



Notes, Ideas, Applications

Section 5**Facilitating Professional Vision:
From Novice to Expert Teaching**

NO ONE is born knowing how to teach. Classroom instruction is one of the most complex intellectual and emotional tasks that any professional undertakes in our society; and the journey towards expertise is a lifetime's work. Successful journeys begin with skilled counsel and guidance.

In the opening of this book, we offer three goals for learning-focused relationships, suggesting that thoughtful mentors offer support, create challenge, and facilitate a professional vision for their protégés. Each of these intentions requires a vision—of the growth potential of the protégé, of the relationship with the protégé and of the mentor's skill in sustaining productive learning.

For this learning to be increasingly purposeful, mentors need frameworks and language for describing the complexity of teaching. This complexity falls into two main areas: what professional teachers think about and pay attention to in their classrooms; and how they think about it before, during and after instruction. This knowledge base organizes the expert teacher's planning, problem-solving and decision-making. Mental access to these resources supports effective teaching practice that is goal-driven and targeted to the needs of individual students. These capabilities, brought to conscious attention, then guide the mentor's own teaching, modeling and interactions with protégés.

**Developing a Vision
of Learning**

There are no fast tracks to teaching expertise. The road is long, winding and sometimes painful. Amid the noise and energy of schools and schooling, teaching can be a lonely profession. The early years for most novices are filled with doubts about personal effectiveness, teaching competence, and whether one has the personal learning capacities to master this complex profession.

Learning to teach means continually managing the disequilibrium that new questions and newly recognized quandaries produce. Given their limits of attention and their limits of craft knowledge, beginning teachers often do not know what they do not know. There is a vague awareness of some magic that the confident veteran next door seems to possess. But time and energy do not allow exploration of these seeming mysteries. Day-to-day survival and managing newly forming relationships with students, parents and colleagues consumes most available time.

Mentoring, therefore, means a continual balance of supporting current learning needs for one's protégé, with providing appropriate challenges for growth at opportune moments. It also means acknowledging the sense of loss and lowered confidence that often accompanies new awareness of knowledge and skill gaps. These are territories of constructive mismatch that require emotional sensitivity and scrupulous attention to the protégé's current state and developmental level. The information on adult development and teaching expertise outlined in this section is intended to focus the mentor's attention and frame this learning agenda. School-based curriculum initiatives intersect with this repertoire to promote collegiality and learning communities in the school.

According to Jean Piaget, learning is a process of disturbing current constructs with new experiences and exposure to novel ideas. These discoveries then need to be assimilated and/or accommodated to form new conceptual understandings. Skillful mentors know when and how to gently disturb their protégé's current state of development as they escort them on their journey from novice to expert teaching.

Defining Expertise

Developing expertise in any field involves the acquisition, storage and contextually appropriate application of knowledge and skills. A defining characteristic of experts is the ways in which this knowledge base is mentally structured and internally cross-referenced for productive application in both predictable and novel situations. Experts have both richer conceptual bases and greater case knowledge than do novices. Case knowledge is the treasure trove of practical experiences that experts draw upon to solve routine problems. These are the tricks-of-the trade that make professional practice time and energy efficient.

Expert teachers are able to operate both in the moment and over time with clear outcomes in mind; skillfully managing students, content, equipment, materials, the clock and the calendar. They also apply greater complexity and sophistication in analyzing and understanding instructional problems. For example, while managing student learning, master teachers focus first on defining and representing the dilemmas they encounter in their classrooms. In contrast, beginning teachers go directly to developing solutions without first framing the problem (Swanson, O'Connor, and, Cooney, 1990). This difference in the approach to problem-solving is one reason for the importance of the Think-Aloud protocols that we describe in Section Two, Learning-Focused Interactions. By thinking aloud about a problem when taking the consulting stance, a mentor teacher models how an 'expert' contemplates a situation, thereby widening the conceptual, emotional and moral frame for the novice.

