented teams, etc. using journals, doing observations or visits, attending workshops or continuing education courses or using the internet. Recent research in England (General Teaching Council for England, 2005) suggests that although these efforts generally involve learning from others that fully collaborative forms of professional learning are perhaps more powerful.

**Integrated approaches.** Literature also refers to the use of a broad range of integrated practices within a comprehensive professional development framework and strategy (Cole et al., 2002; Lieberman & Wilkins, 2006). Fullan (2005) refers to a “tri-level reform solution” which is built upon this kind of integration of professional learning as central to transformation of systems, schools, and teacher and student learning. An example of this orientation is the “Professional Development Pathways Model” (Lieberman & Wilkins, 2006). Supported by University of Northern Illinois and field tested with rural, urban, suburban and elementary, middle and secondary school districts in Illinois, this model, includes four recommended steps that build on the unique needs of each school or district. Because schools are so different in powerful, composition and needs, the model is purposefully flexible and allows faculty and staff options for individualized, grade-level, subject-area, and team-based professional development.

Studies of more integrated continuing professional development programs in England (General Teaching Council for England, 2005; Goodall et al., 2005) reveal that successful programs encourage a richer mix of professional development opportunities and practices for teachers. They also allow teachers to focus upon their own learning and career goals and to consider new responsibilities within their own school context. In these more successful programs, reviewers found:

- the broader use of specialist expertise linked to school based activity;
- peer support or coaching, including observation, to provide a safe environment for experimentation;
- scope for participants to identify their own CPD focus and starting points;
- processes to encourage, extend and structure professional dialogue, reflection and change; and
- processes for sustaining the CPD over time.

In the more successful programs, a significant emphasis on collaborative activity was also noted (e.g. teachers reflecting on their practice, learning from theory or other people’s research, structured professional dialogue, shared planning as a learning activity, experimentation with new strategies and approaches). Evidence from reviews also showed that the continuing professional development had an impact on student and teacher learning. Changes in teachers’ practice, for example, were noted in a variety of areas e.g. teachers’ questioning and students’ response styles, facilitation skills, developing inquiry-based learning strategies, and new literacy strategies. The studies all contained evidence of increased student learning and highlighted the importance of teachers as key players in supporting and sustaining the professional development of themselves and their colleagues through collaborative learning practices.

Each of the above “integrated” examples incorporate involvement in a range of varied practices and modes of delivery within a more comprehensive strategy. Perhaps more significant, is the
attention given not only to the relationship between these modes of delivery and those factors that contribute to the success of the practice (e.g. an explicit focus on improving student learning, attention to the context of learning, explicit links to broader system goals and professional learning standards, effective use of time, resources, and organizational support, and strategies for monitoring improvement in relation to student and teacher learning).
STANDARDS AND FRAMEWORKS (CONTENT)

Standards can be problematic and need to be clearly stated to imply the requisite knowledge bases and their interconnections… the standard is like the visible tenth of the iceberg above the waterline: the knowledge is the nine-tenths that lies beneath. To become expert in teaching, one must have the full range of knowledge, as outlined in the model of knowledge bases, which underpins the visible skills, aptitudes and qualities (Turner-Bissett, 2001, p. 144).

Standards and frameworks for professional development have been advanced worldwide since the 1990s by different educational jurisdictions and professional organizations. Literature suggests that professional development standards and frameworks help contribute to the professional growth process (Darling-Hammond, 2001; Ingvarson, 2002; Lustick & Sykes, 2006; National Reference Group for Teacher Standards Quality and Professionalism, 2003). They are viewed as a means by which good teaching can be identified, recognized and celebrated and are used to provide guidance and transparency for teachers seeking certification, continuing professional learning, and/or needing some form of formal assessment.

Most professional development standards are embedded within broader frameworks of professional practice (e.g. Ontario College of Teachers’ Standards of Practice for the Teaching Profession and the Ethical Standards for the Teaching Profession) rather than in frameworks that focus exclusively on professional development. Standards articulated in these frameworks tend to highlight the core expectations of professional practice. Recommended professional development practices to support frameworks of professional practice have been less explicit and often are not evident in official policy.

Literature also suggests that standards and frameworks for professional development are not without their challenges. Standards in certain contexts have been criticized for being overly “technicist” to having “far too many items” to being “poorly organized” to overemphasizing “teaching” and under-emphasizing “student learning” (Hay McBer Report, DfEE, 2000; Turner-Bisset, 2001). Critics have also argued that defining teachers’ work through competencies not only deskills teachers but also reinforces teachers’ practices as reproductive of schooling rather than being transformative.

In Canada, provincial and territorial education departments/ministries most often establish appropriate goals and standards for teaching in relation to the broad educational goals of the region and tend to work co-operatively with the various stakeholders in their design (e.g. Colleges of Teachers, District School Boards, Federations, Faculties of Education, Professional Associations). In Alberta, for example, the Teaching Quality Standard Ministerial Order (TQS) and the Teacher Growth, Supervision and Evaluation Policy (Appendix 2) have been established to guide teachers’ preparation, certification, career-long professional development, supervision, and evaluation.

British Columbia and Ontario each have their own College of Teachers. Each College establishes professional standards for effective teaching practice and continuous professional improvement. The Ontario College of Teachers, for example, has developed documents to guide teaching in Ontario: the Standards of Practice for the Teaching Profession (Appendix 3) which articulates what teachers need to know and practice daily; the Ethical Standards for the Teaching Profession (Appendix 4) which conveys teachers’ beliefs and values in their professional relationships with...
students, colleagues and diverse educational partners; and the *Professional Learning Framework for the Teaching Profession* (Appendix 5) which outlines opportunities for ongoing professional learning for its members and assists teachers to identify ways that they learn, to integrate their knowledge into their work and to engage in ongoing professional development.

In Ontario, five broad standards comprise the *Standards of Practice for the Teaching Profession*. These are:

- Commitment to Students and Student Learning
- Professional Knowledge
- Professional Practice
- Leadership in Learning Communities
- Ongoing Professional Learning

Central to these standards is a requirement of and commitment to ongoing professional learning as “integral to effective practice and to student learning”. To support these standards in Ontario, the Ontario College of Teachers has also developed the *Professional Learning Framework for the Teaching Profession* to promote professional development aligned with these principles:

- The goal of professional learning is the ongoing improvement of practice. Teacher learning is directly correlated to student learning.
- Standards-based professional learning provides for an integrated approach to teacher education.
- Exemplary professional learning opportunities are based on the principles of effective learning.
- Teachers plan for and reflect on their professional learning.
- Learning communities enhance professional learning.

The standards and this framework tend to be operationalized in different ways through a variety of independent and collaborative activities. The Ministry of Education in Ontario, for example, offers a range of professional learning opportunities for teachers related to provincial mandated curricula (e.g. Literacy and Numeracy and Student Success initiatives). School Districts also provide in-service and resource support for teachers. Many schools now encourage teachers to work together to implement and reflect upon school level goals in relation to student learning and school success. Teacher federations and other educational stakeholders are also involved in providing professional development. Preparation for beginning teachers, in-service support through courses and district initiatives, and more specialized graduate studies programs make up the primary range of opportunities for continuing professional education for teachers offered by Faculties of Education.

The release of the Ministry of Education’s discussion paper *Teacher Excellence Unlocking Student Potential Through Continuing Professional Development* (2004) revealed the Ministry’s continued commitment to ongoing professional development but also alerted the education community to the need to carefully consider effective models of professional development that engage teachers in a continuum of professional growth to improve their practice at different stages of their careers (e.g. beginning teachers, experienced teachers) given the range of challenges facing the teaching profession. The discussion paper highlighted the professional responsibility of teachers in the pursuit of professional learning and indicated some preferred directions. These included, among other things:

- commitment to a fair and effective evaluation process at schools that is strongly tied to professional growth;
- the reporting of the amount and quality of teacher development as one of the indicators of success (e.g. teachers can also record their development activities in an annual learning plan or
portfolio; and
• a harmonization of existing teacher development programs (e.g. professional development days and additional qualifications) with the challenges that teachers face at the schools where they work in ways that respect teacher autonomy.

Outside of Canada. Outside of Canada, there has been increasing attention to appropriate standards and frameworks for professional development to guide good teaching and continuing professional learning. Below are some examples, with particular attention to frameworks and standards related to experienced teachers. Various professional organizations and educational jurisdictions have identified sets of professional development standards to guide the design and content of their professional development programs in the United States. Two examples are provided below. Perhaps the most sophisticated and focused professional development framework is that of the National Staff Development Council (NSDC) in the United States. NSDC is the largest non-profit professional association in the United States. It is committed to ensuring success for all students through staff development and school improvement and offers one of the few frameworks that focus solely on staff development. The Council established “Standards for Staff Development” in 1995 in an effort to guide the design of effective professional development experiences for teachers. These standards were revised in 2001 to “reflect what NSDC and the broader staff development community have learned about professional learning since the creation of the original standards...”. The revised standards were guided by three questions that fore-fronted the relationship between professional development and student learning:
  • What are all students expected to know and be able to do?
  • What must teachers know and do in order to ensure student success?
  • Where must staff development focus to meet both goals?

Standards in three broad areas were established: Context Standards, Process Standards, and Content Standards. The emphasis upon student learning is clear.

### NSDC Standards for Staff Development (Revised, 2001) (Appendix 6)

#### Context Standards
Staff development that improves the learning of all students:
  • Organizes adults into learning communities whose goals are aligned with those of the school and district. (Learning Communities)
  • Requires skillful school and district leaders who guide continuous instructional improvement. (Leadership)
  • Requires resources to support adult learning and collaboration. (Resources)

#### Process Standards
Staff development that improves the learning of all students:
  • Uses disaggregated student data to determine adult learning priorities, monitor progress, and help sustain continuous improvement. (Data-Driven)
  • Uses multiple sources of information to guide improvement and demonstrate its impact. (Evaluation)
  • Prepares educators to apply research to decision making. (Research-Based)
  • Uses learning strategies appropriate to the intended goal. (Design)
  • Applies knowledge about human learning and change. (Learning)
  • Provides educators with the knowledge and skills to collaborate. (Collaboration)

#### Content Standards
Staff development that improves the learning of all students:
• Prepares educators to understand and appreciate all students, create safe, orderly and supportive learning environments, and hold high expectations for their academic achievement. (Equity)
• Deepens educators' content knowledge, provides them with research-based instructional strategies to assist students in meeting rigorous academic standards, and prepares them to use various types of classroom assessments appropriately. (Quality Teaching)
• Provides educators with knowledge and skills to involve families and other stakeholders appropriately. (Family Involvement)

In 2003, the NSDC established the “Standards Assessment Inventory”. The Inventory offers a valid and reliable measure of the quality of professional development in a school as defined by NSDC’s Standards for Staff Development” (Hirsch, 2006). This research-based instrument may be used for assessing the effectiveness of professional development offered by sites and planning for future collective learning and action. However, it does not measure the effectiveness of the professional development efforts in relation to teacher or student learning.

The National Board for Professional Teaching Standards (NBPTS) provides another interesting example of professional standards from the United States. NBPTS was created in 1987 as an independent, nonprofit, nonpartisan organization made up mostly of classroom teachers but also included other educational stakeholders including school administrators, higher education officials, teacher union leaders, and community leaders. It originated in response to public concern about the state of American education reported in A Nation at Risk in 1983 and the Carnegie Task Force report, A Nation Prepared: Teachers for the 21st Century in 1986.

NBPTS’s mission was to:
• advance the quality of teaching and learning by maintaining high and rigorous standards for what accomplished teachers should know and be able to do;
• provide a national voluntary system certifying teachers who meet these standards; and
• advocate for related education reforms to integrate National Board Certification in American education and to capitalize on the expertise of National Board Certified Teachers.

Its first policy statement, What Teachers Should Know and Be Able to Do provoked widespread discussion between teachers and other educators and provided the basis for the development of professional standards for the nation's K-12 teachers (where none existed before).

Five core standards were developed (Appendix 7):
• Teachers are committed to students and their learning.
• Teachers know the subjects they teach and how to teach those subjects to students.
• Teachers are responsible for managing and monitoring student learning
• Teachers think systematically about their practice and learn from experience.
• Teachers are members of learning communities.

At the same time NBPTS established a voluntary National Board Certification (not to replace state licensing) to verify that “a teacher was judged by his or her peers as one who is accomplished, makes sound professional judgments about students' best interests and acts effectively on those judgments” reflected in the five standards of professional practice. The National Board Certification undertakes an elaborate assessment of a teacher's practice against the standards through an extensive series of performance-based assessments, including teaching portfolios, student work samples, videotapes or DVDs and thorough analyses of the candidate's
teaching and the students' learning. The process involves written exercises that probe the depth of a candidate's subject-matter knowledge, as well as his or her understanding of how to teach those subjects. According to the NBPTS website, teachers who have participated in National Board Certification have overwhelmingly stated it is the most powerful professional development experience of their careers. Interestingly, a recent study by Lustick and Sykes (2006) indicates that while there is evidence that the certification process results in professional learning, there are variations in the nature of this professional learning. It can be dynamic learning, meaning that change has occurred in the teacher’s understandings and practice; technical learning, meaning that the learning which occurs during certification does not result in changed classroom practice or deferred learning, meaning that the learning has occurred but change in classroom practice may only appear at a later time.

**Australia and England**

In Australia and England, there has been particular attention to frameworks that infuse two broad sets of interconnected and overlapping standards: one, elements of effective teaching (horizontal); and two, levels of expertise (vertical). In Australia, a *National Framework for Professional Standards for Teaching* (Appendix 8) was prepared by the Teacher Quality and Educational Leadership Taskforce (TQELT) with the support of the Ministerial Council of Education, Employment Training and Youth Affairs (MCEETYA) November 2003 and within the broader system goals outlined in *The National Goals for Schooling in the 21st Century* (The Adelaide Declaration) adopted by MCEETYA in 1999. The *National Framework for Professional Standards for Teaching* provides, among other things, a framework that delineates not only nationally agreed upon foundational elements of effective teaching but also introduces standards for different career levels.

Professional Elements, similar to Ontario’s the *Standards of Practice for the Teaching Profession*, include four interdependent and overlapping standards:

- Professional knowledge;
- Professional practice;
- Professional values; and
- Professional relationships.

The National Framework also includes four core career dimensions related to teachers’ professional growth. The four career dimensions for teachers include:

- Graduation;
- Competence;
- Accomplishment; and
- Leadership.

Central to this design model is a focus on professional development that is aligned with elements of effective teaching, a profile of teachers’ career levels and the national goals for schooling in Australia, thus providing the possibility of system-wide strategic action on teaching and learning and professional development at the national level. Particular attention is given to experienced teachers’ work within the context of career pathways, increasing levels of expertise, and the importance of recognizing and rewarding teachers who demonstrate advanced competencies and continued professional development (as explained in the “Accomplishment” and “Leadership” dimensions of the framework).

There have been various ‘Standards-based’ initiatives undertaken at the State level through Education Departments and at the national level through subject associations and professional associations (like the Australian College of Educators) within the context of the National
Framework. The Queensland Government, for example, has developed its own Professional Standards for Teachers (PST): Guidelines for Professional Practice (http://education.qld.gov.au/staff/learning/standards/teachers/). The Standards were piloted in 2002 and endorsed for use by teachers in Queensland state schools in 2003. A group of practicing teachers engaged in a review and a revised edition of the Professional Standards for Teachers was launched October 2005. Considerable focus has been devoted to equipping teachers to lead their peers in professional development programs using the standards.

In England, frameworks and standards for continuing professional development have been developed and supported in differing ways. Like Australia, professional standards for teaching in England identify certain fundamental content standards (e.g. Knowledge and understanding, Teaching and assessment, Pupil progress, Wider professional effectiveness, Professional characteristics) and recognition of four levels of professional growth, each with varying professional learning expectations. These include:

- Standards for qualified teacher status (QTS)
- Induction standards
- Senior teacher (threshold); and
- Advanced skills teacher (AST).

The Teacher Training Agency (TTA), which became the Training and Development Agency for schools (TDA) in 2005, has engaged in a review of the framework of professional and occupational standards for classroom teachers that has resulted in the development of standards for the excellent teacher. Of particular interest in this review was the attention given to more clearly delineated standards for experienced teachers (e.g. Senior teacher, Advanced skills teacher, and the Excellent teacher and implications for professional development, Appendix 9).

**Excerpts**

**Performance Threshold Standards (Senior teacher)**
- Knowledge and understanding
- Teaching and assessment
- Pupil progress
- Wider professional effectiveness
- Professional characteristics

**Advanced skills teacher (AST) standards**
- Excellent results or outcomes
- Excellent subject or specialist knowledge
- Excellent ability to plan
- Excellent ability to teach, manage pupils and maintain discipline
- Excellent ability to assess and evaluate
- Excellent ability to advise and support other teachers

Different career stages, it was acknowledged, necessitated attention not only to the commonalities and increasing depth of understanding that infuse all standards but also to significantly different areas of professional learning need. Some areas of attention recommended in the review, included differentiation of levels through acknowledgement of increasing capacity to flexibly and fluently adapt to differing demands and contexts, skill in collaborative work and leadership with colleagues, involvement in broader school projects and issues, innovation and creativity in
methods and curriculum, ability to articulate rationale for decisions and actions, and demonstrate effectiveness in student achievement. A range of continuing professional development (CPD) resources are offered to provide practical help for teachers at all stages of their careers. Some examples include: Coaching and mentoring; Postgraduate professional development (PPD) program; and Best practice research scholarships (BPRS), Case studies, Effective teaching and behaviour management; an online professional career development tool (TeacherNet); the National Centre for Excellence in the Teaching of Mathematics (NCETM); international opportunities to study abroad, or to gain CPD as they guide their schools or classes through international programs.

The General Teaching Council for England (GTC), an independent professional body for teaching in England, provides support for teachers to shape the development of professional policy and practice and to set, maintain, and guarantee professional standards. Professional standards that characterize teaching are described in their Statement of Professional Values and Practice for Teachers (Appendix 10). The Council has also developed a Code of Conduct and Practice.

To support continuing professional development for experienced teachers, the Council has developed the Teachers’ Professional Learning Framework (TPLF) (Appendix 11) that assists teachers to plan their own professional learning. The Council has also been responsible for building networks of teachers, focusing attention on the use of research to inform teaching and developing new models for professional development including: the Connect network (for teachers who are leading and supporting continuing professional development); the Achieve network (for professionals promoting equity in schools); and the Teacher Learning Academy (a national framework for the recognition of teachers’ professional learning).
ASSESSING PROFESSIONAL DEVELOPMENT

Traditional professional development activities, such as teacher workshops and faculty meetings with guest speakers, have been criticized as “adult pull-out programs”. These activities which may or may not be connected to a particular school or district goal and often have no follow-up, tend to amount to a series of disjointed experiences that do not necessarily have any observable effect on education…How do we measure our investment in professional development?

It is no longer sufficient to ask teachers what they thought of a particular workshop session or guest speaker. The issue is not the educator’s happiness quotient –how satisfied teachers are with a particular workshop, but rather what effect professional development will have on student learning. And there is no easy way to measure what programs or pursuits will lead to changes in student learning (Kelleher, 2003, p. 751).

While evaluation of professional development is recognized as a critical formative piece of information in order to develop effective programs, professional development programs are rarely evaluated in any systematic way. Frequently, according to Guskey (2000a, 2000b) and Goodall et al. (2005), evaluation connected to professional development tends to consist of “counting” or recording activities or outlining the activities undertaken with no analysis of their impact on learning or practice. Evaluation often takes the form of feedback questionnaires that gauge participant enjoyment of the activity rather than impact or outcome. They are usually one-off, brief and follow the “event” rather than collecting data about improved teaching or learning.

Current literature recommends that assessment or evaluation practices designed to determine the effectiveness of various models of professional development must be based upon solid principles of assessment. Five general standards of assessment quality have been outlined by Stiggins (2001). The following list outlines these standards adapted for use with adult learners:

Standard #1: Quality Assessments are derived from clearly specified targets and outcomes;

Standard #2: The results of sound assessment should be used to develop further learning or plan action;

Standard #3: Appropriate assessment methods reflect the desired outcomes and kind of evidence required;

Standard #4: Quality Assessments provide a sufficiently varied amount of evidence to allow confidence in evaluation and forward planning; and

Standard #5: Sound assessments are designed, developed and used in such a manner as to eliminate bias.

These standards have been adopted by different educational communities and have been further explored, confirmed and elaborated in practice by educational researchers including Wiggins and McTighe (1998) and Katz, Sutherland, and Earl (2006).

The literature further recommends that professional development designers use a comprehensive and outcome-oriented design approach that aligns intended outcomes with instructional practices.
and forms of assessment in their planning and implementation (Guskey, 2003; Lieberman & Wilkins, 2006; Turner-Bisset, 2001; Wiggins & McTighe, 1998). Kelleher (2003), for example, suggests that assessment of professional development must be built into a professional development cycle:

1. Student assessment data is used to set targets for student learning for classrooms and schools;

2. Professional development activities and measures then flow from and support these school targets. Teachers and leaders then determine the appropriate mix of activities for each teacher from a range of collaborative activities to individualized professional growth experiences such as courses, to research and leadership activities to external experiences such as visits to colleagues or other sites;

3. The next stage involves self-reflection and sharing, focused upon the targeted area of learning. This stage leads to identified changes in practice as a result of the learning; and

4. The final stage of the process involves obtaining “multiple measures of student and adult learning” (e.g. student achievement data, teacher portfolio evidence, videotape or sample lesson or journal artifacts, etc.).

This cycle reflects the understanding by design or “backwards mapping” process of identifying outcomes and then planning toward them. If deep understanding of teaching and learning is the goal of professional development, then evaluators must assess for these kinds of understandings. Potential assessment tools for professional development broadly fit the categories of observations, conversations and products, including portfolio, journals, questionnaires and surveys, interviews and focus groups, audio and videotapes, records, student work samples etc. As well, tools that focus upon self-assessment of learning by the participant emerge as key for assessment of effective professional learning for experienced teachers.

Indeed, literature is increasingly advocating the use of self-assessment and non-evaluative peer feedback as critical elements of any evaluation of professional learning (Kelleher, 2003; McTighe & Emberger, 2006). Shepard (2000, p. 12) has suggested “if we want to develop a community of learners – where students naturally seek feedback and critique their own work – then it is reasonable that teachers would model this same commitment to using data systematically as it applies to their own role in the teaching and learning process.” Indeed, Van Eekelen, Vermunt and Boshuizen (2005) indicate that this metacognitive ability to analyze practice is related to the “will to learn” or motivation to continue to improve practice. Capacity to question practice, to risk trying new practices and to evaluate the success of implementation is critical for those who are continual learners. As many researchers call for collaborative professional development (Stiggins, 2004), and the use of learning teams, peer review becomes a more appropriate and viable option.

Katz, Sutherland and Earl (2005, p. 2350) document the outcomes of a professional development initiative designed to promote an evaluation habit of mind for various educators in a district in Ontario. They utilized interviews as the research tool and ultimately relied upon evidence of individual “meaning-making” through use of participants’ reflections as their assessment evidence. Through this study, they determined that “individual, social and institutional factors combine in complex and nonlinear constellations to shape how learning and change take place in schools.”
Lastly, the use of performance indicators, based on these earlier recommendations, is being explored. Joyce and Showers (2002) propose a framework for assessing the level of impact of professional development through assessing “transfer” or the use of strategies or knowledge in classrooms. These levels, complete with descriptors, move from imitative use, through mechanical use, routine use, and integrated use to executive use that is characterized by strong understanding and ability to select and use strategies effectively, independently and flexibly. Guskey (2000) has outlined a 5 level evaluation scale that is the most extensive and widely acknowledged model in current literature. This scale examines the outcomes of professional development in areas ranging from participants’ reactions as the lowest level of outcome, through participants’ learning, organization support and change, participants’ use of new knowledge and skills to student learning outcomes as the fifth and highest level of impact for evaluation. Appendix 12 outlines the levels, questions, evidence and indicators for his model. Guskey advocates looking for “evidence” of the indicators vs. proof as it is too difficult to attribute changes solely to professional development.

Guskey (2003) recently revisited the area of evaluation of effectiveness in professional development. He examined 13 lists of characteristics of effective professional development, drawn from organizations including the American Federation of Teachers, Educational Testing Service, National Staff Development Council, National Partnership for Excellence and Accountability in Teaching and the Association for Supervision and Curriculum Development. He discovered a wide variance both in the listed characteristics of “effectiveness” and the consistency of the research claims upon which they are based. Many lists cited increased content knowledge as a key measure of successful professional learning but this has not been fully proven in all subject areas. Also, measures involving indicators such as sufficient time and resources are inconclusive, although there is some evidence that professional development “time must be well organized, carefully structured and purposefully directed” (Guskey, 2003, p. 748). Collegiality and collaboration are also listed as key elements of effective PD, yet there is some evidence that individuals in groups can block as well as enhance change efforts. A recent study by Goodall et al. (2005) of strategies for evaluation of the impact of continuing professional development in schools in England, using Guskey’s 5 level evaluation scale, revealed similar themes. Evaluation of professional development rarely differentiated between different kinds of benefits in relation to different purposes, it was often based upon individual self-report that relates to the quality and relevance of the experience and not its outcomes, and rarely attempted to chart benefits to students, the school or the district.

Both studies (Guskey, 2003; Goodall et al., 2005) provide a range of recommendations aimed at coherence and increased sophistication in evaluation. Some suggestions relate to ensuring measures aligned to different purposes (e.g. maintenance, improvement, change). Others emphasize that measures considered locations (e.g. on/ off site), impacts of the delivery models used (e.g. didactic, collaborative), and focused upon outcomes (e.g. direct/ indirect benefits for school, department, teacher, classroom, pupil) in the design of evaluative processes. Perhaps the most significant recommendation is a call for more explicit attention to indicators that link professional development to student learning. Guskey (2003, p. 748) suggests a wide range of indicators such as “assessment results, portfolio evaluations, marks or grades, scores from standardized exams and even behavioural measures such as attendance, retention and participation in activities” as potential ways to determine if PD is having an effect on student achievement and learning. Guskey emphasizes that evaluation of professional development must be ongoing, systematic, informed by multiple data sources and multiple kinds of data. It must also be understandable to a variety of stakeholders if it is to have power.
CONSIDERATIONS FOR EFFECTIVE PROFESSIONAL DEVELOPMENT FOR EXPERIENCED TEACHERS

The characteristics that influence the effectiveness of professional development are multiple and highly complex. It may be unreasonable there to assume that a single list of characteristics leading to broadbrush policies and guidelines for effective professional development will ever emerge, regardless of the quality of professional development research. Still, by agreeing on the criteria for effectiveness and providing clear descriptions of important contextual elements, we can guarantee sure and steady progress in our efforts to improve the quality of professional development endeavors (Guskey, 2003, p. 750).

Literature suggests that recent professional development initiatives for mid-career teachers have taken a variety of forms. (Lieberman & Miller, 2001) They can have an individual, collective or dual focus and frequently target student thinking, instructional practices, curriculum development, assessment and other aspects of practice. (Borko, 2004) Typical processes include teacher inquiry, moderation or collaborative review of student products, professional learning communities, use of videotape, and a range of other strategies. Studies of these initiatives provide helpful guidance in relation to the design and delivery of high quality professional development/programs (e.g. core components, appropriate standards [content], effective delivery modes and practices, approaches to assessing professional learning) and their impact on student learning. The literature is unequivocal, a more deeply integrated conception of professional development - that is attentive to certain core elements (e.g. teachers’ stages and pathways, student achievement, research on teaching and learning, educational change) and their interrelationships - is fundamental to the design and delivery of an effective professional development program (Berliner, 2005; Elmore, 2004; Feiman-Nemser, 2001; Fullan, 2001, 2005; Guskey, 1995, 2000, 2003; Hammerness et al., 2005; Hawley & Valli, 1999; Lieberman & Wilkins, 2006; Tomlinson, C., 2005; Warren-Little, 1999).

Most of the literature suggests that a composite of characteristics are considered and interwoven into the design and delivery of effective professional development programs for mid-career teachers. Three perspectives that share common elements are provided below.

Guskey (1994, 2000) reviewed research on professional development, and determined that high quality professional development programs have an “integrated design” which combines a focus on student outcomes, backward design, inclusion of contextual considerations and links larger systemic initiatives with the professional needs of the learner. He particularly stresses that understanding of change processes should inform professional development planning. Thus, collaborative work, organizational supports and structures to sustain change, connecting individual classroom work to larger goals, providing ongoing feedback and information to learners and whenever possible connecting innovations to existing initiatives to avoid overload, are key considerations in designing professional development.

In later research, Guskey, (2000a) distilled his recommendations regarding professional development to the following:
• a focus on learners and learning;
• emphasis on individual and organizational change;
• vision guiding small changes; and
• ongoing development that is procedurally embedded in day-to-day work.
The importance of the integrative nature of professional development is very clear in these four elements.

Hawley and Valli (1999, p. 138) echo Guskey in their review of the research on professional development programs, identifying 8 principles for effective professional development. In their view, powerful professional learning designs are:

- driven by attention to goals and student performance
- built upon teacher involvement in identifying learning needs and shaping the learning opportunities and processes
- school-based emphasizing job-embedded learning
- collaborative and problem solving
- continuous and supported over time
- information rich with multiple sources of information for evaluation of the outcomes
- based in theoretical understanding and utilizing evidence and research to develop, support and advance learning
- part of a comprehensive change process connecting individual and collective learning to larger organizational issues and needs

Tomlinson (2005) offers a third perspective which foregrounds the importance of differentiation and utilizing what educators know about effective pedagogy and learning in the design of professional development. Like many others, she calls for sustained support and ongoing reflection, collaboration and a focus on meaningful issues and problems in practice. For her, key additional features include content that reflects awareness of all learners, use of diagnostic assessment data, and differentiation of processes in recognition of the different professional learning strengths and needs of teachers.

In addition, Feiman-Nemser (2001) recommends that resources and attention be given to the technical and structural elements of the teachers’ work life such as creative use of time, flexible scheduling to work together in school day, subsidizing of summer institutes and courses, etc. Structures must also be in place to support and encourage professional learning and collaboration. In a study of 3250 teachers who had participated in over 80 individual professional development activities of various types and varying duration, through the Australian Government Quality Teacher Program. Ingvarson et al., 2005, discovered that programs that were extended over time, involved a substantial number of hours and were planned so that they enhanced collaboration and joint work in schools tended to result in improved learning and reports of teacher efficacy. These findings replicate those of Garet et al. (2001). A strong case is also made in these studies for adequate resourcing to allow schools to build time to think and plan and work together. Follow up, feedback and “at the elbow” support are all-important but expensive features of effective programs (Ingvarson et al 2005, p. 18). The study of professional development work by Garet et al. (2001), with over 1000 mathematics and science teachers, provides “empirical support that the collective participation of groups of teachers from the same school, subject or grade is related both to coherence and active learning opportunities which in turn are related to improvements in teacher knowledge and skill and changes in classroom practice”.

It appears that certain elements (and combinations of elements) have been given special prominence in the literature. These include a focus on: student learning and achievement; instructional expertise and the use of data to inform instructional decisions; connections to context; responsiveness to the learners’ diverse professional needs and ways of learning; the use of learning strategies that incorporate inquiry and collaboration; attention to the broader processes of educational change; and attention to professional jurisdiction, recognition and motivation.
Student learning and achievement. Literature emphasizes that effective professional development programs focus on the improvement of student learning (Guskey, 1995, 2000; Hawley & Valli, 1999; Joyce & Showers, 2002; Fullan, Hill, & Crevola, 2006). This understanding reflects many perspectives: professional standards which clearly put student learning at the core teaching practice and work, research on educational reform and improvement that underscores the critical role of a skilled teacher in supporting student achievement, and literature that indicates that teachers are motivated and willing to undertake learning that they believe will directly impact their teaching competence and ability to meet student needs and improve student learning. (Lustick & Sykes, 2006) Adult learners must believe that learning will be meaningful and relevant, for teachers, little can be more relevant than impacting student learning. (Wlodkowski, 1999; Knowles, 1980).

Instructional expertise and use of data to inform instructional decisions in relation to student learning. A large-scale study of over 5000 revealed that teachers reported a connection between their feelings of preparedness and competence and the amount of time spent engaged in professional development (Parsad, et al., 2001). Literature about effective professional development programs often focuses on the development of “instructional expertise” or “instructional intelligence”, the issue of “fitness of purpose” (ensuring congruency between intended learning goals and learning strategies), being attentive to “best evidence” related to the area under inquiry, and being able to collect and use data to inform instructional decisions (Bennett, Anderson & Evans, 1997; Berliner, 2001; Bransford, Brown and Cocking, 1999; Fullan, Hill, & Crevola, 2006; Rolheiser & Bennett, 2004; Turner-Bisset, 2001; Tomlinson, 2005). In this literature, “teaching expertise” is viewed as central outcome of professional learning and development. Berliner (2001), for example, stresses that experience does not equal expertise and that expertise is defined differently in different contexts and cultures. He advances the notion of “adaptive expertise” as a critical goal of professional learning. “Adaptive or fluid experts”, according to Berliner (p. 473), “appear to learn through their careers, bringing the expertise they possess to bear on new problems, and finding ways to tie the new situations they encounter to the knowledge base they have.” Building on this notion of “expertise”, Turner-Bisset (2001, p. 19) outlines key knowledge bases that need to be developed through professional development and identifies a range of interacting factors under the general theme of “Pedagogical Content Knowledge” which include: substantive subject knowledge; syntactic subject knowledge; and beliefs about the subject; curriculum knowledge; general pedagogical knowledge; models of teaching; knowledge of learners (cognitive); knowledge of learners (empirical); knowledge of self; knowledge of educational contexts; and knowledge of educational ends, purposes, and values.

Connection to context. Effective professional development programs are attentive to the context. Darling-Hammond and McLaughlin (1999), for example, stress the importance of situational and contextual learning and the power of learning about practice in practice. Cochran-Smith & Lytle (1999, 2001) outline several approaches to knowledge development, including the development of practice for practice (kinds of knowledge teachers need to know), knowledge in practice (knowledge in action), and knowledge of practice (emphasizes the relationship between knowledge and practice and the theoretical aspects of both). They argue that this knowledge is constructed collectively within local and broader communities and is key to the teachers’ professional growth and improvement in student learning. Elmore (2004) emphasize the need to focus on concrete classroom applications of ideas, expose teachers to actual practice rather than descriptions, and provide opportunities for collaboration and enquiry involving deliberate evaluation and feedback by skilled practitioners. The not so underlying message is that the content of professional development needs to be attentive to real themes and issues in the day-to-day work of teachers (Berliner, 2001; Fullan, Hill & Crevola, 2006; Hammerness et al., 2005;
Responsiveness to diverse learner needs (Differentiated). Effective professional development programs ensure that adult learning principles are taken into account (Oja, 1980; Sandholtz, 2001; Smylie, 1995). Experienced teachers, as discussed earlier, have diverse learning needs due to varying levels of prior learning, work experience and professional preparation. These differences need to be taken into account and professional development for experienced teachers needs to be “differentiated” (Tomlinson, 2005). Experienced teachers prefer to be active in determining their own unique paths to learning and satisfaction within the broader professional context in which they work, particularly as they gain professional knowledge and experience. Experienced teachers, according to Smylie (1995), are motivated by meaningful “problems”, questions or dilemmas that stimulate further thought, reading and action.

Self-directedness, collaboration, and contextual relevance are some of the key themes that emerge in the literature for experienced teachers, given their multifaceted and diverse needs at this time in their career. Differentiated options for ongoing professional development are encouraged (e.g. planning days, classroom visitations, sabbaticals, subsidized summer institutes, online networks, partnerships with universities) (Feiman-Nemser, 2001; Tomlinson, 2005; Warren-Little, 1999).

Integrate learning strategies focused upon collaboration, inquiry, and research. Professional learning consists of meaning-making and this process can be inherently motivating (Katz, Sutherland & Earl, 2005) if learning strategies are utilized that encourage problem-solving, inquiry into practice and collaborative professional support throughout the professional development learning processes (Guskey, 1995; Hawley & Valli, 1999; Sheerer, 2000; Tomlinson, 2005). Lesson study and action research are strategies that allow contextualized, collaborative and individual inquiry into areas of professional interest and need (Cochran-Smith & Lytle, 2001; Stigler & Hiebert, 1999).

The importance of collaboration in its many forms cannot be underestimated in the design and successful implementation of professional development programs for experienced teachers (Cochran-Smith & Lytle, 1999; Fullan, 2001, 2005, 2006; Oakes, Franke, Quartz, & Rogers, 2002). A recent study undertaken by the General Teaching Council for England (Goodall et al., 2005), reviewed a range of continuing professional development initiatives in England. The majority of the studies reviewed offered evidence of improvement in pupil learning, often accompanied by positive changes in either student behaviour and/or their attitudes when teachers worked together to develop practice in their own contexts. The emergence of learning in communities of practice has evolved out of multiple research traditions (Zeichner, 1999). In a study of over 5000 teachers across the United States, participation in collaboration with other teachers through mentoring, networking or scheduled in-school teams was positively correlated to feeling very well prepared for teaching (Parsad et al., 2001).

Change process. The literature reveals that effective professional development programs are and need to be attentive to broader change processes (Feiman-Nemser, 2001; Fullan, 2001, 2005, 2006; Hawley & Valli, 1999; Hammerness et al., 2005; Tomlinson, 2005). Key understandings of the change process (e.g. change in an educational setting involves many people working towards a common goal; change is a process that involves different stages – it is not a one shot event; change requires both pressure and support) need to be addressed. Frequently, the change process is occurring as a result of external factors or initiatives. As a result, teachers may feel that change is happening “to them” rather than as a result of their actions. Fullan, Hill and Crevola (2006) demonstrate that professional learning by teachers is central to “breakthrough” change and transformation. By aligning teacher efforts and system goals, teachers lead and create positive
change in the lives of their students and in schools. Projects such as the Pathways model recognize and embed this connection in their work (Lieberman & Wilkins, 2006).

**Professional jurisdiction and recognition.** As well as the research that studies effective elements of professional development, a body of literature investigates recognition, additional certification and even incentives as other elements for consideration. For example, the NBPTS offers a form of incentive in a voluntary program by which teachers can attain additional certification through intensive professional learning and collecting of artifacts and evidence of progress. Participation and success rates have been somewhat low, with only about half of the applicants achieving certification and there have been some questions regarding the teaching strategies and subject foci of the certification process. However, there is evidence of professional learning and even unsuccessful participants indicate that the process has value. This certification is subsidized by some districts and some jurisdictions offer financial incentives for participants. (Johnson, 2001; Lustick & Sykes, 2006) It is not clear whether participation is impacted by the financial incentives or merely the opportunity for additional learning and status or acknowledgement.

Other forms of financial incentive such as merit or performance-based pay are even more disputed and problematic. A scan of the literature reveals an intense and highly charged debate with no conclusive positives, many caveats and recent work calls for further research. Determining what is to be considered good performance (e.g. student achievement) and how to measure performance present significant challenges. (Wyman & Allen, 2001) Indeed, the pay for performance pilot in Denver received a great deal of attention and research and produced the verdict that “test-based pay for performance doesn’t work”. (Gratz, 2005, p. 568) The author cites unintended consequences, inequities and a tendency to over-simplify the work of teaching as just some of the negative results of merit pay or pay for performance.

Results from other professions indicate that “merit pay” is not appropriate for work that must be done successively (passed on to another) or coordinately (shared). Earlier studies of merit pay schemes have not demonstrated positive effects in terms of motivation (Johnson, 1986). However, there is concern in the United States that teachers may not be able to “afford to teach” and thus some monetary issues must be addressed.

Other jurisdictions are investigating ways to develop “career ladders” which provide differentiation and expanded roles for experienced, highly qualified and highly able teachers who continue to learn and grow and are not seeking administrative positions (Johnson, 2001, 2003). Having experienced teachers take roles as mentors or lead teachers in various areas of instruction have met with some success (Johnson, 2001, Christie, 2006). It appears that teachers who change roles, work in a supportive culture and are reflective and able to participate in significant decision-making in school, maintain their motivation and satisfaction in the essential core of their work – classroom teaching (Day cited in Huberman, 1993). Along with this type of additional contribution and recognition, some calls are being made to tie differential salary to differential stages of career ladders (Johnson, 2001, 2003) although there is recognition that this too can be problematic (Johnson, 1986).

Other recognition efforts, such as providing recognition through teaching awards, events such as World Teachers Day and other such “solidarity” rewards may be seen to raise the status of teaching in the public realm and may also be meaningful to teachers. Day et al. (2005) indicate that much of teachers’ motivation and engagement comes from their sense of professional identity and that acknowledgement and recognition of that professional role and contribution figures largely in sustaining commitment and interest.
**The challenge of motivation.** These studies of the use of incentives in professional learning lead to a broader consideration of motivation for professional learning. A small body of research examines factors that influence the motivation of experienced teachers. Studies over time indicate that “there is extensive evidence that teachers regard professional efficacy, not money as the primary motivator in their work” (Johnson, 1986, p. 55). In jurisdictions like England where experienced teachers are leaving the profession due to stress, studies of commitment and motivation reveal that mid career teachers continue to possess “core values-based identities which relate to strongly held purposes and principles of care and commitment to pupils’ learning and achievement” (p. 577) which maintain dedication to work and learning on behalf of students despite challenging circumstances (Day et al., 2005).

Generally, adult learning principles reflect motivation theory. Knowles (1989) argues that

> Adults have a self-concept of being responsible for their own lives . . . they develop a deep psychological need to be seen and treated by others as being capable of self-direction . . . Adults become ready to learn those things they need to know or . . . to cope effectively with their real-life situations (Knowles, 1980, p. 83-4).

Thus, self-direction is a key factor in the motivation of adults to learn (Tough, 1979). “Adults need to connect who they are with what they learn” (Wlodkowski & Ginsberg, 1995, p. 12). Developing competence is a strong adult need as actions are directed toward meaningful pursuits and understandings that are characterized as successful (Mordkowitz & Ginsburg, 1987). Adults want to know that they are becoming effective at what they value. Thus, choice and volition are critical in motivation for learning for adults (Knowles, 1980; Wlodkowski, 1999).

Adults are motivated to learn when they are in an atmosphere that is respectful and connected to others, when the learning is relevant, when there is some degree of choice, when the learning task recognizes and includes their understandings and perspectives, and when they see that they can be effective in learning something of value. Professional development occurs when teachers engage in “substantive actions, either individually or together, that require complex thinking to construct new skills or deeper meaning” (Wlodkowski, 2003, p.40).

Also, background differences (e.g. socio-economic status, life experience, gender etc.) are significant factors when exploring adult learning, and alter learning needs and motivations more than mere stage of human development. If adults feel disconnected from the content, if they feel that their prior, personal knowledge and experience is not valued, if they feel no investment or engagement in the activity or if they believe it is not relevant to their needs, they will be much less likely to be motivated to learn. Mandated activities may be problematic if there is not a strong linkage to real needs and applications. As well, feelings that success or increased effectiveness are unlikely will also diminish motivation and thus decrease the likelihood that learning will occur.

A study in England and Australia demonstrated an interactive and reciprocal relationship between commitment and learning – commitment was likely to be stronger for teachers who reflected upon and questioned their practice, who continued to seek challenge and change, who felt efficacious and able to make a difference. In other words, it is easier to sustain and build commitment when teachers can make connections between the school improvement plan and policies and their personal, professional identity and collaboration with others. As well, colleagues, dialogue, context and environmental factors were key in building and maintaining commitment. Where professional development opportunities are poorly conceptualized, insensitive to the concerns of individual participants and demonstrate little connection to
workplace conditions, they make little impact upon teachers or their students (Day 1999; Goodall et al., 2005).

A study undertaken in the Netherlands that explored teachers’ will to learn also revealed relevance and personal meaning as key features (Van Eeklen et al., 2005). Self efficacy and an internal locus of control - feelings of being able to exert influence over the situation seems key and attributing success or difficulty to personal actions impact motivation as the cognitive literature would also reveal. Recognizing that efficacy is vital to “what motivates” provides interesting questions for those interested in connecting the will to learn, to motivation and to designing effective learning opportunities for teachers.

However, there are variations and individual differences in the ways in which individuals approach professional learning. Joyce and Showers (2002) outline four broad responses that are frequently evident. “Gourmet Omnivores” will seek and initiate learning opportunities and will be sophisticated in their choices of involvement. “Active Consumers” will continually look for and utilize growth opportunities but are less likely to initiate them. “Passive Consumers” will attend and participate in learning but may not carry it into action in their teaching. “Reticents” actively resist learning opportunities and may be suspicious of the intentions of such work. Life circumstances such as family commitments, illness, etc. also impact readiness to undertake professional learning (Huberman, 1995). Likewise, teachers’ level of self-efficacy, the school culture in which they teach, their career stage, their gender, time issues, within and outside of school hours, and self-reflection are some additional factors that complicate any simplistic response to “what motivates”?
SAMPLE APPROACHES

The Challenge 2000 Multimedia Project

This project was one of 19 Technology Innovation Challenge Grants funded by the U.S. Department of Education and won recognition as one of two technology programs across the nation to be recognized as exemplary by the Expert Panel on Educational Technology. One hundred fifty classroom teachers from 50 schools in 11 school districts formed the cadre who participated in the project. The program included Technology Learning coordinators (a mentoring system), minigrants linked to teacher planning, and partnering of teachers more experienced with technology with less experienced. The focus was use of technology in project-based learning activities where students design, plan and produce a multi-media presentation. Teachers from a secondary school and elementary feeder schools formed teams guided by a Technology Learning Coordinator. Use of a mentor cadre to partner with teachers extended the learning. Evaluation of the program occurred through classroom observation, assessment of student multi-media products and performance assessments, surveys and interviews with teachers.

The project goal was to support in-service teachers in extending their use of technology in their teaching. Key student goals were development of student decision making and collaboration. The role of the Technology Learning Coordinator varied from team to team and frequently provided instructional and planning support as much as technical assistance. The classroom teacher determined the content and skill focus for the project depending upon their context. Sometimes the focus for learning would be particular software, e.g. Hyperstudio. Varying degrees of mentoring and support were needed and provided. Minigrants allowed differentiation through purchase of specialized equipment for special projects or additional professional development.

Evidence was collected through teacher surveys and interviews, from observation in classrooms, from the demonstrations of learning in the learning fair and from evaluating 6 of the strongest student projects and interviewing the students responsible. Teachers engaged daily with questions such as “How can I help young students collaborate effectively?” “What kind of decisions are appropriate for first graders to make?” The mini grants encouraged teachers to take next steps with new technologies and software.

Collaboration is evident in partnerships, in school teams, and school to school networks. The TLCs also formed community to support and “teach” each other. Additional human and physical resources provided additional time for fostering collaboration. Self-direction and choice characterized the projects, particularly the funded mini-grant projects. Utilized existing knowledge and allowed various entry points for teacher learners – as cadre members or as partners. The projects and support take place on-site and are job-embedded making the learning extremely relevant and meaningful.

Evaluation of student outcomes and teacher development conducted by SRI International and the Institute for Research on Learning (IRL) revealed the following evidence. Observations in classrooms revealed that students spent more time in sophisticated cognitive activities, e.g. creating representations and models, interpreting information and considering how to organize presentations for an audience, etc. 84% of teachers indicated that they would continue using new teaching practices. Student projects receiving an exemplary rating grew from 22% in 1988 to 73% in 2000. Teachers indicated that they’d learned about technology (56%), how to implement project-based learning (54%) and how to facilitate (52%).
Schools Attuned/All Kinds of Minds

The Schools Attuned Program is a professional development approach that helps educators acquire the knowledge and skills to meet the diverse learning needs of students, from Kindergarten to Grade 12. The purpose of the program is to prepare teams of educators with new knowledge and skills to make wise professional judgments about instructional practices with struggling learners. The underlying intent is to assist educators in using “neurodevelopmental” content in their classrooms to create success at learning and provide hope and satisfaction for all struggling students. It is a comprehensive yearlong professional development program and is designed primarily with experienced teachers in mind.

Two different professional development paths are offered to address the areas of interest and expertise of educators and other related service professionals. The two paths include the “Generalist Path” and the “Subject Specialist Path”. The “Generalist Path” curriculum builds upon case studies of students and draws from teacher experiences across content areas in grades K-8 settings. The “Subject Specialist Path” curriculum builds upon case studies of students and draws from teacher experiences within their subject areas in grades 7-12 classroom settings. Teachers are the key participants in this professional development program but other critical stakeholders are involved (school psychologists, school social workers, administrators). The curriculum is based on focused study (content) and school based application (process) of eight evidenced-based neurodevelopmental constructs that affect learning. Each professional development path includes certain key features: pre-course work, a core instructional course of a minimum of 35 hours, and a minimum of 10 hours of follow-up experiences.

The program links professional development to student learning, professional standards for learning (NSDC) and current research on adult learning. The Program reflects the most current, research-based considerations of professional development that changes teaching practice and has a positive impact on student learning. These include:

\[ \sqrt{\text{Use of evidenced-based neurodevelopmental content to develop understandings and instructional techniques that builds upon educators' knowledge of professional practice;}} \]

\[ \sqrt{\text{Use of data, collected through various assessment instruments, to personalize learning;}} \]

\[ \sqrt{\text{Work within classroom contexts;}} \]

\[ \sqrt{\text{Use of alliances among students, parents, and teachers that enable them to understand and talk about learning differences, appreciate student strengths, and take responsibility for achieving standards;}} \]

\[ \sqrt{\text{Incorporation of a variety of professional development practices that involve active engagement and reflection in learning new content and instructional practices (professional conversation, sharing of instructional resources and practices, subject and lesson analysis: analysis of videos, professional readings, case studies, classroom demonstration and practice); and}} \]

\[ \sqrt{\text{Assessment of professional growth, reflection and forward planning are part of the professional development cycle.}} \]

The design of this professional development program involves ongoing program evaluation to monitor the quality of the design, development, and delivery of our programs and ongoing research of the impact of the program by independent researchers. Various research initiatives are currently underway. Independent research studies conducted to date indicate that the Schools Attuned Program creates positive changes in teacher practice, student outcomes, and school climate, culture, and systems.
Alberta: Northern Lights School Division
Teacher Leadership and Collaborative Inquiry

The Northern Lights School Division in Alberta is a remote rural school district that has established an Early Literacy Cadre, a Leadership Academy and many school-based teams that engage in inquiry as part of a comprehensive but varied approach to professional learning within the system. The district is somewhat isolated and schools are located hours apart.

Along with these elements, professional learning practices include study groups, demonstrations, use of video, co-planning and teaching and peer observation and support. Regularly scheduled time is provided for professional learning. Research-based instructional and curricular interventions which have been implemented include reading/writing initiatives in Kindergarten, specialized programs for struggling readers in Grade 2 and upper grades and an “at home” independent reading program.

The goal for student learning is to support not only students who have been struggling, but all learners to achieve gains in literacy as well as in their self-regulation and metacognitive capacities. The goal for the professional learning process is to obtain the knowledge and competence to lead the improvement process using evidence-based practice and informed professional judgement.

The teacher leaders engage in a cooperative inquiry, involving reading and study, seeing demonstrations, practicing and investigating student learning. Group investigation, a form of collaborative inquiry, is utilized, in which a question is posed and following a research study, individuals develop a personalized action plan that they then implement and study in their classrooms. Cadre members also practice strategies with peer observation and feedback, developing skills in modeling. Teachers are directly connected with experts who come to work with them, and many participate in academics and conferences. On-line graduate courses have been developed to bring the university to the community. Schools have developed professional learning communities and engage in study focused on student learning.

Evidence is collected through weekly student records of reading materials and assessment of vocabulary and decoding. As well standardized measures are used periodically, along with provincial assessment measures. Teacher learning and efficacy are determined through focus group discussions, surveys and interviews. The Northern Lights Leadership Academy was the product of the learning plan of a participant who attended another Academy. Teachers articulate that they have assumed a learning and inquiry stance.

The daily schedule has been restructured and lengthened to provide compensatory time that can be used for staff development on eight “Family Fridays” when classes are suspended and teachers can engage in uninterrupted professional learning. Innovative instructional practices are grounded in research. As well, they may spend 15 – 20 hours per month in professional development. Professional learning is for everyone, including trustees. There is a strong alignment between system goals and change efforts and school based efforts but there is also opportunity for self-direction in the choice of projects or methodologies.

Evaluation of student outcomes indicates that 90 % of the students in the specialized reading programs accelerated rapidly. 80% of the Kindergarten students were able to read “caption books” by the end of the year. The average number of books read per pupil was reported as 100. Grade One students were virtually all able to demonstrate phonemic awareness and strong sight word retention. The cadre members all implemented one of the curricular projects and engaged in
research on that implementation. Teachers who were interviewed indicated that they believed that the literacy interventions were effective (84%) and should be continued (95%). Teacher comments include, “I am confident that I can teach all kids to read – all kids. This work has changed my teaching forever. I now see myself as an inquiry teacher – inquiry into student learning, into the research behind what I do.”

Comprehensive and integrated approaches: Children’s Literacy Success Strategy, Building Essential Literacy, and the Professional Development Pathways Model

More recently, more comprehensive and integrated approaches to professional development are being encouraged. These approaches forefront student learning but do so with attention to the interconnections among schools, communities, and systems. Professional standards for learning, varied professional learning processes and practices, ongoing assessment, reflection and forward planning are core components considered in this approach. This approach is multi-faceted and attentive to certain additional considerations (e.g. teachers’ stages and pathways, student achievement, research on teaching and learning, educational change). Lastly, this approach is purposefully flexible and allows teachers options for individualized, grade-level, subject-area, and team-based professional learning.

Fullan, Hill and Crevola, (2006) recommend an integrated approach to professional learning that foregrounds instruction and that integrates student learning with teacher learning, schools, and systems. They identify a few examples of this orientation in relation to work on literacy development, which they refer to as CLIPS (Critical Learning Instructional Paths), including: the Children’s Literacy Success Strategy (ClaSS), a school-improvement project of the Catholic Education Office, Melbourne involving over 300 Catholic elementary schools; and, Building Essential Literacy (BEL), an initiative of Mondo Publishing in New York city. In each of these examples, considerable attention is given to developing teachers’ understanding of and competence in using a range of powerful instructional strategies to improve literacy that are contextually-based, personalized, and data-driven. Complex, yet manageable, data collection and assessment tools are introduced to guide and focus instruction. They suggest that these examples may serve as helpful guides for thinking about other areas of curriculum and professional learning and explain what the implications might be at the levels of the individual student, the class, the system, and across systems. They also suggest that,

Any CLIP will initially have its shortcomings and should be treated as an initial hypothesis to be tested and as a set of processes and procedures that need to be improved gradually through attention to design. It is important that the data generated through implementing the CLIP be collected and systematically analyzed and evaluated and that there be mechanisms for updating the critical path and for making improvements to processes and procedures. That is, after all, what the whole notion of improvement by design is all about (Fullan, Hill and Crevola, 2006, p. 80).

Another example of this orientation, with a more explicit focus on professional development, is the Professional Development Pathways Model (PDPM) described by Lieberman & Wilkins (2006). Field tested with rural, urban, suburban and elementary, middle and secondary school districts in Illinois, this model infused many of the core considerations of effective professional development (discussed earlier) integrated in the four recommended steps outlined below.
**Step 1:** Assess the needs. Start by consulting the school improvement plan (SIP) to determine critical areas that need to be addressed. Next conduct a needs assessment to determine individual needs. Then filter the assessment results through three lenses: adult learning theory, teacher development levels and state certification requirements.

**Step 2:** Determine the appropriate professional development pathways. The pathways allow faculty and staff members’ options to select individualized grade-level, subject-area, and team-based professional development opportunities. The pathways need to be aligned with areas of improvement defined in the SIP, results from needs assessment, as well as the professional development standards created by NSDC (2001). The PDP Model provides three broad choices for teachers that are not mutually exclusive:
- √ School-wide training or information sessions, appropriate when all stakeholders need to receive similar information.
- √ Grade level, content area or team development, in which teams have freedom to determine strategies that best fit their needs.
- √ Individual choice options, such as inquiry and individually guided activities.

**Step 3:** Reflect. Over the past decade, standards for teachers and administrators have been drafted and refined. Each set acknowledges the role of reflection as one vehicle through which faculty members can revise their practice to improve teaching and learning. Reflections should include an emphasis on the relationship between the professional development provided and the impact on student learning.

**Step 4:** Revisit the SIP. In addition to using reflection as a strategy for improving teaching and learning, the technique also should be used to determine the next steps toward addressing the larger needs of the school. At this point, it is time to revisit the SIP and PDP process starts again.

In each of the above examples, explicit attention is given to professional development in relation to student learning within, and among, classrooms schools, communities, and systems. These examples are integrated and multi-faceted. While it is too early to see results of these approaches, early observations are revealing some important outcomes (e.g. improvements in student learning, more precision in teachers’ use of particular instructional strategies and understanding of learning pathways, increased collaborative support to provide a safe environment for professional dialogue and experimentation, a richer mix of professional development opportunities and practices, a deepened focus upon teachers’ own learning needs and consideration of new responsibilities within the school context, improved strategies for monitoring improvement in relation to student and teacher learning, better coherence between learner and broader system goals and support).
CONCLUDING REFLECTIONS

The limitations of traditional forms of PD point to the need for a richer repertoire of professional development opportunities for experienced teachers. PD frameworks and practices will need to be respectful of the emerging literature that highlights the complexity and multifaceted nature of teaching excellence and the professional learning process, what we might refer to as “teaching with deep understanding.” This more comprehensive orientation signals a change in both conceptualizing and realizing the breadth, depth, and diversity of professional development throughout the duration of a teacher’s career. This section offers some concluding reflections as a way of illuminating what we believe to be a range of significant matters. We are deliberately avoiding simplistic assertions that could not be substantiated by evidence.

Professional development needs to be, first and foremost, attentive and responsive to student learning and performance. It needs to attend to authentic themes and issues in the day-to-day work of teachers in relation to student learning and be respectful of those theoretical and technical knowledge bases that inform the act of teaching.

Professional development for experienced teachers should not be viewed as part of a simple linear process. Experienced teachers have variant forms of professional expertise and preferred ways of learning. Mid-career is a time for consolidation, synthesis and integration of many kinds of knowledge as well as a time for experimentation and exploration to improve skills and deepen understanding. Frequently, sharing knowledge with others is a feature of professional learning for experienced teachers.

Motivation theories support the need for relevance, self-direction, purpose and meaning in the learning of experienced teachers. A richer and more integrated mix of sustained and ongoing professional development practices is needed. Furthermore, these practices need to carefully consider ‘fitness of purpose’ (congruency between learning goals and learning strategies) and encourage collaborative professional (peer and expert) support and problem solving in relation to student learning and school context. There is extremely compelling evidence in the literature that mandated, discrete events that are unrelated to student learning, the context or learning needs of teachers do not encourage sustained, internalized professional learning and/or change in practice.

There have been many efforts by many jurisdictions around the globe to define professional standards for teachers. Most of these standards place student learning at the core and outline some form of quality teaching and competence in planning, instruction and assessment, understanding of development and student learning, communication skills and professional and ethical characteristics including ongoing professional learning. An articulated set of professional development standards is helpful in guiding both professional and organizational professional development decisions, assessment, and accountability. These standards, however, need to be transparent, meaningful, and manageable. It is also important to keep in mind that delineating standards may reduce teaching to a checklist and/or a narrow set of technical skills if care is not taken when considering the use of standards so that the potential for depth and complexity in understanding and practice is not restricted.

Evaluation must be seen as an integral part of the continuous process of professional learning. Few studies, however, have attempted to determine the effectiveness of professional development in relation to student learning. Indeed, recent research calls for greater attention and effort in this key, but complex, area. Principles of effective assessment indicate that: expectations must be clear from the outset, there must be multiple opportunities and ways for learners to demonstrate
understanding, evidence and methods must be appropriate for the learning to be assessed and the information gained should be utilized to support the learner and to inform next steps for learning. There is a tendency to use assessment mechanisms that are based more on record keeping and administration than on providing teachers with high quality professional learning experiences that encourage diagnostics, feedback, and reflection on their practices. A profile assessment approach perhaps best reflects a broad continuum of professional development rather than a simple temporal framework of experience.

Lastly, it is critical that professional development for experienced teachers not be viewed as a ‘one-off’ activity. There needs to be a sustained timeframe that is, where possible, built into the ongoing work of teaching (job-embedded) and sensitive to workplace conditions. Professional development delivery processes and practices need to be attentive to broader change processes and respectful of teachers’ professional jurisdiction and responsibility. While providing effective and meaningful professional development for teachers is a challenging and multifaceted enterprise, it must be seen as being at the core of teachers’ professional work as they develop expertise and efficacy in their practice in the service of students.
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Teachers College Press.


Appendix 1
Teacher Excellence — Unlocking Student Potential Through Continuing Professional Development (MOE)
www.edu.gov.on.ca/eng/general/ellemsec/partnership/potential.html

Fifth in a series of mini discussion papers prepared for the Education Partnership Table to permit wide input to the direction of education in Ontario.

Introduction

The McGuinty government accepts the responsibility to ensure that Ontario has a highly skilled and highly motivated workforce in our schools. Ontario has 116,000 full-time and 20,000 part-time and occasional teachers in publicly funded schools with instructional responsibility for just under two million students, as well as 60,000 education support workers. Influencing their well-being and effectiveness is clearly one of the most important priorities for the Ministry of Education and its partner school boards.

This paper is concerned with the ongoing continuing professional development of our teaching corps. Continuing professional development for teachers is about reinforcing all the dimensions of good teaching throughout a teacher’s career. This paper sets out some of the principles and ideas that the ministry is considering for a new teacher excellence program for Ontario teachers. We recognize the professional development needs of principals, senior administrators, educational assistants and others. Although these are not dealt with in this paper, we expect to consider them in the future. A discussion paper focussed on the role of the principal is planned for the fall of 2004.

It is important to acknowledge that there are many other factors beyond individual skills and capability that influence the effectiveness of teaching. The state of the education workplace includes factors such as the quality of leadership in the school, the availability of supporting resources, the quality of the curriculum and the strategies being used by the school and the system. The government, therefore, recognizes its work to improve these factors as also being vital to ensuring overall teaching excellence.

The underlying principle for our approach to teacher development is that teachers must at all times be respected as professionals, deserving the same respect as other professionals.

As a result, we reject outright the overly formalized and controlled PLP or Professional Learning Program unilaterally imposed by the past government. The program was not respectful of teachers and exceedingly prescriptive. It created a unique professional jeopardy by tying a particular set of courses to the revoking of the licence to teach. Our Bill 82, currently before the Legislature, proposes to end this approach altogether.

Our outlook is for policies that will see as many teachers as possible engaged in professional development, appropriate to their daily challenges and the stage of their career, by streamlining and making better sense of existing processes.

We believe the time is very opportune for a discussion with our partners about how teachers can best be supported in their professional growth. Teachers, the Ministry of Education, school boards, teacher federations, a revitalized College of Teachers, the faculties of education, subject associations, principals, diverse entities such as TVOntario, as well as students, parents and the public, all have important perspectives and roles to play. While consultations on this paper occur, this government has a number of new initiatives. We are offering a summer development program for up to 9,000 JK to Grade 3 classroom teachers in literacy and numeracy across the province in August this year. During the 2004-2005 school year, we will increase the number of specially trained lead teachers in JK to Grade 6 literacy and numeracy from 8,000 to 16,000. These teachers will be exposed to the best practices and most effective techniques. We are also setting up a new literacy and numeracy secretariat that will ensure that teachers and principals...
get the supports they need when they need them.

In the secondary panel, new student success leaders at every board are coordinating training for thousands of high school teachers to implement initiatives to help students at risk. The Report of the Expert Panel on Math Success for Grades 7-12 was recently released and Student Success Leaders are being provided professional resources and support to lead implementation in their school boards, including opportunities for interaction and teamwork among professionals.

**Status of teacher development**

It is vital to note that compared to its own past and to many other jurisdictions, Ontario is fortunate to have highly qualified teachers. Where once teachers were only required to have a single year after high school, now virtually all teachers have a university degree and a bachelor in education. Our faculties of education enjoy a high level of competition for spots; in 2004, over 15,000 applicants are vying for 7,000 positions.

There has been a strong tradition of ongoing professional development in a variety of forms, with as many as 85 per cent of teachers engaged in some kind of professional improvement through formal courses or workshops.

At the same time, the conflict of the last eight years within education has undoubtedly been a setback in the strength of teacher support. There are strong indications of the need for additional support for teachers. The loss rate of new teachers is high, with about one-third in the first five years exiting the profession. The strains upon teaching are also manifested in disability leaves, which have doubled since 1991, and depression rates, in particular, which have been identified as one-third higher than in other professions.

The challenges of teaching have certainly not stood still. Teaching students today is very different than in previous generations. There are much higher expectations by students, families and society. Students need to know more now than ever before to succeed. Yet, students are also less in awe of authority than in previous generations. Like never before, there is a broader diversity of students, both culturally and in terms of how they learn. Since 1990, an average of 225,000 immigrants of all ages arrive in Canada every year of whom 60 per cent come to Ontario. In Ottawa, Kitchener, Hamilton, London and Windsor, up to 10 per cent of the school-age population have a home language other than English or French. In Toronto, this figure is over 20 per cent. Progressive integration policies mean that classes are composed of greater numbers of students with special educational needs than in the past.

We also know that more than 32 per cent of Ontario teachers will be retiring over the next 10 years, continuing an accelerated rate of turnover as a disproportionate number have been reaching retirement age. Some 10,000 new teachers enter Ontario's classrooms every year. This represents a significant challenge, given the loss of experience to Ontario students, but also an opportunity to get teacher development right with high dividends in both increased retention and confidence on the part of new teachers.

**Formal education of teachers (Pre-service)**

Given the new educational challenges, there is a growing consensus that the preparation for most Ontario teachers is too brief to be fully effective. About three-quarters of our new teachers have just one year's specific education preparation following their university degree. However, there will be a high demand for the foreseeable future due to the combination of high retirement levels and new government initiatives, such as smaller class sizes, leading to concerns about teacher supply.

As an alternative to a two-year program, the government is interested in exploring the need for a more formalized learning component to the first year of practice. A first-year induction program could form a natural area for collaboration between faculties of education and school systems and most importantly a more confident entry for new teachers. The College of Teachers has published a useful paper in this regard, albeit for a two-year program.

Having an entry test to teaching is consistent with our approach of treating teachers as responsible
professionals and is helpful to ensure student familiarity with Ontario curriculum and provincial education objectives. There is significant prospect for improvement, however, in the convenience for teacher candidates and the relevancy of the test. Instead of the ministry having responsibility for the test, we propose a revitalized College of Teachers could work collaboratively with the faculties of education. The test could be redesigned to ensure there is a core of common learning without homogenizing our diverse teacher preparation programs. Potentially, the test could be moved to after the end of the first practice or "induction" year.

**Mentoring of new teachers**

The 20 to 30 per cent of new teachers exiting the profession with less than three years represent not only a very significant lost potential, but also a financial cost to government of $21 million for every year that was spent on faculty subsidies, and another $14 million annually from wasted recruitment and hiring costs.

The government believes that effective mentoring programs over that period are vital to improve new teacher retention and development for beginning teachers. Our experienced teachers are held in very high regard and are valued for the professional support they give to new teachers. Those willing to act as mentors for new teachers would be supported with release time and other resources to permit beneficial reviews and the ongoing exchange of information and ideas. This year, we propose to work with boards to design a mentoring program for new teachers.

Currently, fewer than 20 per cent of Ontario's new teachers participate in a formal mentoring program. The existing informal mentorship and pre-service teaching is highly valued by teachers, cited right after their own job experience as a source of skills and knowledge.

**Professional standards**

Once "trained," what obligation should a teacher feel towards ongoing professional development? As far as our government is concerned, that is a question that has to be answered by teachers in their capacity as professionals. As the current standards of practice of the College indicate: "members of the Ontario College of Teachers are learners who acknowledge the interdependence of teacher learning and student learning. They engage in a continuum of professional growth to improve their practice."

Does this standard need to be enforced in any way? Our government rejects the idea of licensing sanctions. Some professional colleges set quality designations that have to be maintained by their members or the extra designations are lost. We look forward to having a revitalized College of Teachers consider this question and find ways to recognize teachers' continuing professional development.

How then does the government ensure that we have good teachers? We believe that a fair and effective evaluation process at schools, one that ties in more strongly to personal growth for teachers, is far better for the public interest than any artificial sanctions.

Schools and school boards should report the amount and quality of teacher development as one of their indicators of success. Teachers can also record their development activities in an annual learning plan and a portfolio.

**Formal opportunities (In service)**

"The most valuable professional development is embedded in the on-going life of the school."


One of the many flaws of the PLP was its disconnect from the everyday working lives of teachers and students at local schools.

We would like to see existing teacher development programs, like annual learning plans, professional
development days and additional qualifications, harmonized and made relevant to the challenges that teachers face at the schools where they work.

School-improvement needs, as well as board and ministry strategies at work in a particular school, should be drivers for teacher development, but in ways that respect teacher autonomy.

In harmonizing existing programs, individual teachers would be significantly free to choose courses or other development opportunities to meet their own needs and the needs of their school. A personal development portfolio could be maintained that would be subject to outside review at the time of evaluation. Mentors can help shape development choices for beginning teachers and principals could participate through the appraisal program.

School systems and the ministry can impact development through professional development days and programs that they provide to staff.

**Teacher appraisal program and its relationship to development**

The current teacher appraisal program should be reformatted to orient it more towards teacher growth and development.

Currently, the program is overly complex and time consuming in the accountability aspect while de-emphasizing personal development. Principals and staff alike report that so much time is spent on the formal process that the gains from meaningful discussion and exploring possibilities are lost.

The annual learning plan should recognize teachers' own high professional standards and responsibility for ongoing learning. It should take on more importance, as a way for constructive discussion among teachers about teacher development needs and opportunities. Principals would only take more of a role in influencing these plans if teachers are struggling or under review. In general, an increased priority has to be given to helping teachers overcome challenges. The current system is so structured in timelines, requiring improvement for example in 60 school days, as to almost preclude real development for teachers who need to address problems. While it is important to have some means of dealing with the small number who cannot reach standards, the first priority should be on helping teachers meet standards and succeed.

**Additional qualifications**

Teachers spend $22 million dollars a year taking more than 22,000 Additional Basic Qualifications (ABQ) and Additional Qualification (AQ) courses annually. The courses are recognized by the College of Teachers and are reflected as part of the salary grid. A teacher with 11 years of experience, the maximum recognized by a typical salary grid, receives 26 per cent more salary if he or she has completed the maximum range of AQ type courses compared to another teacher with the same experience who has completed none at all. The provincial government provides a special grant to recognize the impact of experience and qualifications on board payrolls.

Prior to 1993, the Ministry of Training, Colleges and Universities had provided support for teachers seeking to enhance their qualifications. However, since that time, educators have been responsible for paying the cost of the courses themselves. It is clear they are motivated to take courses that are best for them. Yet, according to some teachers, the AQs and ABQs are dated and in need of revision so that current issues, such as assessment and evaluation, can be addressed in a meaningful way. It would make sense to have some connection to the annual learning plans for teachers. Boards and the ministry should also have some influence at least on the range of choices, so there can be a connection to school and system improvement.

The difficulty with the current system is that somewhere before mid-career, the direct incentive for development runs out as teachers maximize the incentive. Some would also argue that the incentive system runs counter to the professional obligation of teachers to take courses for their own sake.
**Professional activity / Professional development days**

In 1998, the previous government reduced teacher Professional Activity Days from nine to four, just as they were introducing an entirely new curriculum. Time used for professional development activities was taken over by report card writing, parent teacher meetings and semester turnaround time.

Effectively, two days out of 194 in the school year do not allow principals and their staff to keep up. In the absence of enough days, the opportunities for shared problem solving, team learning and learning communities suffered. This is particularly important, recognizing that development is not just acquiring knowledge or teaching skills, but sustaining motivation and innovation as well. Many boards have resorted to early dismissal days to make up the gap, but this still requires transportation arrangements and the inconvenience of arranging childcare for parents.

Our government wishes to introduce new collaborative strategies for a range of goals, beginning with literacy and numeracy and student success in high schools, but eventually including daily physical activity and arts in education and other elements. Each requires teacher engagement and training on an ongoing basis. Therefore, we want to explore with boards and teacher federations the idea of four days dedicated to professional development, while two separate days are recognized as professional activity to cover other needs. Implementing common PD days and activities is also something that we have been asked to consider.

The decision would be a consequential one; while not requiring more money, each PD day represents $41 million in cost to the system and, of course, inconvenience to students and parents. Respecting that, teachers would be required to participate in professional development activities on those days.

**Experienced teachers**

There are few external incentives for experienced teachers to continue with professional development. The government is prepared to look at special opportunities, such as enhanced ability to undertake sabbaticals, masters programs, work exchange or complementary experience, as well as the aforementioned mentoring program, to help keep valuable teachers engaged and up to date.

**Informal opportunities**

A great deal of valuable professional development is gained from informal activities such as:
- Improving personal technology skills;
- Academic programs;
- Participating in subject associations and curriculum development;
- Federation seminars and workshops;
- Applied research;
- Collaborating with other teachers;
- Collaborating with outside organizations; and
- Extracurricular activities.

We want the value of these kinds of activities to be recognized. Including them in an annual learning plan and a portfolio helps to raise awareness and gives some professional recognition to efforts made for professional growth. Consideration could also be given by the government to recognize out-of-pocket expenses by teachers as tax credits.

**Internationally trained professionals**

A new orientation program for teachers qualified outside of Ontario is being developed to lower barriers for internationally trained professionals. This government-funded initiative is being implemented through a multiple partnership of the Ontario Teachers' Federation, the Ontario College of Teachers, Skills for Change, LASI/ World Skills, and also with support from school boards and faculties.
The ministry is vitally interested in making progress in this area, so that the significant skills and talents of these teachers can be put to use in helping students achieve success.

**Funding**

The average spending on training across all sectors has been reported as $776 per employee, whereas the ministry has been spending about $319.

The Ministry of Education provides $37 million annually for general staff development through board grants, but will invest in 2004-05 at least another $50 million for dedicated programs, or the equivalent of an additional $430 per teacher.

**Path forward**

We welcome input from all parts of the education sector and the public. Our goal is to create a program that has every teacher in publicly funded education reaching her or his potential.

Once our plan is finalized, special discussions will be needed with a variety of stakeholders, such as school boards, teacher federations, faculties of education and a revitalized College of Teachers, and a special implementation task force will be formed to that effect.

**About Ontario education discussion papers**

These papers are prepared by the Ministry of Education to solicit ideas and solutions to combat challenges facing Ontario students before formal policy decisions are made by the ministry. They are discussed by the Education Partnership Table, which is composed of provincial representatives from several education stakeholder groups, including parents, students, teachers, trustees, principals, education support workers and other components of the education sector. Members of the table assist in problem solving discussions at meetings and help to disseminate papers to their respective members and solicit their feedback.

The ministry also invites input directly from the public. Parents, students, teachers and those interested are invited to join the interactive Ontario Provincial Education Network (OPEN) online and register to receive electronic updates on important education initiatives, meeting notices and opportunities to provide instant feedback on proposed policies. This way, perspectives are continuously represented from education stakeholders across the province.
Appendix 2
Teacher Growth, Supervision and Evaluation Policy and the Teaching Quality Standard Applicable to the Provision of Basic Education in Alberta (Alberta)


‘Excerpts’ from Policy 2.1.5 - Teacher Growth, Supervision and Evaluation

BACKGROUND

The Teacher Growth, Supervision and Evaluation Policy aims to ensure that each teacher’s actions, judgments and decisions are in the best educational interests of students and support optimum learning. School authorities, Early Childhood Services (ECS) operators, superintendents, principals and teachers are responsible for facilitating quality improvement through each teacher’s career-long professional growth.

POLICY

School authorities, ECS operators, superintendents, principals and teachers must work together to achieve the teaching quality standard. All teachers are expected to practice consistently in keeping with the standard.

STATUTE

School Act

s.18 Teachers
s.20 Principals
s.22 School council
s.28(2) Private schools
s.30(1)(2) Early childhood services program
s.39(3) Teacher evaluation
s.93 Qualifications re supervisory position
s.94 Certification of teachers
s.105 Suspension of teacher
s.106 Termination of contract
s.107 Termination by board
s.108 Termination by teacher
s.109 Notice of termination
s.113(4) Superintendent of schools

Teacher Growth

3 A teacher employed by a school authority or ECS operator:
(a) under a probationary contract or continuing contract, or
(b) under other provisions of the School Act if required by the policy of the school authority or ECS operator, is responsible for completing during each school year an annual teacher professional growth plan that:
(i) reflects goals and objectives based on an assessment of learning needs by the individual teacher,
(ii) shows a demonstrable relationship to the teaching quality standard, and
(iii) takes into consideration the education plans of the school, the school authority and the Government, or the program statement of an ECS operator;
(c) must submit for review or approval at a time specified in the policy that annual teacher professional
growth plan to:
(i) the principal, or
(ii) a group of teachers delegated by the principal, if such delegation is provided for in the policy.

4 An annual teacher professional growth plan:
(a) may be a component of a long-term, multi-year plan; and
(b) may consist of a planned program of supervising a student teacher or mentoring a teacher.

5 At a time specified in the policy, a teacher must provide a completed annual teacher professional growth plan to the principal or to the persons referred to in Procedure 3(c) for review and the person or persons conducting the review, in consultation with the teacher, must make a finding whether the teacher has completed an annual teacher professional growth plan that complies with Procedure 3.

6. If a review under Procedure 5 finds that a teacher has not completed an annual teacher professional growth plan as required, the teacher may be subject to disciplinary action as defined in the policy.

7. Unless a teacher agrees, the content of an annual teacher professional growth plan must not be part of the evaluation process of a teacher under Procedures 9(c) and 10.

8. Despite Procedure 7, a principal may identify behaviours or practices that may require an evaluation under Procedure 9(c) provided that the information identified is based on a source other than the information in the annual teacher professional growth plan of the teacher.

‘Excerpts’ from Directive 4.2.1 - Teaching Quality Standard Applicable to the Provision of Basic Education in Alberta

(3) Descriptors of Knowledge, Skills and Attributes Related to Permanent Certification

Teachers who hold a Permanent Professional Certificate must demonstrate, in their practice, professional repertoires that are expanded beyond the Interim KSAs.

The following descriptors comprise a repertoire of selected knowledge, skills and attributes from which teachers who hold a Permanent Professional Certificate should be able to draw, as situations warrant, in order to meet the Teaching Quality Standard. Teachers, staffs, supervisors and evaluators should use the descriptors to guide professional development, supervision, evaluation and remediation strategies in order that teachers can meet the Teaching Quality Standard consistently throughout their careers.

a) Teachers’ application of pedagogical knowledge, skills and attributes is based in their ongoing analysis of contextual variables.

Teachers’ analysis of contextual variables underlies their reasoned judgments and decisions about which specific pedagogical skills and abilities to apply in order that students can achieve optimum learning. Selected variables are outlined below.

student variables

• demographic variables, e.g. age, gender
• maturation
• abilities and talents
• relationships among students
• subject area of study
• prior learning
• socio-economic status
• cultural background
• linguistic variables
• mental and emotional states and conditions
• Government Organization Act
• School Act and provincial regulations, policies and Ministerial Orders
• Child Welfare Act
• Canadian Charter of Rights and Freedoms
• school authority policies
• Guide to Education
• programs of study
  • school variables
  • parent and societal variables
• resource availability and allocation
• teaching assignment
• class size and composition
• collegial and administrator support
• physical plant
• physical plant
  • teacher variables
• teaching experience
• learning experiences
• parental support
• parental involvement in children’s learning
• socio-economic variables
• community support for education
• multiculturalism
• cultural pluralism
• inter-agency collaboration
• provincial, national and global influences

b) Teachers understand the legislated, moral and ethical frameworks within which they work.
Teachers function within a policy-based and results oriented education system authorized under the School Act and other legislation.

Teachers also function within policy frameworks established by school authorities. This includes policies which require: a commitment to teaching practices that meet their school authority’s teaching quality standard(s); and that teachers engage in ongoing, individualized professional development.

Teachers recognize they are bound by standards of conduct expected of a caring, knowledgeable and reasonable adult who is entrusted with the custody, care or education of students or children. Teachers recognize their actions are bound in moral, ethical and legal considerations regarding their obligations to students, parents, administrators, school authorities, communities and society at large. Teachers acknowledge these obligations and act accordingly.

c) Teachers understand the subject disciplines they teach.
Teachers understand the knowledge, concepts, methodologies and assumptions of the subject disciplines they teach. This includes an understanding of how knowledge in each discipline is created and organized, and that subject disciplines are more than bodies of static facts and techniques - they are complex and evolving. Their understanding extends to relevant technologies, the linkages among subject disciplines, and their relevance and importance in everyday life at the personal, local, national and international levels.

Teachers understand that students typically bring preconceptions and understandings to a subject. They know strategies and materials that are of assistance in furthering students’ understanding.
d) **Teachers know there are many approaches to teaching and learning.**
Teachers appreciate individual differences and believe all students can learn, albeit at different rates and in different ways. They recognize students’ different learning styles and the different ways they learn, and accommodate these differences in individuals and groups of students including students with special learning needs.

Teachers understand the fluidity of teaching and learning. They constantly monitor the effectiveness and appropriateness of their practices and students’ activities, and change them as needed.

e) **Teachers engage in a range of planning activities.**
Teachers’ plans are founded in their understanding of contextual variables and are a record of their decisions on what teaching and learning strategies to apply. Plans outline a reasoned and incremental progression toward the attainment of desired outcomes, for both teachers and students. Teachers monitor the context, their instruction, and monitor and assess students’ learning on an ongoing basis, and modify their plans accordingly.

Teachers strive to establish candid, open and ongoing lines of communication with students, parents, colleagues and other professionals, and incorporate information gained into their planning.

f) **Teachers create and maintain environments that are conducive to student learning.**
Teachers establish learning environments wherein students feel physically, psychologically, socially and culturally secure. They are respectful of students’ human dignity, and seek to establish a positive professional relationship with students that is characterized by mutual respect, trust and harmony. They model the beliefs, principles, values, and intellectual characteristics outlined in the Guide to Education and programs of study, and guide students to do the same.

Teachers work, independently and cooperatively, to make their classrooms and schools stimulating learning environments. They maintain acceptable levels of student conduct, and use discipline strategies that result in a positive environment conducive to student learning. They work with students to establish classroom routines that enhance and increase students’ involvement in meaningful learning activities. They organize facilities, materials, equipment and space to provide students equitable opportunities to learn, and to provide for students’ safety.

Where community members work with students either on-campus or off-campus and where students are engaged in school-sponsored off-campus activities, teachers strive to ensure these situations also are secure and positive environments conducive to students’ learning.

g) **Teachers translate curriculum content and objectives into meaningful learning activities.**
Teachers clearly communicate short and long range learning expectations to students, and how the expectations are to be achieved and assessed. They engage students in meaningful activities that motivate and challenge them to achieve those expectations. They integrate current learning with prior learning, and provide opportunities for students to relate their learning to the home, community and broader environment.

Teachers apply a broad range and variety of instructional and learning strategies. The strategies vary in keeping with contextual variables, subject content, desired objectives, and the learning needs of individuals and groups of students. The strategies are selected and used to achieve desired outcomes, primarily the expectations outlined in the Guide to Education, programs of study and other approved programs.

h) **Teachers apply a variety of technologies to meet students’ learning needs.**
Teachers use teaching/learning resources such as the chalkboard, texts, computers and other auditory, print
and visual media, and maintain an awareness of emerging technological resources. They keep abreast of advances in teaching/learning technologies and how they can be incorporated into instruction and learning. As new technologies prove useful and become available in schools, teachers develop their own and their students’ proficiencies in using the technologies purposefully, which may include content presentation, delivery and research applications, as well as word processing, information management and record keeping.

Teachers use electronic networks and other telecommunication media to enhance their own knowledge and abilities, and to communicate more effectively with others.

i) Teachers gather and use information about students’ learning needs and progress.
Teachers monitor students’ actions on an ongoing basis to determine and respond to their learning needs. They use a variety of diagnostic methods that include observing students’ activities, analysing students’ learning difficulties and strengths, and interpreting the results of assessments and information provided by students, their parents, colleagues and other professionals.

Teachers select and develop a variety of classroom assessment strategies and instruments to assess the full range of learning objectives. They differentiate between classroom and large-scale instruments such as provincial achievement tests, administer both and use the results for the ultimate benefit of students. They record, interpret and use the results of their assessments to modify their teaching practices and students’ learning activities.

Teachers help students, parents and other educators interpret and understand the results of diagnoses and assessments, and the implications for students. They also help students develop the ability to diagnose their own learning needs and to assess their progress toward learning goals.

Teachers use their interpretations of diagnoses and assessments as well as students’ work and results to guide their own professional growth. They assist school councils and members of the community to understand the purposes, meanings, outcomes and implications of assessments.

j) Teachers establish and maintain partnerships among school, home and community, and within their own schools.
Teachers engage in activities that contribute to the quality of the school as a learning environment. They work with others to develop, coordinate and implement programs and activities that characterize effective schools. They also work cooperatively with school councils.

Teachers strive to involve parents in their children’s schooling. Partnerships with the home are characterized by the candid sharing of information and ideas to influence how teachers and parents, independently and cooperatively, contribute to students’ learning.

Teachers seek out and incorporate community resources into their instruction, and encourage students to use home and community resources in their learning. Teachers make connections between school, home and community in order to enhance the relevance and meaning of learning. Home and community resources are utilized to make learning meaningful and relevant, and so students can gain an increased understanding of the knowledge, skills and attitudes needed to participate in and contribute positively to society.

k) Teachers are career-long learners.
Teachers engage in ongoing professional development to enhance their understanding of and ability to analyze the context of teaching; ability to make reasoned judgments and decisions; and, pedagogical knowledge and abilities. They recognize their own professional needs and work with others to meet those needs. They share their professional expertise to the benefit of others in their schools, communities and profession.
Teachers guide their actions by their overall visions of the purpose of teaching. They actively refine and redefine their visions in light of the ever-changing context, new knowledge and understandings, and their experiences. While these visions are dynamic and grow in depth and breadth over teachers’ careers, the visions maintain at their core a commitment to teaching practices through which students can achieve optimum learning.
Appendix 3

Standards of Practice for the Teaching Profession (OCT)

On June 8, 2006, the Council of the Ontario College of Teachers approved new versions of the Standards of Practice for the Teaching Profession and the Ethical Standards for the Teaching Profession.

The new standards describe a culture of care, support and meaningful instruction for students, an ethic of professionalism and a shared environment of responsibility with other educational partners - all reflecting the desire to create a community of lifelong learners.

The Standards of Practice for the Teaching Profession

Introduction

The Standards of Practice for the Teaching Profession provide a framework of principles that describes the knowledge, skills, and values inherent in Ontario’s teaching profession. These standards articulate the goals and aspirations of the profession. These standards convey a collective vision of professionalism that guides the daily practices of members of the Ontario College of Teachers.

The Purposes of the Standards of Practice for the Teaching Profession are:

• to inspire a shared vision for the teaching profession
• to identify the values, knowledge and skills that are distinctive to the teaching profession
• to guide the professional judgment and actions of the teaching profession
• to promote a common language that fosters an understanding of what it means to be a member of the teaching profession.

The Standards of Practice for the Teaching Profession are:

Commitment to Students and Student Learning

Members are dedicated in their care and commitment to students. They treat students equitably and with respect and are sensitive to factors that influence individual student learning. Members facilitate the development of students as contributing citizens of Canadian society.

Professional Knowledge

Members strive to be current in their professional knowledge and recognize its relationship to practice. They understand and reflect on student development, learning theory, pedagogy, curriculum, ethics, educational research and related policies and legislation to inform professional judgment in practice.

Professional Practice

Members apply professional knowledge and experience to promote student learning. They use appropriate pedagogy, assessment and evaluation, resources and technology in planning for and responding to the needs of individual students and learning communities. Members refine their professional practice through ongoing inquiry, dialogue and reflection.

Leadership in Learning Communities

Members promote and participate in the creation of collaborative, safe and supportive learning communities. They recognize their shared responsibilities and their leadership roles in order to facilitate student success. Members maintain and uphold the principles of the ethical standards in these learning communities.
Ongoing Professional Learning
Members recognize that a commitment to ongoing professional learning is integral to effective practice and to student learning. Professional practice and self-directed learning are informed by experience, research, collaboration and knowledge.

Inquiry (Resource Kit)

The College created the Standards of Practice resource kit (*Standards in Practice: Fostering Professional Inquiry*) to support the integration of the standards through professional inquiry. It provides a practical inquiry-based resource for teacher education.

The kit was developed to encourage teachers to reflect upon and explore their practice in order to enhance it. It offers a variety of reflective strategies that include cases, an interactive script and ethical decision-making guide along with descriptive booklets and guides for integrating the Standards of Practice.

Developed by educators for educators, the resources in this kit offer diverse ways for educators to reflect on their practice and provide meaningful engagement with the standards.
- Facilitator's Handbook
- Booklet 1: Casework Inquiry for Educators
- Booklet 2: Exploring Ethical Knowledge Through Inquiry
- Booklet 3: Reflecting on Practice Through a Case Script
- Booklet 4: Standards Review Discussion Guide
- School Assessment: the Act of a Professional by Dany Laveault
Appendix 4
The Ethical Standards for the Teaching Profession (OCT)

Introduction

The Ethical Standards for the Teaching Profession represent a vision of professional practice. At the heart of a strong and effective teaching profession is a commitment to students and their learning.

Members of the Ontario College of Teachers, in their position of trust, demonstrate responsibility in their relationships with students, parents, guardians, colleagues, educational partners, other professionals, the environment and the public.

The Purposes of the Ethical Standards for the Teaching Profession are:
• to inspire members to reflect and uphold the honour and dignity of the teaching profession
• to identify the ethical responsibilities and commitments in the teaching profession
• to guide ethical decisions and actions in the teaching profession
• to promote public trust and confidence in the teaching profession.

The Ethical Standards for the Teaching Profession are:

Care

The ethical standard of Care includes compassion, acceptance, interest and insight for developing students' potential. Members express their commitment to students' well-being and learning through positive influence, professional judgment and empathy in practice.

Respect

Intrinsic to the ethical standard of Respect is trust and fair-mindedness. Members honour human dignity, emotional wellness and cognitive development. In their professional practice, they model respect for spiritual and cultural values, social justice, confidentiality, freedom, democracy and the environment.

Trust

The ethical standard of Trust embodies fairness, openness and honesty. Members' professional relationships with students, colleagues, parents, guardians and the public are based on trust.

Integrity

Honesty, reliability and moral action are embodied in the ethical standard of Integrity. Continual reflection assists members in exercising integrity in their professional commitments and responsibilities.
Appendix 5
Professional Learning Framework for the Teaching Profession (OCT)

Between August 1997 and April 1998, consistent with its role to establish, a provincial professional learning framework to support standards of practice and promote continuing competence among members of the College, the Standards of Practice and Education Committee examined the principles of teachers' ongoing learning.

The committee developed principles that honoured flexibility and adaptability to members' multiple learning styles and preferences. To impact on classroom practice, a program of ongoing professional learning must be accessible, valued and relevant to the members themselves. The literature review substantiated the College's direction with themes that underlined the importance of self-directed learning and teacher choice. For example:
• Teacher learning is supported and stimulated through holistic integration of all dimensions of teacher development.
• Teachers are aware of the moral and social purposes in their teaching and the impact their teaching has.
• Teachers learn from other teachers.

With encouragement to personally select ongoing and dynamic learning activities, College members were acknowledged as self-directed learners who anticipated how their own professional learning could be integrated in a meaningful way into their practices.

As well, a focus on collaboration and shared knowledge would encourage long-term commitment to professional growth.

With these goals in mind, the College held a series of focus groups.
1 Series A included representatives from the Ontario Teachers' Federation (OTF) and each of the affiliates and members of faculties of education.

A French-language focus group included representatives from the six regional teacher centres.
2 Series B brought together elementary, secondary, Native, Catholic, French-language independent and public school educators along with trustees, parents and faculty representatives at:
  ◦ Nipissing University (Northwestern Region)
  ◦ Queen's University (Eastern Region)
  ◦ University of Western Ontario (Western Region) and
  ◦ Ontario College of Teachers (Central Region).

The themes resulting from this consultation reinforced the need for:
• linking theory and practice
• practical but also social skills
• reflection
• a focus on diversity
• professional learning that is autonomous and self-directed.

The College gathered and analysed data from the focus groups, a survey pre-test and hundreds of written responses.

In addition, a Professional Learning Survey was conducted by York University with 800 English-speaking and 70 French-speaking randomly selected classroom teachers.

Results from 510 returned questionnaires revealed that, as teachers became more experienced, their interests in professional learning became more focused and their school culture encouraged professional learning.
In general, these respondents said they were actively involved in a variety of learning programs both formally and informally.

Only 15 per cent felt professional development days provided most of the professional learning needed in a typical year.

On April 8, 1999, the Standards of Practice and Education Committee approved a draft Professional Learning Framework for the Teaching Profession. To solicit feedback, over 300 copies of the draft document were mailed to members of the public and the educational community in Ontario who had participated in the development of the framework.

Although the committee indicated that the ongoing consultations and feedback were positive, they determined additional feedback would be valuable. They passed a resolution that extended feedback for the Professional Learning Framework for the Teaching Profession until December 31, 1999.

On August 25, 2000, the Standards of Practice and Education Committee passed the Professional Learning Framework for the Teaching Profession that was subsequently approved by Council at the October 12-13, 2000 meeting.

The Professional Learning Framework for the Teaching Profession

Ontario College of Teachers is the self-regulatory body for the teaching profession in Ontario. Members of the College refine the knowledge, skills and values described in the Standards of Practice for the Teaching Profession and the Ethical Standards for the Teaching Profession through ongoing professional learning.

The Professional Learning Framework for the Teaching Profession outlines opportunities for ongoing professional learning for its members. The framework provides for this growth and development through the identification of accredited pre-service and in-service programs of professional teacher education and a wide range of other learning opportunities.

The Professional Learning Framework

Professional learning may take a variety of forms. Following their pre-service training, members of the College can complete courses or programs that are identified in Regulation 184/97, Teachers Qualifications, made under the Ontario College of Teachers Act. These courses or programs are accredited by the College and offered by registered providers. They are outlined on page 25 of this document. When a member successfully completes one of these courses or programs, it is recorded on the Certificate of Qualification.

Members of the College stay current and up to date in many ways beyond completing Additional Qualification courses and programs. Examples of these professional learning opportunities are identified on page 26 of this document. Educators can participate in or facilitate professional development activities, mentor colleagues, join professional networks, engage in research activities, and read books and articles about educational issues.

Professional learning is at the heart of teacher professionalism. In addition to the accredited in-service programs, members of the Ontario College of Teachers engage in a wide variety of professional learning in order to improve their practice and enhance student learning. All of these opportunities are an integral part of the professional learning framework. Educators participate in learning opportunities offered by their employers, the Ministry of Education, faculties of education, professional organizations, federations and subject associations. Through this professional learning, College members demonstrate a commitment to continued professional growth.
By developing the *Professional Learning Framework for the Teaching Profession*, the Ontario College of Teachers meets its legislated mandate to “provide for the ongoing education of members of the College.” It also informs the public of the many ways educators remain knowledgeable and current.

**Professional Learning Required in Legislation**

*Regulation 184/97, Teachers Qualifications*

*Regulation 184/97, Teachers Qualifications* made under the *Ontario College of Teachers Act* identifies the programs currently recognized by the Ontario College of Teachers. These include: *Certification Programs: Regulation 184/97, Teachers Qualifications*

These professional learning programs are accredited by the Ontario College of Teachers.
- Pre-service Ontario Teacher Education Programs (Basic Qualifications)
- Honours Specialist Courses
- Orientation Program for Teachers Qualified Outside the Province of Ontario
- Supervisory Officer’s Qualification Program
- Principal’s Qualification Program
- Additional Basic Qualification Courses
- Additional Qualification Courses

**Other Opportunities for Professional Growth and Development**

The challenge for members of the College today is to maintain and extend their professional knowledge and skills in a rapidly changing educational environment. Educators engage in many forms of professional learning. The range of opportunities listed on page 26 reflects the complexity of the teaching profession and identifies ways that educators remain current in their practice.

Opportunities for professional growth and development might include but are not limited to:

**Academic Programs**

Currently the Certificate of Qualification includes only completed degree programs. Members of the Ontario College of Teachers may choose to:
- participate in programs or courses offered through universities, colleges or other institutions or organizations that do not always lead to academic degrees.

These programs may be prerequisites to enrolment in the certification programs listed in Regulation 184/97, Teachers Qualifications.

**Research Activities**

Members of the Ontario College of Teachers may choose to:
- inquire into teaching practice
- plan and conduct research activities to enhance teaching and learning
- work collaboratively with others to contribute to the knowledge base of teaching and learning
- explore ways to access and use educational research.

**Professional Networks**

Members of the Ontario College of Teachers may choose to:
- partner with business, industry, colleges and universities
- contribute to subject councils, the work of the federations or other professional organizations
- participate on school-based committees
- serve on a local school community committee or school council.

**Professional Activities**

Members of the Ontario College of Teachers may choose to:
- maintain a professional portfolio
- arrange opportunities to observe exemplary practice
- stay current by reading educational books and journals
- share ideas and resources with other colleagues
- participate in curriculum writing and/or assessment projects.

**Mentoring and Networking**

Members of the Ontario College of Teachers may choose to:
- serve as an associate teacher
- become involved in a mentoring partnership
- learn with colleagues through co-operative planning and problem solving
• form study groups.

**Professional Contributions**
Members of the Ontario College of Teachers may choose to:
• participate in, present at, or organize conferences, workshops and institutes
• contribute to a professional publication.

**Learning through Practice**
Members of the Ontario College of Teachers may choose to:
• develop and implement curriculum materials
• participate in school-based collaborative inquiry
• implement a new instructional or assessment strategy
• conduct and publish action research projects
• pilot new initiatives individually or with colleagues.

**Technology and Learning**
Members of the Ontario College of Teachers may choose to:
• increase their competency in computer, telecommunication, videoconferencing, CD-ROM and videodisc technology
• join a listserv
• integrate technology into teaching practice
• enrol in a distance education program.

Members of the Ontario College of Teachers may also choose to determine other options for learning beyond these examples.

**The Professional Learning Framework:**
• acknowledges the commitment members of the teaching profession make to professional learning
• highlights a range of options to improve practice and enhance student learning
• identifies programs and professional learning activities accredited by the College
• assists members of the College to identify, collect, reflect upon and celebrate their learning experiences and accomplishments
• assures the profession and the public that members of the College have the opportunity through professional learning to remain current throughout their careers.

**The Professional Learning Framework Supports the Following Principles:**

The goal of professional learning is the ongoing improvement of practice. Teacher learning is directly correlated to student learning.
The professional learning framework encourages learning activities based on provincial legislation and policy, system needs, personal growth needs and student learning needs. The framework also encourages members of the College to identify and pursue their strengths and personal interests to further their professional learning.

Standards-based professional learning provides for an integrated approach to teacher education.
All programs and professional learning activities accredited by the College must be designed to support the Standards of Practice for the Teaching Profession and the Ethical Standards for the Teaching Profession.

Exemplary professional learning opportunities are based on the principles of effective learning.
The framework takes into account individual career and personal priorities. It outlines professional learning activities that are varied, flexible and accessible to members of the College.

Teachers plan for and reflect on their professional learning.
Responsible lifelong learning is continuous learning that is initiated by members of the College and directed and reviewed by them on an ongoing basis.

Learning communities enhance professional learning.
The professional learning framework encourages collaboration. It supports ongoing commitment to the
improvement and currency of teaching practice as an individual and collective responsibility.

The Ontario College of Teachers uses the processes described in the professional learning framework to guide its consultation and research activities. These processes are being used to develop, implement and initiate the revision of the standards of practice, ethical standards and the professional learning framework. They also provide the opportunity for the accreditation of pre-service and in-service teacher education programs.

**Conclusion**

The *Foundations of Professional Practice* articulate the values inherent in three key aspects of the teaching profession – the practice of teaching, the ethics of teaching and the career-long professional learning that is an integral part of teaching.

The three documents in the *Foundations of Professional Practice* should be regarded as interconnected – each of them deriving effectiveness through its relation to the others. Their overarching purpose is to guide teachers in their practice so they can more readily meet the goal of enhancing student learning.

This compendium document provides a vision for exemplary professional practice for all teachers in Ontario.
Appendix 6
Standards for Staff Development (NSDC)

1. Learning Communities

The standard
Staff development that improves the learning of all students organizes adults into learning communities whose goals are aligned with those of the school and district.

The rationale
Staff development that has as its goal high levels of learning for all students, teachers, and administrators requires a form of professional learning that is quite different from the workshop-driven approach. The most powerful forms of staff development occur in ongoing teams that meet on a regular basis, preferably several times a week, for the purposes of learning, joint lesson planning, and problem solving. These teams, often called learning communities or communities of practice, operate with a commitment to the norms of continuous improvement and experimentation and engage their members in improving their daily work to advance the achievement of school district and school goals for student learning.

Learning teams may be of various sizes and serve different purposes. For instance, the faculty as a whole may meet once or twice a month to reflect on its work, engage in appropriate learning, and assess its progress. In addition, some members of the faculty may serve on school improvement teams or committees that focus on the goals and methods of schoolwide improvement. While these teams make important contributions to school culture, learning environment and other priority issues, they do not substitute for the day-to-day professional conversations focused on instructional issues that are the hallmark of effective learning communities. Learning teams meet almost every day and concern themselves with practical ways to improve teaching and learning. Members of learning communities take collective responsibility for the learning of all students represented by team members. Teacher members of learning teams, which consist of four to eight members, assist one another in examining the standards students are required to master, planning more effective lessons, critiquing student work, and solving the common problems of teaching.

The teams determine areas in which additional learning would be helpful and read articles, attend workshops or courses, or invite consultants to assist them in acquiring necessary knowledge or skills. In addition to the regular meetings, participants observe one another in the classroom and conduct other job-related responsibilities. Learning communities are strengthened when other support staff, administrators, and even school board members choose to participate, and when communication is facilitated between teams. Because of this common focus and clear direction, problems of fragmentation and incoherence that typically thwart school improvement efforts are eliminated.

Administrator learning communities also meet on a regular basis to deepen participants' understanding of instructional leadership, identify practical ways to assist teachers in improving the quality of student work, critique one another's school improvement efforts, and learn important skills such as data analysis and providing helpful feedback to teachers.

Many educators also benefit from participation in regional or national subject-matter networks or school reform consortia that connect schools with common interests. While most such networks have face-to-face meetings, increasing numbers of participants use electronic means such as e-mail, listservs, and bulletin boards to communicate between meetings or as a substitute for meetings. Such virtual networks can provide important sources of information and knowledge as well as the interpersonal support required to persist over time in changing complex schoolwide or classroom practices.

2. Leadership
The standard
Staff development that improves the learning of all students requires skillful school and district leaders who guide continuous instructional improvement.

The rationale
Quality teaching in all classrooms necessitates skillful leadership at the community, district, school, and classroom levels. Ambitious learning goals for students and educators require significant changes in curriculum, instruction, assessment, and leadership practices. Leaders at all levels recognize quality professional development as the key strategy for supporting significant improvements. They are able to articulate the critical link between improved student learning and the professional learning of teachers. They ensure that all stakeholders - including the school board, parent teacher organizations, and the business community - understand the link and develop the knowledge necessary to serve as advocates for high quality professional development for all staff.

Staff development leaders come from all ranks of the organization. They include community representatives, school board trustees, administrators, teachers, and support staff.

Principals, superintendents, and other key personnel serve as instructional leaders, artfully combine pressure and support to achieve school and district goals, engage parents and other caretakers in the education of their children, and establish partnerships with key community institutions that promote the welfare of all students. They are clear about their own values and beliefs and the effects these values and beliefs have on others and on the achievement of organizational goals. As primary carriers of the organization's culture, they also make certain that their attitudes and behavior represent the values and practices they promote throughout the school or district.

Skillful leaders establish policies and organizational structures that support ongoing professional learning and continuous improvement. They ensure an equitable distribution of resources to accomplish district goals and continuously improve the school or district's work through the ongoing evaluation of staff development's effectiveness in achieving student learning goals. They make certain that employee contracts, annual calendars, and daily schedules provide adequate time for learning and collaboration as part of the workday. In addition, they align district incentive systems with demonstrated knowledge and skill and improvements in student learning rather than seat-time arrangements such as courses completed or continuing education units earned.

Principals and superintendents also distribute leadership responsibilities among teachers and other employees. Distributed leadership enables teachers to develop and use their talents as members or chairs of school improvement committees, trainers, coaches, mentors, and members of peer review panels. These leaders make certain that their colleagues have the necessary knowledge and skills and other forms of support that ensure success in these new roles. These leaders read widely, participate in learning communities, attend workshops and conferences, and model careerlong learning by making their learning visible to others. All leaders make use of various electronic tools to support their learning and make their work more efficient. They use e-mail, listservs, bulletin boards, Internet, and other electronic means to communicate, locate research and other useful information, and seek assistance in problem solving. They enlist other electronic tools to organize and schedule their work, produce and share documents, and increase their accessibility to colleagues, parents, and community members. Skillful leaders are familiar with the strengths and weaknesses of various electronic learning processes for themselves and others and make certain these processes are appropriately matched to individual and organizational goals.

3. Resources

The standard
Staff development that improves the learning of all students requires resources to support adult learning and collaboration.

The rationale
Professional learning may be viewed either as an investment that will pay future dividends in improved staff performance and student learning or an expense that diminishes a school district's ability to meet its other financial obligations. While the latter view has been dominant in many school districts, the National Staff Development Council's position is that well designed and implemented professional development for school employees is an essential long-term investment in successfully teaching all students to high standards.

Well designed professional development creates learning communities that provide mutual support and focus everyone's attention and learning on a small number of high priority goals. While the vast majority of educators' professional learning should occur during the school day in collaboration with colleagues, it is also important that they acquire knowledge from sources outside the school by attending workshops and state and national conferences. However, when most teachers' and principals' professional learning occurs away from the school, it serves as a centrifugal force that leads to fragmentation and incoherent improvement efforts.

Professional development resources may serve many purposes. For instance, they may fund trainers who help teachers and administrators implement new instructional strategies and successfully use technology in their classrooms. They may provide full or part-time in-school coaches who assist teachers and principals in implementing standards-based curriculum in classrooms serving an increasingly diverse student population. In addition, these resources may support the use of external consultants or facilitators who assist the schools and teams in planning and evaluation of program efforts. They can also fund substitutes who cover classes while enabling educators to learn about leading-edge ideas and practices through attendance at state and national conferences.

Funds may also be used to provide stipends for lead teachers to serve as mentors or members of training cadres. To these ends, NSDC advocates that school districts dedicate at least ten percent of their budgets to staff development and that at least 25 percent of an educator's work time be devoted to learning and collaboration with colleagues. While many schools allocate one percent or less of their budgets to professional development and offer virtually no time for adult learning and collaboration, others have found ways to provide resources that approach the amounts recommended by the Council.

Because technology purchases have increased dramatically in many school districts during the past decade, often with little attention given to the development of teachers' abilities to use the technology, NSDC advocates that at least 30 percent of the technology budget be devoted to teacher development in this area. Without opportunities to learn, plan, and practice what they have learned, district investments in technology will fail to produce the intended benefits for students.

To make certain that resources invested in staff development achieve their intended results, district incentive systems such as salary supplements for graduate degrees may be redirected to reward demonstrations of knowledge and skill and student learning gains rather than seat-time arrangements such as courses taken or continuing education units earned. These changes require extensive discussions among key district leaders about the organization's purposes and the role of professional learning in improving student achievement. They are also likely to require significant modifications of collective bargaining agreements. However, recognizing that resources for professional development will continue to be scarce, it is vital that the resources be aligned to support the outcomes the districts seek for their educators and students.

4. Data-driven

The standard
   Staff development that improves the learning of all students uses disaggregated student data to determine adult learning priorities, monitor progress, and help sustain continuous improvement.

The rationale
   Data from various sources can serve a number of important staff development purposes. First, data on
student learning gathered from standardized tests, district-made tests, student work samples, portfolios, and other sources provide important input to the selection of school or district improvement goals and provide focus for staff development efforts. This process of data analysis and goal development typically determines the content of teachers' professional learning in the areas of instruction, curriculum, and assessment.

Helpful data are typically drawn from other sources, including norm-referenced and criterion referenced tests, grade retention, high school completion, reports of disciplinary actions, school vandalism costs, enrollment in advanced courses, performance tasks, and participation in post-secondary education. Data on individual tests can be analyzed to learn how much students advanced in one year as well as particular strengths and weaknesses associated with the focus of the test. These data are typically disaggregated to reveal differences in learning among subgroups of students. The most common forms of disaggregation include gender, socioeconomic status, native language, and race.

A second use of data is in the design and evaluation of staff development efforts, both for formative and summative purposes. Early in a staff development effort, educational leaders must decide what adults will learn and be able to do and which types of evidence will be accepted as indicators of success. They also determine ways to gather that evidence throughout the change process to help make midcourse corrections to strengthen the work of leaders and providers. Data can also indicate to policy makers and funders the impact of staff development on teacher practice and student learning.

A third use of data occurs at the classroom level as teachers gather evidence of improvements in student learning to determine the effects of their professional learning on their own students. Teacher-made tests, assignments, portfolios, and other evidence of student learning are used by teachers to assess whether staff development is having desired effects in their classrooms. Because improvements in student learning are a powerful motivator for teachers, evidence of such improvements as a result of staff development experiences helps sustain teacher momentum during the inevitable frustrations and setbacks that accompany complex change efforts. Another benefit of data analysis, particularly the examination of student work, is that the study of such evidence is itself a potent means of staff development. Teachers who use one of several group processes available for the study of student work report that the ensuing discussions of the assignment, the link between the work and content standards, their expectations for student learning, and the use of scoring rubrics improve their teaching and student learning.

If data are to provide meaningful guidance in the process of continuous improvement, teachers and administrators require professional development regarding data analysis, designing assessment instruments, implementing various forms of assessment, and understanding which assessment to use to provide the desired information. Because the preservice preparation of teachers and administrators in assessment and data analysis has been weak or nonexistent, educators must have generous opportunities to acquire knowledge and skills related to formative classroom assessment, data collection, data analysis, and data-driven planning and evaluation.

5. Evaluation

The standard
Staff development that improves the learning of all students uses multiple sources of information to guide improvement and demonstrate its impact.

The rationale
The quality of staff development experienced by many teachers and administrators varies considerably from year to year and even from teacher to teacher in the same school. As a result, many educational leaders and policy makers are skeptical about the value of staff development in improving teaching and student learning. Well-designed staff development evaluation can address this skepticism by serving two broad purposes: (1) improving the quality of current staff development efforts, and (2) determining the effects of staff development in terms of its intended outcomes.
Evaluation design is determined by the purpose for the evaluation—to improve something or to judge its worth—and by the audience for the evaluation's findings. The evaluation process begins in the planning stages and is based on clarity of thought regarding outcomes, the adult learning processes that will be used, and the evidence that is required to guide decision making. It asks and answers significant questions, gathers both quantitative and qualitative information from various sources, and provides specific recommendations for future action.

If staff development is to improve student learning, many levels of change are required, each with its own particular evaluation challenges. Unfortunately, a great deal of staff development evaluation begins and ends with the assessment of participants' immediate reactions to workshops and courses. While this information may be helpful to staff development planners, good evaluation design also gathers additional information. Beyond the (1) initial collection of data on participants' reactions, evaluation must focus on (2) teachers' acquisition of new knowledge and skills, (3) how that learning affects teaching, and in turn (4) how those changes in practice affect student learning. In addition, evaluators may also be asked to provide evidence of (5) how staff development has affected school culture and other organizational structures.

Staff development leaders must also recognize that different audiences require different evidence. Because the vast majority of decisions about staff development are made in district offices and at school improvement team meetings, the urgent pressure that many school leaders feel to improve student learning means that they are interested in knowing now if staff development as it is practiced with their teachers and administrators is making a difference. They are not willing to wait several months for the district to receive the results of its standardized testing. Likewise, teachers want to know if staff development is making their work more effective and efficient, particularly whether improvements in student learning justify the often difficult changes they are being asked to make.

School board members and state legislators, however, want to know if their increased investment in staff development is paying off in improvements on state measures. While state and local policy makers may prefer evidence derived from more rigorous evaluation designs, it is important to remember that they may also be influenced by anecdotes and other informal assessments they hear from teachers or principals at meetings or in other settings.

Staff development evaluation must take into consideration each group's needs with regard to evaluation data. It must ensure the process is in place to collect the needed data and that the audience has the prerequisite knowledge and skills to interpret and use the information.

6. Research-based

The standard
Staff development that improves the learning of all students prepares educators to apply research to decision making.

The rationale
The charisma of a speaker or the attachment of an educational leader to an unproven innovation drives staff development in far too many schools. Staff development in these situations is often subject to the fad du jour and does not live up to its promise of improved teaching and higher student achievement. Consequently, it is essential that teachers and administrators become informed consumers of educational research when selecting both the content and professional learning processes of staff development efforts.

A problem in the use of the term "research-based" is that it is applied equally to practices that vary considerably in the scientific rigor used in their investigation. For instance, a person who reads an article in a professional journal in which the author advocates the use of a particular practice without providing any supporting evidence for that assertion may later carelessly describe that practice to others as "research-based." Other studies may cite only teachers' reports of changes in their own teaching practice and improved student learning as sufficient evidence for the value of the innovation. Still other studies may have methodologies that include pretests and post-tests of students and teachers, classroom observation of
teachers’ instructional practice, and random assignment of students to control and experimental groups.

To further add to the confusion, popular educational journals frequently publish articles in which a researcher critiques the work of another researcher in a way that often produces more heat than light, perplexity rather than clarity. While widely varied in their scientific and intellectual rigor, these and many other examples add to the confusion teachers and administrators feel when asked to select research-based improvement strategies. Consequently, it is critical that teams of teachers and administrators take the time to study methodically the research that supports the claims made by advocates of a particular approach to instructional improvement or whole-school reform. Such study often extends for several months and includes reading research reports (particularly those that have been published in peer reviewed journals), talking with researchers on the telephone or inviting them to the school, and visiting schools that have adopted this approach. During this review, school leaders compare the students on whom the research was conducted with the students in their school, examine the research methodology, and determine if the researcher’s conclusions reflect the evidence that was provided. It may also be helpful for the team to contrast the research with that of others who make competing claims.

Because teachers and administrators often seek improvements in areas in which there is little research or in which researchers present contradictory findings, it is important that they design pilot studies to determine the effectiveness of new approaches before proceeding with large-scale implementation. While such studies (sometimes called action research) do not require the scientific rigor of more formal research, it is critical that they clearly stipulate the program's goals, methods, and the types of evidence that will be accepted as indicators of success. Such evidence often includes student gains on teacher-made tests and improvements on appropriate performance tasks.

7. Designs and strategies

The standard
Staff development that improves the learning of all students uses learning strategies appropriate to the intended goal.

The rationale
Just as successful teaching requires that teachers be adept at using a variety of research-based instructional strategies, so too does successful staff development require that planners select learning strategies that are appropriate to the intended outcome and other situational factors. That means that staff development leaders and providers must be aware of and skillful in the application of various adult learning strategies.

For many educators, staff development is synonymous with training, workshops, courses, and large group presentations. They are unaware that teacher and administrator learning can occur through means as diverse as collaborative lesson design, the examination of student work, curriculum development, immersion in the work of mathematicians and scientists, case studies, action research, study groups, and professional networks, to name a few such processes. They are also often unaware that training sessions and coursework must include numerous live or video models of new instructional strategies, demonstrations in teachers’ classrooms, and coaching or other forms of follow-up if those strategies are to become a routine part of teachers’ instructional repertoire.

It is essential that staff development leaders and providers select learning strategies based on the intended outcomes and their diagnosis of participants' prior knowledge and experience. For instance, while awareness of new ideas may be achieved through large group presentations, that approach alone is unlikely to lead to changes in teaching practice. An extended summer institute with follow-up sessions throughout the school year will deepen teachers' content knowledge and is likely to have the desired effect. A two-hour after-school workshop will not achieve that goal. And while teachers are likely to adapt their instruction to new standards-based curriculum frameworks through the joint planning of lessons and the examination of student work with their colleagues, simply reading a journal article about the standards will in most cases be insufficient.
The most powerful forms of professional development often combine learning strategies. To promote the development of new instructional skills, training may be combined with coaching, study groups, and action research. To promote the skillful implementation of a standards-based curriculum, study of the subject with a content expert may be combined with curriculum replacement units and a course on the development of rubrics.

Technology provides a useful tool for accessing various means of professional learning. It provides for the individualization of teacher and administrator learning through the use of CD-ROMs, e-mail, the Internet, and other distance learning processes. Technology enables educators to follow their unique learning goals within the context of schoolwide staff development plans. They may download lesson plans, conduct research on a particular topic, or compare their students' work with that of students in other schools or even other countries who are participating in similar lessons. Technology also makes it possible for teachers to form virtual learning communities with educators in schools throughout the country and around the world. For example, teachers may become members of online subject-area networks, take online courses, and contribute to action research projects being done in various locations around the country.

8. Learning

The standard
Staff development that improves the learning of all students applies knowledge about human learning and change.

The rationale
No matter the age at which it occurs, human learning is based on a common set of principles. While adults have more life experience to draw on than younger learners and are often clearer about what they want to learn and why it is important, the means by which the learning occurs is remarkably similar. Consequently, it is important that the learning methods used in professional development mirror as closely as possible the methods teachers are expected to use with their students.

It is essential that staff development assist educators in moving beyond comprehension of the surface features of a new idea or innovation to a fuller and more complete understanding of its purposes, critical attributes, meaning, and connection to other approaches. To improve student achievement, adult learning under most circumstances must promote deep understanding of a topic and provide many opportunities for teachers and administrators to practice new skills with feedback on their performance until those skills become automatic and habitual. Such deeper understanding typically requires a number of opportunities to interact with the idea or procedure through active learning processes that promote reflection such as discussion and dialogue, writing, demonstrations, practice with feedback, and group problem solving.

Because people have different learning styles and strengths, professional development must include opportunities to see, hear, and do various actions in relation to the content. It is also important that educators are able to learn alone and with others and, whenever possible, have choices among learning activities.

Another important dimension of adult engagement in change processes is the feelings that such change often evokes in individuals. Even under the best of circumstances, pressure for change, no matter what its source, may produce feelings of anxiety, fear, and anger. Such feelings are most effectively addressed through skillful listening and problem solving within a respectful and trusting school culture. It is helpful for educational leaders to appreciate that, to some degree, such feelings are natural and an inevitable part of the change process. Such appreciation is aided when leaders have a deep understanding of the change literature, particularly the Concerns-Based Adoption Model, and are able to apply its insights when planning and implementing new practices in schools.

A third dimension of change is the life stage of individuals engaged in the change process. While recognition of life stage differences would not alter expectations for performance, it may affect an individual's availability and interest in additional work responsibilities during different phases of his or her
life. Recognition of life stage differences may also help staff development leaders in tapping educators' strengths and talents, such as asking skillful veteran teachers to serve as mentors or coaches for their peers.

Electronic forms of learning may prove particularly helpful in providing alternatives that respond to differences in learning styles and availability due to life stage issues. Staff development content may be accessed via the Internet or other forms of distance technology that will enable learning throughout the day in various settings using media that appeals to different learning preferences.

9. Collaboration skills

The standard
Staff development that improves the learning of all students provides educators with the knowledge and skills to collaborate.

The rationale
Some of the most important forms of professional learning and problem solving occur in group settings within schools and school districts. Organized groups provide the social interaction that often deepens learning and the interpersonal support and synergy necessary for creatively solving the complex problems of teaching and learning. And because many of the recommendations contained in these standards advocate for increased teamwork among teachers and administrators in designing lessons, critiquing student work, and analyzing various types of data, among other tasks, it is imperative that professional learning be directed at improving the quality of collaborative work.

Staff development provides teachers and administrators appropriate knowledge and skills regarding group processes to ensure various teams, committees, and departments within schools achieve their goals and provide satisfying and rewarding experiences for participants. Because acquisition of this knowledge and skill has not typically been a part of educators' professional preparation and because leaders often underestimate its importance, it is essential that professional learning focused on helping educators work together successfully be given a high priority. Organized groups usually go through several stages in their development as participants come together, begin to know one another at deeper levels, get clear about the group's purpose and ground rules, surface and address the inevitable conflict that such work elicits, and become effective at performing the group's work in a manner that satisfies both the task and interpersonal expectations of participants. It is important that participants understand that these phases are a natural part of group development and that they be given opportunities to learn strategies for addressing problems that arise along the way. Outside facilitators can be helpful to groups as they navigate these unfamiliar waters.

One of the most difficult tasks of such groups is constructively managing the conflict that inevitably arises when participants discuss their fundamental beliefs about teaching and learning and seek the best ways to improve student achievement. Some schools have managed conflict by steering away from controversial issues or pretending that significant disagreements do not exist. Such "pseudo community" or "contrived collegiality" is a barrier that inhibits educators from speaking honestly with one another about their views on important issues, which is a critical first step in conflict resolution. These candid conversations are essential in reaching consensus on long-term goals and strategies and in finding solutions to the perennial problems of teaching and school leadership.

While collaborative, face-to-face professional learning and work are the hallmarks of a school culture that assumes collective responsibility for student learning, technology will increasingly provide a means for new and different forms of collaboration. Technology will enable teachers and administrators from around the country and world to share ideas, strategies, and tools with one another in ways that will dramatically increase the number of collaborative links among educators. But electronic forms of such work will also present teachers and administrators with new challenges whose outlines are only becoming dimly visible as larger numbers of educators begin to use these processes to strengthen their teaching and leadership practices.
10. Equity

The standard
Staff development that improves the learning of all students prepares educators to understand and appreciate all students, create safe, orderly, and supportive learning environments, and hold high expectations for their academic achievement.

The rationale
Effective educators know and demonstrate appreciation for all their students. Through their attitudes and behaviors, they establish classroom learning environments that are emotionally and physically safe and they communicate high expectations for academic achievement and quality interpersonal relationships. Professional development related to these issues is particularly important when educators are assigned to levels other than those for which they were prepared (for instance, elementary and high school teachers or administrators assigned to middle-grades schools) and when they are teaching students whose backgrounds are significantly different from their own (for instance, white, middle-class teachers working in schools that primarily serve students of color and/or those from low-income homes).

Teachers' knowledge of their students is an essential ingredient of successful teaching. Staff development helps teachers to understand the general cognitive and social/emotional characteristics of students in order to provide developmentally appropriate curriculum and instruction. It provides strategies for tapping the unique learning strengths of each student. In addition, it helps teachers to use knowledge of their students' interests and backgrounds to assist them in planning meaningful, relevant lessons.

For teachers to act on this knowledge of students, it is important that staff development equip them with ways of providing various types of instruction based on individual differences. Teachers learn to recognize learning strengths and preferences and how to differentiate learning activities within their classrooms. They also learn various ways to assess student progress based on individual differences.

Successful educators convey through various means the value and potential that is inherent in each student. They demonstrate understanding, respect, and appreciation of students' cultures and life experiences through their lessons and daily interaction with students and their caregivers. High quality staff development provides educators with opportunities to understand their own attitudes regarding race, social class, and culture and how their attitudes affect their teaching practices and expectations for student learning and behavior. In addition, teachers learn about the cultural backgrounds of their students and to develop an appreciation of the benefits that diversity provides in their classrooms for both students' academic performance and interpersonal and social development.

Staff development equips all educators with the knowledge and skills to establish safe and orderly learning environments characterized by mutual respect in which academic learning and psycho/social development will occur. It enables teachers to develop classroom management skills that support positive interaction and nurture students' capacity for self-management. It assists teachers and administrators in creating schoolwide practices that convey respect for students, their families, and their cultural backgrounds. Such practices may include school investigations, curriculum units, and other activities that recognize the contributions and traditions of various cultures. These practices also demonstrate sensitivity to caregivers and their students whose primary language is not English and whose work, home life, or cultural traditions makes it difficult for them to interact with the school and teachers in ways most comfortable and familiar to North American educators.

11. Quality teaching

The standard
Staff development that improves the learning of all students deepens educators' content knowledge, provides them with research-based instructional strategies to assist students in meeting rigorous academic standards, and prepares them to use various types of classroom assessments appropriately.
The rationale
Successful teachers have a deep understanding of the subjects they teach, use appropriate instructional methods, and apply various classroom assessment strategies. These teachers participate in sustained, intellectually rigorous professional learning regarding the subjects they teach, the strategies they use to teach those subjects, the findings of cognitive scientists regarding human learning, and the means by which they assess student progress in achieving high academic standards.

Teachers may acquire deeper understanding of their subjects through various means. For example, they may serve summer internships in appropriate organizations, attend extended institutes with follow-up activities throughout the school year, take traditional university or electronically delivered coursework, perform the activities of individuals involved in that field (for instance, conduct historical research), or participate in face-to-face or electronic subject-area networks. Whenever possible, however, it is important that teachers experience firsthand as learners the instructional approaches they in turn will be using with their own students. They may also attend workshops and courses with classroom follow up, participate in study groups, visit or watch videotapes of high performing classrooms, observe demonstration lessons, or receive classroom coaching. Because it is natural that teachers will teach as they themselves are taught, it is imperative that the instructional methods used with educators be congruent to the greatest extent possible with those they are expected to use in their classroom.

Teachers depend on other knowledge and skills to facilitate student success. Examples of such additional content include classroom management, fundamental technological skills that increase teacher productivity, as well as mentoring and coaching skills for teacher leaders. Again, teachers must experience appropriate staff development designs to facilitate the desired outcome for students.

Because classroom assessment when appropriately conducted can improve student learning as well as gauge achievement, it is essential that teachers have a range of methods at their disposal that promote learning as well as measure it. Therefore, successful professional development efforts regularly include opportunities for teachers to acquire formative classroom assessment techniques appropriate to the subject matter and types of performance called for in state or local standards.

Fortunately, teachers' acquisition of this knowledge and these skills can occur relatively simultaneously. For instance, teachers may be learning new instructional approaches and assessment techniques while they are deepening their understanding of curriculum content. Teachers who are learning research-based instructional skills may find that their progress is limited by a lack of subject-area knowledge in a particular area and request an on-the-spot explanation of a particular concept. Teachers who are developing or learning how to use a scoring rubric for assessment purposes may at the same time be deepening their content knowledge.

In their role as instructional leaders, district and school administrators make teacher content knowledge and skills related to curriculum, instruction, and assessment high priorities. They do so by designing teachers' work days to include ongoing professional learning and collaboration and by providing teachers with data to assist with formative classroom assessment. In addition, they create a district and school culture of innovation and continuous improvement by visiting classrooms regularly to observe instruction and by engaging in frequent conversations with teachers individually and collectively about instruction and student learning.

12. Family involvement

The standard
Staff development that improves the learning of all students provides educators with knowledge and skills to involve families and other stakeholders appropriately.

The rationale
At its best, the education of young people is a partnership between the school, the home, and the community. Effective partnerships, however, require leadership, a compelling purpose for their work, and a
set of mutually agreed-upon goals. Educators who wish to strengthen the bonds among those individuals and organizations who contribute to the education and welfare of a community's youth must be knowledgeable about various ways in which families and community members can be involved meaningfully in the affairs of the school for the benefit of students.

Different types of partnerships require different sets of knowledge and skills. School and district-level administrators are responsible for forging a consensus on mission and goals and the underlying values and beliefs that support their work. They also must be able to engage the community in a way that sustains this collaborative work over a sufficient period of time to realize the intended improvements. Leaders who are successful at these tasks see consensus building with the broader school community as an important part of their work, are skillful in communicating in clear, direct language (both orally and in writing), and are effective in conducting meetings that balance task achievement and relationships. These leaders are both clear about their own values and beliefs and respectful of the values and beliefs of others. Such work requires a capacity to convey authentic interest in the perspectives of others, to listen deeply and honor others' points of view, and to identify areas of common interest.

Teachers who establish partnerships with the families or other caregivers of their students must understand the cultural backgrounds of their students and the unique challenges those families may be experiencing. Teachers must be able to communicate clearly and respectfully with family members and demonstrate a genuine interest in the welfare of the child and family. They must be skillful in conducting meetings with caregivers that create a sense of teamwork between the home and school as well as delineate appropriate and manageable ways for providing support for a student's learning at home. In addition, teachers must demonstrate sensitivity to ways in which caregivers may be most appropriately involved in schools as classroom volunteers or committee members.

Technology provides teachers and administrators with important tools for this work. While not applicable in all communities or with all families, some schools have strengthened their connections with families and the community by posting school news and homework assignments on school or district web sites and by easing communication with teachers by providing e-mail or voice mail access to families. Other schools are increasing the availability of computers to all students by working with community organizations such as libraries and churches. While Internet-based communication may seem like a pipe dream in schools where teachers still do not have ready access to telephones or copy machines, the availability of such technology is growing at an increasing rate and should be available to virtually all schools.
Appendix 7
What Teachers Should Know and Be Able to Do (NBPTS Standards)
www.nbpts.org/standards/dev.cfm

Standards that define accomplished teaching are the heart of the work of the National Board for Professional Teaching Standards. The National Board has developed standards in 27 fields. All NBPTS standards are based on the National Board's Five Core Propositions for what accomplished teachers should know and be able to do. The standards serve as the basis for National Board Certification®

Proposition #1: Teachers are Committed to Students and Their Learning

Fundamental to the teacher's credo is the belief that all students can learn. Furthermore, they act on that belief. Accomplished teachers like young people and are dedicated to and skilled at making knowledge accessible to all students, even as they acknowledge their distinctive traits and talents. Success depends on teachers' belief in the dignity and worth of all human beings and in the potential that exists within each child. Teachers typically do not work one-on-one with students for extended periods of time because they are responsible for groups. But within this constraint, they are attentive to human variability and its influence on learning.

Teachers Recognize Individual Differences in Their Students and Adjust Their Practice Accordingly

To respond effectively to individual differences, teachers must know many things about the particular students they teach: Alex has a stutter, Maria loves science fiction, Toby is anxious about mathematics, Marcus is captivated by jazz. But accomplished teachers know much more -- whom their students go home to at night, how they have previously performed on standardized tests, what sparks their interest. This kind of specific understanding is not trivial, for teachers use it constantly to decide how best to tailor instruction.

As diagnosticians of students' interests, abilities and prior knowledge, skillful teachers learn to "read" their students. When planning a unit on aging, for example, they will anticipate what concepts and activities certain students may find problematic. Watching a student work on a computer, they will look for signs of progress. By keeping a finger on the pulse of the class, teachers decide when to alter plans, work with individual students, or enrich instruction with additional examples, explanations or activities.

Proficient teachers learn from their experiences. They learn from listening to their students, from watching them interact with peers, and from reading what they write. The information they acquire about students in the course of instruction subsequently becomes part of their general knowledge of education. Such monitoring and learning is no easy feat. What teachers are able to see, hear and learn is colored by their own prior knowledge and experience. Thus teachers must, in their efforts to work with children different than themselves, monitor both what they see and hear, and what is not so close to the surface. They must strive to acquire a deep understanding of their students and the communities from which they come that shape students' outlooks, values and orientations toward schooling.

Teachers Have an Understanding of How Students Develop and Learn

In addition to particular knowledge of their students, teachers use their understanding of individual and social learning theory, and of child and adolescent development theory, to form their decisions about how to teach. They are familiar with the concepts generated by social and cognitive scientists that apply to teaching and learning. Moreover, they integrate such knowledge with their personal theories of learning and development generated from their own practice. For example, accomplished teachers know that old theories of a monolithic intelligence have given way to more complex theories of multiple intelligences. Current thinking no longer casts "intelligence" as a context-free, one-dimensional trait. Instead, it recognizes different kinds of intelligence -- linguistic, musical, mathematical, spatial, kinesthetic, personal. This perspective also holds that there are variations in the sources of intelligence (e.g., practical experience versus formal study) and the forms of intelligence (e.g., procedural skills versus propositional knowledge). Both their knowledge of these theories and their experiences in classrooms have taught teachers that each student has different strengths, perhaps even gifts. Teachers think about how to capitalize on these assets as
they consider how best to nurture additional abilities and aptitudes.

Moreover, teachers recognize that behavior always takes place within a particular setting that, to some extent, defines the behavior. They know, for instance, that students who cannot flawlessly recite multiplication tables may still be able to multiply in other contexts (e.g., in calculating whether they have enough money for items at the grocery store). Accomplished teachers are aware that school settings sometimes obscure a clear vision of students' aptitudes and intelligences. Therefore, they strive to provide multiple contexts in which to promote and evaluate those abilities.

They also recognize the ways in which intelligence is culturally defined. That is, what is considered intelligent behavior is largely determined by the values and beliefs of the culture in which that behavior is being judged. Accomplished teachers recognize that in a multicultural nation students bring to the schools a plethora of abilities and aptitudes that are valued differently by the community, the school and the family. The knowledge, skills, abilities and dispositions that are nurtured in a Native American community in the state of Washington will differ from those valued in an Hispanic community in Florida. Likewise, those cultivated by a suburban community in Utah will differ from those developed in urban New York. Thus, teachers are attuned to the diversity that is found among students and develop an array of strategies for working with it. This includes providing educational experiences which capitalize on and enlarge the repertoires of learning and thinking that students bring to school.

**Teachers Treat Students Equitably**

As stewards for the interests of students, accomplished teachers are vigilant in ensuring that all pupils receive their fair share of attention, and that biases based on real or perceived ability differences, handicaps or disabilities, social or cultural background, language, race, religion, or gender do not distort relationships between themselves and their students. This, however, is not a simple proposition. Accomplished teachers do not treat all students alike, for similar treatment is not necessarily equivalent to equitable education. In responding to differences among students, teachers are careful to counter potential inequities and avoid favoritism. This requires a well-tuned alertness to such matters and is difficult, as we have only modest knowledge of human differences and how best to respond to them. Hence, accomplished teachers employ what is known about ineffectual and effective practice with diverse groups of students, while striving to learn more about how best to accommodate those differences.

**Teachers' Mission Extends Beyond Developing the Cognitive Capacity of Their Students**

Teachers are concerned with their students' self-concept, with their motivation, with the effects of learning on peer relationships, and with the development of character, aspiration and civic virtues. These aspects of the student -- important as they are in their own right -- are also essential to intellectual development. Proficient teachers consider students' potential in this broader sense when making decisions about what and how to teach.

**Proposition #2: Teachers Know the Subjects They Teach and How to Teach Those Subjects to Students**

If one cardinal precept of teaching is a commitment to the welfare and education of young people, the other is a commitment to subject matter. Accomplished teachers are dedicated to exposing students to the social, cultural, ethical and physical worlds in which they live, and they use the subjects they teach as entrees into those worlds. Thus, elementary teachers know about geography and its relationship to commerce and history. Foreign language teachers know how language and culture interact and fuse. But, it is not sufficient that teachers know the facts that fall into these different content domains. Understanding subject matter entails more than being able to recite lists of dates, multiplication tables, or rules of grammar.

**Teachers Appreciate How Knowledge in Their Subjects is Created, Organized and Linked to Other Disciplines**

Teachers in command of their subject understand its substance -- factual information as well as its central organizing concepts -- and the ways in which new knowledge is created, including the forms of creative investigation that characterize the work of scholars and artists.
Physics teachers know about the roles played by hypothesis generation and experimentation in physics; mathematics teachers know the modes of justification for substantiating mathematical claims; art teachers understand how visual ideas are generated and communicated; history teachers know how historians use evidence to interpret past events; and English teachers understand the relationships among reading, writing and oral language. Many special education teachers have a slightly different orientation -- focusing on skill development as they work to help moderately and profoundly handicapped students achieve maximum independence in managing their lives.

Understanding the ways of knowing within a subject is crucial to the National Board Certified teacher's ability to teach students to think analytically. Critical thinking does not occur in the abstract, for the thinker is always reasoning about something. Proficient teachers appreciate the fundamental role played by disciplinary thinking in developing rich, conceptual subject-matter understandings. They are dedicated to exposing their students to different modes of critical thinking and to teaching students to think analytically about content.

Teachers represent the collective wisdom of our culture and insist on maintaining the integrity of the methods, substance and structures of disciplinary knowledge. In the face of pressures to portray knowledge in weak and diluted forms, they remain firm. Their role, however, is not just to reinforce the status quo. Rather, appreciative of the fact that there are multiple perspectives and interpretations in each discipline, accomplished teachers encourage students to question prevailing canons and assumptions to help them think for themselves.

It is sometimes assumed that elementary school teachers need not be equipped to approach their subjects critically. But all accomplished teachers, regardless of the ages of their students, are charged with teaching students about something, and in order to do so, they must appreciate its complexity and richness. Teachers must possess such knowledge if they are to help their students develop higher-order thinking skills -- the hallmark of accomplished teaching at any level. Being able to engage elementary school children in the broad array of subjects they can profitably come to appreciate makes elementary school practice especially challenging. This does not imply that fourth-grade teachers should have the same command of biology as high school biology teachers. However, it does mean that they have an understanding of science that allows them to present basic precepts to their students and introduce them to the joy of discovering -- and thinking about -- the natural world of which they are a part.

**Teachers Command Specialized Knowledge of How to Convey a Subject to Students**

Knowledge of subject matter is not synonymous with knowledge of how to reveal content to students so they might build it into their systems of thinking. Accomplished teachers possess what is sometimes called "pedagogical content knowledge." Such understanding is the joint product of wisdom about teaching, learning, students and content. It includes knowledge of the most appropriate ways to present the subject matter to students through analogies, metaphors, experiments, demonstrations and illustrations. Subject-specific knowledge also includes an awareness of the most common misconceptions held by students, the aspects that they will find most difficult, and the kinds of prior knowledge, experience and skills that students of different ages typically bring to the learning of particular topics. Proficient science teachers, for example, know that some students have misconceptions about gravity that can influence their learning, while proficient art and music teachers know that young children arrive at school at various stages of maturity with respect to eye-hand coordination. Teachers use this knowledge of their students to structure instruction that facilitates further development.

Thus, subject-specific pedagogical knowledge is not a bag of tricks, but a repertoire of representations that combines instructional techniques with subject matter in ways that take into account the mix of students and school contexts that confront the teacher. Such subject-specific teaching knowledge embodies a way of reasoning through and solving the problems that arise in the daily work of teachers -- decisions ranging from what aspects of the subject matter to emphasize to decisions about how to pace instruction. In making these choices, teachers bring to bear their knowledge of students and learning and teaching and subject matter.
Professional teachers’ instructional repertoires also include knowledge of available curricular resources such as primary sources, models, reproductions, textbook series, teachers’ guides, videotapes, computer software and musical recordings. Their commitment to learning about new materials includes keeping abreast of technological developments that have implications for teaching; for example, how to engage students in the rapidly expanding field of computer technology, as well as how to use the computer to enhance their own teaching. Thus, able teachers keep current with the growing body of curricular materials -- including literature available through their professional organizations -- and constantly evaluate the usefulness of those materials based on their understanding of curriculum theory, of students, of subject matter, and of the school's and their own educational aims.

Teachers Generate Multiple Paths to Knowledge

Knowledgeable teachers are aware there is value in both structured and inductive learning. That is, while it is useful to teach students about the concepts and principles that scholars have generated in the various disciplines, it is also valuable to engage students in learning by discovery, where they themselves search for problems, patterns and solutions. Proficient teachers help students learn to pose problems and work through alternative solutions, in addition to teaching them about the answers that others have found to similar problems.

The posing and solving of problems on their own is central to the development of true understanding by students -- moving far beyond the rote memorization of facts, the easy manipulation of formulas or the facile playing of a musical scale. Teaching for understanding requires students to integrate aspects of knowledge into their habits of thinking, rather than simply store fragmented knowledge bits. It also means learning to think in a nonlinear way, approaching issues from different angles, weighing multiple criteria and considering multiple solutions. Thus, in the eyes of the proficient teacher, “knowledge” is not conceived narrowly as a lower-level form of understanding. Rather, knowledge is cast in the richest light -- as a combination of skills, dispositions, propositions and beliefs -- integrated and flexible, elaborate and deep. Furthermore, understanding involves the ability to apply such knowledge to problems never before encountered by teacher or student. Accomplished teachers appreciate that this is the kind of knowledge and understanding that counts, and that this type of learning cannot be rushed.

Proposition #3: Teachers are Responsible for Managing and Monitoring Student Learning

Professional teachers hold high expectations for all students and see themselves as facilitators of student learning. To fulfill these responsibilities, teachers must create, enrich and alter the organizational structures in which they work with young people. They also find ways to capture and sustain the interest of their students. Because time is a precious commodity in schools, teachers attempt to make the most efficient use of it. To accomplish these tasks, teachers seek to master the body of generic pedagogical knowledge.

Teachers Call on Multiple Methods to Meet Their Goals

Accomplished teachers know and can employ a variety of generic instructional skills -- how to conduct Socratic dialogues, how to lecture, how to oversee small cooperative learning groups. Although much of instruction is determined by the content to be taught, there are some commonalities about teaching methods that guide their practice. They are aware of what can reasonably be covered in a 45-minute roundtable discussion, when to hold back and let students figure out their own solutions, and what types of questions provoke the most thoughtful conversation. But it is not sufficient that teachers know about different modes of instruction; they must also know how to implement those strategies. Traditional distinctions between knowing and doing have obscured the fact that thought and action interpenetrate in teaching -- knowing about something and knowing how to do something are both forms of understanding central to teaching.

Because students vary in learning styles and because different settings afford differing learning opportunities, accomplished teachers know when and how to alter the social and physical organizational structure of the learning environment. It is not enough to be a master lecturer, for there are many times when lecturing is not an effective way to teach. An outdoor experiment, a mock trial or an economic simulation, for example, may be more appropriate. Alternatively, a playlet or a debate might be a more effective way to engage students in thinking and learning. Teachers know about the breadth of options...
available to them, such as innovative instructional formats that involve discovery learning, conceptual
mapping, brainstorming, working with computers, as well as more traditional tried-and-true methods.

Teachers not only have the opportunity to vary instructional settings and to employ a range of instructional
materials, they also have the opportunity to call on various human resources to custom-tailor the working
environment for students. Accomplished teachers know how to mobilize students to tutor their peers and
how to engage aides and volunteers as teaching assistants. In schools where staffing arrangements are not
fixed and inflexible, teachers also have a good appreciation of their colleagues’ skills and the circumstances
in which their colleagues’ talents can best complement their own. Professional teachers wisely enlist the
knowledge and expertise of their fellow faculty members in a variety of ways as they seek to provide their
students with as rewarding a learning experience as possible.

Accomplished teachers also know the strengths and weaknesses of these options, and their suitability or
incompatibility for certain students and groups. The settings that a teacher chooses are not just matters of
personal preference, but are grounded in the literature of teaching. Teaching, to the accomplished teacher,
is an elegant web of alternative activities in which students are engaged with the content; sometimes with
the teacher, sometimes with each other, sometimes alone.

**Teachers Orchestrate Learning in Group Settings**

Teachers know how to manage groups of students. They are responsible for setting forth the social norms
by which students and teachers act and interact, helping students learn to adopt appropriate roles and
responsibilities for their own learning and that of their peers. This includes teaching students to work
independently without constant direct supervision by a teacher.

Accomplished teachers have developed systems for overseeing their classrooms so that students and
teacher alike can focus on learning, not on controlling disruptive behavior. Discipline and management
techniques vary, and no one system has been proven most effective. Hence, proficient teachers consider the
desired learning results, their knowledge of their students and the social context, and their own prior
experience in selecting management strategies.

Teachers also know that different instructional formats often require different norms of social interaction.
Accomplished teachers can alternate among organizational arrangements and understand how different
structures cast students and teachers in different roles. Applying their knowledge of the relative strengths
and weaknesses of different structures, they weigh these considerations when deciding which instructional
strategy and organizational structure will best enhance student learning. They also continually search for
new forms of organization that may expand their repertoire and prove effective.

**Teachers Place a Premium on Student Engagement**

Facilitating student learning is not simply a matter of placing young people in educative environments, for
teachers must also motivate them, capturing their minds and hearts and engaging them actively in learning.
Thus, the National Board Certified teacher understands the ways in which students can be motivated and
has strategies to monitor student engagement. The teacher’s role in building upon student interests and in
sparking new passions is central to building bridges between what students know and can do and what they
are capable of learning.

Proficient teachers also know that motivating students is not always equivalent to making learning fun, for
learning can be difficult work. Developing an acute sense of one’s body in dance, for example, requires
intense intellectual and physical concentration. Writing a short story requires drafting and re-drafting,
editing and re-editing, occasionally submitting oneself to the critiques of peers and teachers. To practice
effectively, teachers need to know how to encourage students even in the face of temporary failure and the
inevitable doubts that students meet as they push themselves to new affective, intellectual and physical
planes. With such learning comes the real joy in education, the satisfaction of accomplishment.

**Teachers Regularly Assess Student Progress**

While teachers are not always the central actors in their students’ educational experiences, they are
ultimately responsible for the creation and maintenance of those experiences and bear a considerable
responsibility for what students learn at school. Proficient teachers, therefore, can judge the relative success of the activities they design. They can track what students are learning (or not learning), as well as what they, as teachers, are learning.

Assessment in teaching is not a simple task; teachers must monitor the successes and failures of individual students and evaluate their classes as collectives of learners. Additionally, they make judgments about themselves as teachers in relation to those students and classes. Although these judgments are interdependent of one another, they are not necessarily synonymous. One of the essential tensions of teaching is that teachers teach individual students, while managing groups. Accomplished teachers do not treat a class as a monolith. They know that a class does not learn; individual students do. But individuals neither learn the same things, nor learn at the same pace.

Accomplished teachers use information about how the students in their classes are doing "on average" as a guide to making judgments about the relative success or failure of an instructional strategy. But they do not forget that there are few average students. They know that some students have moved far beyond that "average" evaluation, while others trail. And while they have to make decisions about what to do with the class as a whole, proficient teachers find ways to accommodate what they know about individual students and what they are learning in their plans for the whole group.

Accomplished teachers understand that the purposes, timing and focus of an evaluation affect its form. They are astute observers of students -- their movements, their words and their minds. Teachers track student progress with a variety of evaluation methods, each with its own set of purposes, strengths and weaknesses. Their knowledge extends to creating their own, sometimes innovative, tools for evaluation, including portfolios, videotapes, demonstrations and exhibitions. In addition, they may use more traditional measures such as quizzes or exams. Sometimes teachers ask questions in the middle of a group discussion in order to assess how well students are following the presentation of information; or they may talk individually with students while they are engaged in independent work. At other times they watch their students' behavior as they read to each other or work in the laboratory.

Teachers frequently do not assign grades, for evaluation is not always for the purpose of recording grades; rather, it allows students and teachers to assess where they stand. Teachers also assess students to determine how much they have learned from a unit of instruction, be it a week on seeds, a semester of photography, or a year of athletic training. Student responses then contribute to teachers' decisions about whether to reteach, review or move on. By continually adding to their repertoire of methods for assessing what students have learned, as well as constantly monitoring student progress, accomplished teachers are able to provide constructive feedback to students, parents and themselves. Finally, such teachers help their students to engage in self-assessment, instilling in them a sense of responsibility for monitoring their own learning.

**Proposition #4: Teachers Think Systematically About Their Practice and Learn from Experience**

As with most professions, teaching requires an open-ended capacity that is not acquired once and for all. Because they work in a field marked by many unsolved puzzles and an expanding research base, teachers have a professional obligation to be lifelong students of their craft, seeking to expand their repertoire, deepen their knowledge and skill, and become wiser in rendering judgments. Accomplished teachers are inventive in their teaching and, recognizing the need to admit new findings and continue learning, stand
ready to incorporate ideas and methods developed by others that fit their aims and their students. What exemplifies excellence, then, is a reverence for the craft, a recognition of its complexities, and a commitment to lifelong professional development.

**Teachers Are Continually Making Difficult Choices That Test Their Judgment**

The demands of teaching often present stiff challenges that do not lend themselves to simple solutions. Conflicting objectives regularly require teachers to fashion compromises that will satisfy multiple parties. A Western Civilization teacher, for example, attempting to reconcile demands for coverage with demands for in-depth understanding, will do what is necessary to race from Plato to NATO, yet set aside time to develop in students the understanding that history is evolutionary rather than a series of events strung together chronologically. Likewise, a third-grade teacher will find a way to introduce students to the idea that writing is a thinking process, while ensuring that students are learning the basics of spelling and grammar.

Teachers also face choices that force them to sacrifice one goal for another. For instance, teachers who are committed to teaching mathematics for conceptual understanding want to teach students to see number relationships in the real world, to represent them with appropriate symbols, and to use their knowledge of mathematical formulas and computational skills to manipulate those numbers. Such teaching requires giving students time to frame their own problems, find their own solutions, and compare those solutions with alternatives posed by their classmates. Students who have learned through experience that math class involves filling out worksheets and doing problem sets may dislike the uncertainty inherent in problems with multiple or no solutions; they may be troubled that their teacher now wants them to discuss the reasons why a particular solution makes sense. Abandoning speed and accuracy as the criterion of success may temporarily jeopardize students' performance on standardized tests, even as the teacher fosters growth in the depth of students' mathematical competence. In deciding to teach in this way, a teacher risks alienating students, parents and administrators who have their own strong ideas of what math class is supposed to look like and the kind of competence it is supposed to yield.

Such circumstances call on teachers to employ their professional knowledge of what makes for sound practice, with the interest of their students given paramount consideration. While more than one satisfactory path may be derived to balance non-complementary objectives, the teacher's decision will be grounded in established theory and reasoned judgment.

**Teachers Seek the Advice of Others and Draw on Education Research and Scholarship to Improve Their Practice**

Aware that experience is not always a good teacher, proficient teachers search out other opportunities that will serve to cultivate their own learning. As savvy students of their own teaching, they know the value of asking others to observe and offer a critique of their teaching. They also know the value of writing about their work and of soliciting reactions from parents and students. Thus, masterful teachers develop specialized ways to listen to their students, colleagues and administrators, and reflect on their teaching in order that they might improve their practice.

Able teachers are also students of education scholarship and are cognizant of the settled and unsettled territory in their field. They stay abreast of current research and, when appropriate, incorporate new findings into their practice. They take advantage of teacher centers and special conferences and workshops. They might conduct and publish their own research, if so inclined, for testing of new approaches and hypotheses is a commonplace habit among adept teachers, even if a normally overlooked and undocumented one.

Wise teachers understand the legitimacy and limitations of the diverse sources that inform teaching and they continuously draw upon them to enrich their teaching. Their enthusiasm for, and commitment to, continued professional development exemplifies a disposition they hope to nurture in students. Hence, the thinking, reasoning and learning that characterize first-rate teaching are doubly valuable: not only are thoughtful teachers able to teach more efficiently and effectively, they are also models for the critical, analytic thinking that they strive to develop in our youth. Teachers who are themselves exemplars of careful reasoning -- considering purposes, marshaling evidence and balancing outcomes -- are more likely
to communicate to students the value and manner of such reasoning. Moreover, they model other dispositions and traits as well, such as a commitment to creativity in their work and the disposition to take risks in exploring new intellectual, emotional, physical or artistic territories.

Proficient teachers, then, are models of educated persons. Character and competence contribute equally to their educative manner. They exemplify the virtues they seek to impart to students: curiosity and a love of learning; tolerance and open-mindedness; fairness and justice; appreciation for our cultural and intellectual heritages; respect for human diversity and dignity; and such intellectual capacities as careful reasoning, the ability to take multiple perspectives, to question received wisdom, to be creative, to take risks, and to adopt an experimental and problem-solving orientation.

Proposition #5: Teachers are Members of Learning Communities

Teaching most commonly is regarded as the daily conduct of lessons and the provision of learning experiences. But the work of teaching reaches beyond the boundaries of individual classrooms to wider communities of learning. In order to take advantage of the broad range of professional knowledge and expertise that resides within the school, accomplished teachers have a range of duties and tasks outside the direct instruction of students that contribute importantly to the quality of the school and to student learning.

There are two broad areas of responsibility. One involves participation in collaborative efforts to improve the effectiveness of the school. The second entails engaging parents and others in the community in the education of young people.

Teachers Contribute to School Effectiveness by Collaborating with Other Professionals

Teaching is often portrayed as the implementation of policy and curriculum developed by others -- as following orders. The National Board advocates a more proactive and creative role for teachers: engaging them in the analysis and construction of curriculum, in the coordination of instruction, in the professional development of staff and in many other school-site policy decisions fundamental to the creation of highly productive learning communities.

While state authorities and local school district leadership establish broad goals, objectives and priorities for the schools, professional teachers share responsibility with colleagues and administrators for decisions about what constitutes valuable learning for students. This includes their participation in critically analyzing the school curriculum, identifying new priorities and communicating necessary changes to the school community. Teachers' knowledge of curriculum and their students are essential to discharging these responsibilities effectively. But a readiness to work collaboratively on such matters and not blindly accept curricular conventions is also necessary.

Accomplished teachers attend to issues of continuity and equity of learning experiences for students that require school-wide collaboration across the boundaries of academic tracks, grade levels, special and regular instruction and disciplines. Such boundaries, constructed as much out of traditional patterns of school organization as out of instructional rationales, are often dysfunctional and damaging to student learning. National Board Certified teachers cultivate a critical spirit in appraising such schooling commonplaces, together with a willingness to work with administrators toward school-wide improvements that can include revision of organizational as well as instructional features of schooling.

The development of curriculum and the coordination of instruction are particularly important functions shared among teachers and administrators. Proficient teachers collaborate in planning the instructional program of the school to assure continuity of learning experiences for students. They possess the interpersonal skills needed to work on teams and a willingness to work together in the interest of the school community. Their understanding of the technical requirements of a well-coordinated curriculum enables them to participate in planning and decision-making within teams, departments or other educational units outside the classroom, laboratory or studio.

Consonant with their role in curriculum planning and coordination, teachers are aware of the learning goals
and objectives established by state and local authorities. Professional practice requires that teachers be knowledgeable about their legal obligation to carry out public policy as represented by state statute and regulation, school board directives, court decisions and other policies.

Accomplished teachers also participate in the coordination of services to students. Today's schools include a wide variety of educational specialists, and with increasing specialization has come the need for coordination, lest pupils' educational experiences become fragmented. The increased practice of "mainstreaming" special-needs students to assure that they are being educated in the least restrictive environment has meant that general and special education teachers need to work with one another. Compensatory education programs typically involve teaching pupils outside regular school settings. The various forms of English as a second language, bilingual and English-immersion programs often require cooperation among teachers of non- and limited-English-speaking youth. National Board Certified teachers are adept at identifying students who might benefit from such special attention and at working in tandem with specialists.

In addition to working on the improvement of school-wide curricula and the coordination of instruction, teachers work together to strengthen their teaching. Sometimes they observe each other teach; at other times they engage in discussions about teaching; and occasionally they collaborate in trying out new instructional strategies. While the particulars of how teachers choose to improve their instruction will vary according to the structure of opportunity and a teacher's dispositions and interests, the principle underlying such engagement is the continuous pursuit of teaching excellence in the company of peers.

Strong schools emphasize a process of continuous improvement. They are organized to find and solve problems and to locate, invent and experiment with different methods of instruction and school organization. Teachers within such schools work not only on professional development, but also on school-wide improvements. This expectation is part of what constitutes a professional orientation to teaching and part of what distinguishes the professional teacher.

The conventional image of the accomplished teacher as solo performer working independently with students is narrow and outdated. Committed career teachers assume responsibility in cooperation with their administrators for the character of the school's instructional program. They are team players willing to share their knowledge and skill with others and participate in the ongoing development of strong school programs. This participation may take many forms, such as mentoring novices, serving on school and district policy councils, demonstrating new methodologies, engaging in various forms of scholarly inquiry and artistic activity, or forming study groups for teachers.

**Teachers Work Collaboratively with Parents**

Teachers share with parents the education of the young. They communicate regularly with parents and guardians, listening to their concerns and respecting their perspective, enlisting their support in fostering learning and good habits, informing them of their child's accomplishments and successes, and educating them about school programs. Kindergarten teachers, for example, can help parents understand that reading stories to their children is more important to literacy development than completing worksheets on letters.

In the best of all worlds, teachers and parents are mutually reinforcing partners in the education of young people. But three circumstances complicate this partnership. First, the interests of parents and schools sometimes diverge, requiring teachers to make difficult judgments about how best to fulfill their joint obligations to their students and to parents. Second, students vary in the degree and kind of support they receive at home for their school work. The effects of culture, language, and parental education, income and aspirations influence each learner. Teachers are alert to these effects and tailor their practice accordingly to enhance student achievement. However, when faced with an unavoidable conflict, the teacher must hold the interest of the student and the purposes of schooling paramount. Third, the behavior and mind-set of schools and families can be adversarial. Some parents are distrustful of the school's values, and the schools sometimes underestimate the family's potential to contribute to their children's intellectual growth. Students get caught in the middle, their allegiance to and affection for each party challenged by the other. Accomplished teachers develop skills and understandings to avoid these traditional pitfalls and work to foster collaborative relationships between school and family.
The changing family structure in our society creates new challenges as well, for there are now more youth with single parents, working parents and parents with inadequate income. Thus, creating home-school partnerships has become more difficult for teachers and parents in many communities. In attempting to work creatively and energetically with families in the interest of students' development, able teachers acquire knowledge and understanding of individual students' lives outside school. A teacher's foremost responsibility is to the intellectual development of our youth, but they are mindful of the broad range of children's needs, including the need for guidance and the strong presence of caring and nurturing adults. This is a difficult set of obligations to fulfill. On the one hand, teachers are prepared neither by training nor by role to serve as parent surrogates or social workers. The distinctive mission of teaching is to promote learning, a complex undertaking in itself. On the other hand, education's broad and humane purposes do not admit any narrow specialization. Students' physical, emotional, and social well-being cannot be separated from their intellectual growth.

**Teachers Take Advantage of Community Resources**

Professional teachers cultivate knowledge of their school's community as a powerful resource for learning. The opportunities are many for enriching projects, lessons, and study: observing the city council in action; collecting oral histories from senior citizens; studying the ecology of the local environment; visiting a nearby planetarium; drawing the local architecture; or exploring career options on-site. Any community -- urban or rural, wealthy or poor -- can be a laboratory for learning under the guidance of an effective teacher. Moreover, within all communities there are valuable resources such as other teachers and students, senior citizens, parents, business people, and local organizations that teachers can engage to assist, enhance and supplement their work with students. Teachers need not teach alone.

Teachers also cultivate knowledge about the character of the community and its effects on the school and students. They develop an appreciation of ethnic and linguistic differences, of cultural influences on students' aspirations and expectations, and of the effects of poverty and affluence. Cultural and other discontinuities between home and school frequently can confound teachers' efforts to promote learning. Conversely, the cultural diversity represented in many communities can serve as a powerful resource in teaching about other cultures, in encouraging tolerance and understanding of human differences, and in promoting civic ideals. Accomplished teachers seek to capitalize on these opportunities and to respond productively to students' diverse backgrounds.

There is a balance here. Schools and teachers cannot alleviate all the social problems that they encounter. Yet teachers confront the human condition daily in all its variety, splendor and misery. They must be humane, caring and responsive to students and their problems, while they maintain a focus on their distinctive professional responsibilities.

**Conclusion**

Accomplished teaching involves making difficult and principled choices, exercising careful judgment and honoring the complex nature of the educational mission. Teachers employ technical knowledge and skill, yet must be ever mindful of teaching’s ethical dimensions. The primary mission is to foster the development of skills, dispositions and understanding, while responding thoughtfully to a wide range of human needs and conditions. Teachers owe joint allegiance to the forms and standards of knowledge within and across disciplines and to the students they serve.

They must acquire and employ a repertoire of instructional methods and strategies, yet remain critical and reflective about their practice, drawing lessons from experience. Teachers' professional responsibilities focus on instructing the students in their immediate care, while they participate as well in wider activities within the school and in partnership with parents and the community.

Teaching is often portrayed as an activity that conserves valued knowledge and skills by transmitting them to succeeding generations. It is that and more. Teachers also have the responsibility to question settled structures, practices, and definitions of knowledge; to invent and test new approaches; and, where necessary, to pursue change of organizational arrangements that support instruction. As agents of the public
interest in a democracy, teachers through their work contribute to the dialogue about preserving and improving society, and they initiate future citizens into this ongoing public discourse. In the development of its assessment procedures and certification standards, the National Board has sought to represent these ideals faithfully and comprehensively.

Assertations about what teachers should know sometimes conceal inadequacies in the current state of knowledge. In this respect, teaching is not unlike other professions where practitioners confront unavoidable uncertainty in their work. However, the knowledge base for teaching is growing steadily. Professional consensus and research findings have begun to provide authoritative support for knowledge related to many of the tasks, responsibilities and results of teaching. But much remains to be learned.

The National Board draws on existing knowledge in developing its standards but also relies on the professional judgment of accomplished teachers and scholars in designing its assessment procedures. Recognizing that new knowledge about teaching is continually being formulated, the National Board continually reviews its work to reflect new findings and to update its standards and assessments as appropriate.

The National Board also considers the effects of school context on standards for teaching. The very existence of a National Board suggests common standards that prevail across teaching's many settings. However, teaching in an Alaskan village exacts demands different from teaching in Chicago. Teachers in both settings, though, blend and adapt their knowledge of teaching with their knowledge of the community in which they work to ensure effective student learning. For accomplished teachers, the wisdom of practice that they accrue depends on the settings in which they work, the communities they serve, and the students they encounter.

The assessment procedures developed by the National Board take context into account in a variety of ways. This is achieved by the use of assessment formats such as essays, videotaping and reflective commentaries. The National Board offers National Board Certification to all qualified teachers irrespective of the teaching environments in which they work. But the opportunities available to teachers to acquire and exercise many of the professional capacities and responsibilities endorsed by the National Board vary markedly from community to community. Some schools feature strong professional cultures whose norms support collaboration, innovative teaching, a high degree of collegiality, and participation in a broad array of professional activities. Other schools provide few such opportunities, and some even discourage such activity. To address this tension, the National Board's assessments acknowledge that there are multiple paths to meeting the standards, which take into account the diversity of teaching contexts.

These are the touchstones that guide the development of the National Board's certification standards and assessments. Our view of the responsibilities of the National Board Certified Teacher is deliberately complex and demanding, for this is how we see the work of American professional teachers, who are challenged to create excellence in education for all our nation's youth.
Appendix 8

Excerpts from the National Framework for Professional Standards for Teaching (Australia, 2003)

The National Framework is designed to be evolutionary, providing a vision, principles and structures for jurisdictions and the profession to align current or proposed standards for teaching.

Vision

The adoption of the National Framework for Professional Standards for Teaching is an acknowledgement of the need for the highest quality of education to be available to all Australians, and an assurance that this quality should be maintained and built upon for this and future generations. The key to this assurance is the successful partnership between teachers and the teaching profession, teacher educators, teacher employers, the community and Government. The responsibility for delivering the highest quality education rests personally and collectively with teachers, in a context that is contingent on the recognition and support of governments for quality teaching. Individually, teachers are ultimately responsible for the career long development of their professional skills. Teacher educators must share responsibility for ensuring that students graduate with skills that align with the demands of schools and the teaching profession. Employers must ensure that teachers are supported, encouraged and provided with opportunities for ongoing professional learning. Governments, both Commonwealth, and State and Territory, have a responsibility for ensuring coherent policy and resource frameworks. A framework to guide the development of equitable, trusted, reliable and nationally consistent and acknowledged teaching standards is central to achieving this vision and to supporting and enhancing the professionalism of teachers. The National Framework for Professional Standards for Teaching is an expression of the commitment of all responsible parties toward supporting quality teaching.

Principles underpinning the development of professional standards for teaching consistent with the Framework

The National Framework does not provide standards but presents the parameters within which they can be developed, outlining core dimensions and attributes of standards that allow the development of generic, specialist and subject specific standards. It embodies principles to strengthen the definition and articulation of teachers’ work. The National Framework for Professional Standards for Teaching enables and supports the development of standards that:

• Acknowledge the link between quality teaching and improved student learning outcomes;
• Ensure consistency and enable recognition of quality teaching;
• Reflect authentic and extensive knowledge about teaching and learning;
• Encourage teachers to aspire to a higher level of performance;
• Have regard for the future but are grounded in current effective professional practice;
• Reflect the theoretical knowledge of specific content and pedagogy and the practical application of that knowledge to improve student learning;
• Are outcomes’ based to ensure strong links between standards for teaching, their evaluation and professional learning;
• Reflect teachers’ professional experience and growth on a continuum from undergraduate preparation to professional leadership; and,
• Promote, support, recognise and reward quality teaching in the full range of social and cultural contexts in which teaching occurs.
The Framework
The career dimensions and professional elements of the National Framework provide guidance to, but do not limit the capacity of jurisdictions or the profession to articulate professional expectations for teachers within standards.

Career Dimensions
Teachers develop their knowledge, skills and practices throughout their professional lives, but teacher development is not a simple linear process. They enter the profession with varying levels of prior learning, work experience and professional preparation, and work in a range of different contexts. Individual teachers display a profile pattern along a continuum of practice related to their competence and confidence in particular aspects of their role over the period of a career. These circumstances reflect a reality best captured in a framework that suggests a profile approach to learning and practice throughout a career rather than a staged representation. Nevertheless, it is important to highlight that there are aspects that can serve to recognise dimensions in the development of teachers for the enunciation of professional standards. These dimensions do not signify levels of experience; rather they frame general and recognizable aspects of professional capacity and achievement. They reflect a broad continuum of professional development rather than a simple temporal framework of experience. This approach is essentially neither sequential nor lock step and is dependent on application and context. While graduation clearly relates to a specific activity, descriptors of competence, accomplishment and leadership are aspects of professional status, rather than detailed or sequenced events. The National Framework for Professional Standards for Teaching describes four career dimensions for teachers: Graduation; Competence; Accomplishment; and Leadership.

• Graduation
The National Framework allows the identification of the specific attributes of individual teacher education graduates. This dimension is distinct from newly accredited or newly appointed teachers because their essential qualification lies predominantly in study rather than professional practice. While practice is an essential component of theoretical investigation, reflection and learning in preparation for teaching, a graduate is not yet recognised as a competent and capable practitioner with full professional standing. Graduate teachers are about to begin their teaching careers. They have undertaken endorsed programs of teacher preparation and possess the requisite knowledge, skills, values and attitudes to plan for and manage successful learning. Effective graduate teachers are equipped to engage in and negotiate a process of on-going professional learning. They identify their development needs and seek advice and support from colleagues. They have high expectations of themselves as professional learners, and for the learning of their students. Their commitment to students and student learning is reflected in their desire to support students’ achievement of the highest possible education outcomes. They have the commitment, enthusiasm and interpersonal skills to assume a professional role within their schools and its broader communities and to contribute to the operations of a school as a whole.

• Competence
The National Framework allows for the establishment of a mechanism and process that signifies professional competence or formal and full entry to the profession. Professionally competent teachers have demonstrated successful teaching experience. They effectively monitor, evaluate and plan for learning and are able to tailor teaching programs to meet the needs of individuals and groups within the class. Professionally competent teachers have a record of effective and ongoing professional learning. They work collegially and in teams to further enhance their professional practice, and take greater responsibility in collaboration with others for identifying and addressing their own learning needs. They are effective members of a school and its broader community and interact effectively with stakeholders.

• Accomplishment
Consistent with the priority of recognising teacher quality and supporting the development of teachers, the National Framework allows for recognition of teachers who are highly accomplished and highly regarded by their peers. Teachers at this level are highly proficient and successful practitioners. They are recognised by other teachers as having in-depth subject knowledge and pedagogical expertise. They keep abreast of
and contribute to professional learning and contribute to the professional learning of others. These teachers are advocates for the profession and their schools. They communicate effectively to diverse audiences and interact professionally with the community.

**Leadership**
A framework, which facilitates a culture of recognition and quality, should also enable professional leaders to be identified. Within a profession, and among the most accomplished of professionals, some individuals will have the capacity and the willingness to apply their professionalism in ways that are transformative for their profession, for students and the community. Such teachers have a record of outstanding teaching and are committed to enhancing the quality of teaching and learning. They are committed educators who can articulate a vision of education to their students, peers, the profession and the wider community. These teachers are knowledgeable about the latest developments in pedagogy and can apply those developments to unique student contexts. They have outstanding interpersonal and leadership skills, underpinned by principles of fairness, compassion, integrity and equity. They recognise the talents of others and promote and encourage those people to achieve their potential. They apply critical analysis and problem solving skills to educational matters, and engage in ongoing professional learning and facilitate and support the professional learning needs of others. They communicate effectively with the community to support the development of the school and promote student learning.

**Professional Elements**
The career dimensions of the National Framework can be described through specific aspects of teachers’ work. The categories outlined below have been drawn from a mapping of a range of activities, nationally and internationally. These categories are interdependent and overlapping. In practice, no teacher activity will be applied in a way that draws on any area independently of the other. In addition, the extent or complexity of achievement may not be captured in a two dimensional category. But neither a framework for standards nor standard statements are intended to or capable of capturing the complexity of practice. They are intended as common and recognisable reference points for professional engagement.

**Professional knowledge**
Teachers know and understand the fundamental ideas, principles and structure of the disciplines they teach. They know and understand the links to other content areas and are able to integrate learning across and between content areas. They know how to effectively teach that content, and understand the prompts and barriers to learning likely to be encountered by students. In addition, effective teachers have a detailed understanding of how young people learn and their role in facilitating that learning. They know and understand and can articulate a range of philosophies of learning. They critically evaluate the range of teaching and learning theories and know how to apply them where appropriate. They know and understand and take account of the diverse social, cultural and special learning-needs background of their students and the influences these have on teaching and learning. Effective teachers structure learning to take account of these differences.

**Professional practice**
Teachers communicate effectively with their students and establish clear goals for learning. They possess a repertoire of inquiry techniques and teaching strategies, and use a range of tools, activities, and resources to engage their students in learning. They select and organise the content in logical and structured ways to meet learning goals. They are adept at managing the range of behaviours and situations that occur in the classroom and establishing a climate where learning is valued and fostered. Teachers create safe and supportive learning environments and recognise and are attentive to their child protection and welfare roles. Teachers plan for learning, and utilise a range of formative and summative assessment techniques to report on learning and to inform their planning. They understand the need to evaluate their teaching and the importance of providing both formal and informal feedback to students as a stimulus to learning.

**Professional values**
Teachers are committed to their own development and continually analyse, evaluate and enhance their professional practice. They understand that the contexts in which they work are continuously evolving and changing and the need to adapt and respond to these changes. They work closely with parents and careers
to acknowledge that the education of students is a shared enterprise. They uphold high professional ethics with regard to their own conduct and that of others, and respect their students and value their diversity. They act professionally at all times in their dealing with their students, peers, members of the profession and members of the community.

• **Professional relationships**

Teachers engage with diverse student populations representing equally diverse communities. They meet these challenges by forming professional relationships at all levels of the community. It is within this context that teachers design and manage learning experiences for individuals and groups of students that value opportunities to actively engage with other members of their profession and their wider school communities. They work productively with colleagues and other professionals to enhance the learning of their students, and understand and value the importance of close links between the school, home and community in the social and intellectual development of their students. They understand and foster the critical relationship between them and the student. This is a relationship that is underpinned by trust, respect and confidence.
Appendix 9  
Teacher Training Agency (England)  
www.tda.gov.uk/

The TDA has been asked by the Secretary of State to bring coherence to the framework of professional and occupational standards for classroom teachers. This involved a review of standards for qualified teacher status, induction, post-threshold and advanced skills teacher, and the development of standards for the excellent teacher scheme.

Since September 2005, the TDA has consulted extensively to inform the review. Thank you to all those who have taken the time to contribute their views.

The TDA provided advice to the Secretary of State in April 2006 on a revised framework of professional standards for teachers.

The Secretary of State then launched a consultation of this revised framework and responses from this consultation are currently being reviewed.

The threshold, excellent teacher and advanced skills teacher standards are pay standards, and the Secretary of State has yet to consult on how these revised standards should be incorporated into the school teachers' pay and conditions document. The intention is that these standards should be used for pay and progression purposes from September 2007. Publication of the revised framework of professional standards is planned for 2007.

Using the links on the left you can look at the current standards, read the key points from the first stage of the consultation, and read about the uses and design guidelines for these standards. The draft revised standards are available for download using the link on the right.

Current professional standards

QTS standards  
www.tda.gov.uk/teachers/professionalstandards/currentprofessionalstandards/qtsstandards.aspx

Induction standards  
www.tda.gov.uk/teachers/professionalstandards/currentprofessionalstandards/inductionstandards.aspx

Performance threshold standards  

Advanced skills teacher (AST) standards  
www.tda.gov.uk/teachers/professionalstandards/currentprofessionalstandards/aststandards.aspx

Key points from the first stage of consultation

Over three thousand people in the profession took part in the first stage of the consultation on professional standards for teachers. Here is a summary of the key points that gained support.

The scope of the review includes consideration of:
- the changing structure of the school workforce
- the role of teachers in multi-disciplinary teams and
- the common core of skills and knowledge for the children’s workforce needs to be appropriately reflected in the standards.

General
A common structure should permeate all standards.
Revised QTS standards should underpin all other standards.
Clear language is needed to aid shared understanding.
Revised standards should be more concise than the current standards.
Support for the design guidelines and uses of the standards (however some amendments were noted).
Progression should be evident between each standard.

Qualified teacher status
Standards need to be shortened and simplified without losing rigour.
Some of the detail should become part of requirements.
The structure of QTS should be maintained, however, learning could be added to the teaching heading.
Pupil learning needs greater emphasis.
Some element of leadership needs to be included, e.g. leading learning and managing/leading support staff.
The current wording of some standards places an unrealistic expectation on NQTs.

Excellent teacher
Should be distinct from AST standards.
Advising, coaching and mentoring other teachers in the school should be a key element.
Should be a leading example of teaching in the classroom.
Should be involved in some capacity with the development of wider school issues.
Should have responsibility to extend their knowledge of pedagogy and their knowledge of their subject.
The role should include motivating and inspiring pupils.
Should be innovative/take risks and creative in their teaching.
Should be committed to and successful in improving pupil attainment.
Should be able to articulate effective practice in pedagogy.
Leading curriculum development and leading learning should be reflected.
The qualities of a reflective practitioner should be a key element.

Induction
The standards for induction should focus on consolidating, extending and sustaining in the employment context the standards reached during training.

Senior teacher (threshold)
Clear progression is required from QTS/Induction standards.
Greater clarity and demand is required.
Creativity, reflection and team building should be reflected.
Greater emphasis could be placed on aspects of whole school development including coaching and mentoring.

Advanced skills teacher
Should be distinct from excellent teacher standards.
Appropriate standards for leadership should be included.
The standards should emphasise working in unfamiliar environments and in a range of different contexts, to transfer and adapt methods from one situation to another and to work with a range of professional colleagues in different settings.
Evaluating others’ teaching needs to be reflected.
The standards should include reference to working with headteachers/ leadership team to establish a new culture of professional development for all teachers.
Appendix 10

Statement of Professional Values and Practice for Teachers (GTC, England)

www.gtc.org.uk/standards/disc/StatementOfProfValues

The Statement of Professional Values and Practice for Teachers
The GTC Statement underpins the Council’s advisory and regulatory work. This version was agreed by Council in March 2006 in the light of changes to policy, legislation and the Professional Standards Framework. The Statement is kept under review to ensure it continues fully to reflect society’s expectations of and aspirations for teachers, teachers’ own values and aspirations, and the context in which teachers work.

General introduction: the high standards of the teaching profession
First and foremost, teachers are skilled practitioners. They have insight into the learning needs of children and young people. They use professional judgment to meet these needs and to choose the best ways of motivating pupils to achieve success. They use assessment to inform and guide their work. They are highly skilled at dealing with the rigours and realities of teaching.

Teachers inspire and lead children and young people to learn, in and beyond the classroom. They enable them to get the most out of life and develop the knowledge, skills and attributes for adulthood – so that they can achieve their potential as fulfilled individuals and make a positive contribution to society – while staying safe and healthy.

Teaching is a vital, unique and far-reaching role requiring high levels of individual knowledge, skill and judgment, commitment, energy and enthusiasm. It is one of the most demanding and rewarding of professions.

Teachers work within a framework of legislation, statutory guidance and school policies, with different lines of accountability. Within this framework they place particular importance on promoting equality of opportunity – challenging stereotypes, opposing prejudice, and respecting individuals regardless of age, gender, disability, colour, race, ethnicity, class, religion, marital status or sexual orientation.

Teachers recognise the value and place of the school in the community and the importance of their own professional status. They understand that this requires judgment about appropriate standards of personal behaviour.

The professionalism of teachers in practice

Children and young people
Teachers place the learning and well-being of young people at the centre of their professional practice.

They use their expertise to create safe, secure and stimulating learning environments that take account of individual learning needs, encourage young people to engage actively in their own learning, and build their self-esteem. They have high expectations for all young people, are committed to addressing underachievement, and work to help young people progress regardless of their background and personal circumstances.

Teachers treat young people fairly and with respect, take their knowledge, views, opinions and feelings seriously, and value diversity and individuality. They model the characteristics they are trying to inspire in young people, including enthusiasm for learning, a spirit of intellectual enquiry, honesty, tolerance, social responsibility, patience, and a genuine concern for other people.

Parents and carers
Teachers respond sensitively to the differences in the home backgrounds and circumstances of young
people, recognising the key role that parents and carers play in children’s education.

They seek to work in partnership with parents and carers, respecting their views and promoting understanding and co-operation to support the young person’s learning and well-being in and out of school.

**Professional colleagues**
Teachers see themselves as part of a team, in which fellow teachers, other professional colleagues and governors are partners in securing the learning and well-being of young people.

They recognise the importance of effective multi-agency working, are clear and confident about their own role and professional standards, and understand and respect the roles and standards of other colleagues. They are keen to learn from others’ effective practice and always ready to share their own knowledge and expertise. They respect young people’s and colleagues’ confidentiality wherever appropriate.

**Learning and development**
Teachers entering the teaching profession in England have met a common professional standard.

Initial education has prepared them to be effective teachers, and they take responsibility for their continuing professional development.

They reflect on their own practice, develop their skills, knowledge and expertise, and adapt their teaching appropriately to take account of evidence about effective practice and new technology; they understand that all of these are vital if young people are to receive the best and most relevant education.

Teachers make use of opportunities to take part in mentoring and coaching, to evaluate and adapt their own and institutional practice, and to learn with and from colleagues in the wider children’s and school workforce.
Professional learning and development is an entitlement and responsibility for all teachers. It is an important way of supporting and recognising teachers’ expertise. Learning runs right through a teaching career. It takes place every day, formally and informally, through a wide range of learning experiences, deepening and revitalising teachers’ skills, abilities, values and knowledge. It is a process of enquiry supporting teachers to:

• develop the learning of their pupils
• develop a common language for understanding the processes and outcomes of teaching and learning
• engage in improvement in teaching and learning.

What is the Teachers’ Professional Learning Framework?
The Teachers’ Professional Learning Framework (TPLF) reflects the commitment of the General Teaching Council for England (GTC) alongside partners to continuing professional development (CPD). It outlines a professional development entitlement for all, irrespective of where teachers work and in what capacity. It is based on in-depth consultation with teachers, teaching associations and unions, teacher educators, LEA advisers and others who support teachers’ learning.
The TPLF offers a map of professional development experiences, encouraging access to a diverse range of opportunities and activities. It is designed so that all teachers, through performance review and other ways, may choose a route that matches their professional needs. It is not a blueprint for action but a tool, for the school and individual teacher, to help plan professional learning.
It reflects and recognises the spectrum of opportunities and activities outlined in the Department for Education and Skills (DfES) CPD strategy Learning and Teaching and found in provision at school, network, LEA and Higher Education Institution (HEI) level.

How you can use the Teachers’ Professional Learning Framework Teachers can use the TPLF to plan their own professional development pathway and needs. It encourages diversity and differentiated programmes of development.
The TPLF can be used in performance review meetings between team leaders and teachers to help create individual learning plans. The whole staff, teams and CPD coordinators can also use it to draw up team, departmental or school learning plans. It can be used to identify and support progression and continuity at different career stages.

What supports professional learning?
Teachers enhance their subject and specialist professional knowledge and practice by:

• working within a learning team (in a department, Key Stage or on a cross-school theme)
• working with a mentor or coach
• collaborative teaching, planning and assessment
• planning, study and evaluation of lessons and other learning experiences with colleagues
• observing colleagues teaching
• sharing teaching approaches with teachers from other schools
• taking an active part in self-evaluation processes
• engaging in peer review
• collecting, interpreting and applying pupil feedback, data and outcomes
• observing and analysing children’s responses to learning activities
• developing resources and projects with colleagues
• participating in collaborative enquiry and problem-solving
• leading or contributing to staff meetings and inservice training
• engaging with subject or specialist associations
• reading educational, academic and professional journals and texts
• participating in courses, online learning opportunities and higher education study
• accessing National College of School Leadership (NCSL) programmes
• taking secondments and sabbaticals.

Teachers are supported in making judgements and leading change in their practice by:
• accessing evidence of effective practice to inform teaching
• designing and conducting classroom-based research activities, including:
  • collecting, analysing and interpreting both qualitative and quantitative data
  • keeping and analysing a log of their own or learner activity
• developing the collective knowledge base of teaching and learning.
## Appendix 12: Guskey’s 5 Level Evaluation Scale (Guskey, 2000, pp. 45-51)

|------------------|-------------------------------|-----------------------------------|------------------------------|-------------------------------|
| 1. Participants' Reactions | Did they like it?  
Was their time well spent?  
Did the material make sense?  
Will it be useful?  
Was the leader knowledgeable and helpful?  
Were the refreshments fresh and tasty?  
Was the room the right temperature?  
Were the chairs comfortable? | Questionnaires administered at the end of the session | Initial satisfaction with the experience | To improve program design and delivery |
| 2. Participants' Learning | Did participants acquire the intended knowledge and skills? | Paper-and-pencil instruments  
Simulations  
Demonstrations  
Participant reflections (oral and/or written)  
Participant portfolios | New knowledge and skills of participants | To improve program content, format, and organization |
| 3. Organization Support & Change | Was implementation advocated, facilitated, and supported?  
Were problems addressed quickly and efficiently?  
Were sufficient resources made available?  
Were successes recognized and shared?  
What was the impact on the organization?  
Did it affect the organization's climate and procedures? | District and school records  
Minutes from follow-up meetings  
Was the support public and overt?  
Questionnaires  
Structured interviews with participants and district or school administrators  
Participant portfolios | The organization's advocacy, accommodation, facilitation | To document and improve organization, support facilitation and recognition  
To inform future change efforts |
| 4. Participants' Use of New Knowledge and Skills | Did participants effectively apply the new knowledge and skills? | Questionnaires  
Structured interviews with participants and their supervisors  
Participant reflections (oral and/or written)  
Participant portfolios  
Direct observations  
Video/audio tapes | Degree and quality of implementation | To document and improve the implementation of program content |
| 5. Student Learning Outcomes | What was the impact on students?  
Did it affect student performance or achievement?  
Did it influence students' cognitive or physical or emotional well-being?  
Are students more confident as learners?  
Is student attendance improving?  
Are dropouts decreasing? | Student records  
School records  
Questionnaires  
Structured interviews with students, parents, teachers, and/or administrators  
Participant Portfolios | Student learning outcomes  
Cognitive (Performance& Achievement)  
Affective (Attitudes & Dispositions)  
Psychomotor (Skills & Behaviors) | To focus and improve all aspects of design, implementation, and follow-up  
To demonstrate the overall impact of professional development |