Acquiring Craft Knowledge

Day-to-day classroom work draws upon a reservoir of craft knowledge that teachers acquire through the years as they master the various tasks required by their work. In the 1980's, Donald Schon described this wisdom in his seminal work on reflective practice (Schon 1983; 1987). Schon suggests that experienced professionals rely very little on theoretical or academic knowledge to solve practical problems. They rely instead on an extensive body of context specific craft knowledge that allows them to relate past experiences to current situations.

This knowledge is not always explicit; in fact, it may be so well integrated that it seems intuitive to skilled veterans. This automaticity can often be frustrating to novice teachers who are still struggling with basic classroom moves and routines and see their mentors as gifted masters in touch with the secrets of a teaching universe that is still hidden from them.

To transfer the purposes and processes of automated routines and responses to novices, experienced practitioners must first bring these to their own conscious awareness. This is one of the gifts of the mentor/protégé relationship. Articulating one's own craft knowledge increases its usefulness and extends the craftsmanship of the user.

Craft knowledge and expertise in teaching take time to acquire. The transition from novice to expert occurs in predictable stages. David Berliner identifies the following five stages in this transition (Calderhead, 1996).

TABLE 5.1 NOVICE TO EXPERT STAGES OF TEACHER DEVELOPMENT

1. NOVICE	Seeking rules and recipes to guide actions.
2. ADVANCED BEGINNER	Seeking contextual and strategic knowledge and beginning to understand when the rules are appropriate and when they might be broken.
3. COMPETENT	Making conscious choices about what to do and how to monitor and modify actions to meet goals.
4. PROFICIENT	Operating intuitively with know-how, viewing actions holistically within both short and long term goals.
5. EXPERT	Integrating the teacher and the task, operating fluently with automaticity and few surprises, in control of the situation.

• NOVICE TEACHERS
Novice teachers seek the comfort of rules and procedures for guidance. With little repertoire to draw from, they attempt to duplicate the structured lessons in the teacher's manual. This might mean preparing

and implementing a guided reading lesson for a specific story in the precise sequence described in the district’s reading text. Initially, there is little variation from the scripted text and scant attention to individual student responses. The novice presents the lesson as written in the manual, following her advanced preparation.

• ADVANCED BEGINNER TEACHERS

Advanced Beginner teachers start to stretch the pattern a bit. They are at the early stages of developing richer knowledge about basic classroom operations, their students and teaching specific subjects like reading. They still might use the reading series as a foundation for lessons, but with a bit more comfort and confidence in basic routines, they add strategies like experiential language charts to expand the lesson structure. They also start to modify the sequence that the publisher suggests, incorporating tips from colleagues as they develop personal preferences in both stories and techniques.

• COMPETENT TEACHERS

Competent teachers are goal oriented across a spectrum of instructional concerns. They have the ability to change course during lessons to better meet the immediate needs of learners. During the planning and teaching of a reading lesson, for example, they consider the needs of specific learners and tailor the lesson to help each student develop literacy skills. Assessment of student progress is ongoing and shapes each day’s lesson design. The teacher’s manual no longer controls instructional practice.

• PROFICIENT TEACHERS

Proficient teachers operate at multiple levels simultaneously. They have goals for the class, goals for each student and goals for themselves. They skillfully organize instruction that has both short-term and long-term coherence. Reading lessons, which extend throughout the day and across the curriculum, are not limited to a special period. Students are flexibly grouped and regrouped as skills develop. There is increased attention and greater sophistication in applying informal and formal reading assessments. These are used to organize special interest reading centers for skills development and in-depth exploration of topics popular with students, such as animals and favorite authors.

• EXPERT TEACHERS

Expert teachers expand personal and professional proficiency in all areas of their teaching. There is an organic flow to the day that extends to the ways students self-manage many classroom routines. Teachers at this stage anticipate potential management and learning bottlenecks and intervene before problems emerge. They are able to fluidly apply a vast technical repertoire of knowledge and skills about learning and learners. While seeing children as unique individuals, their personal catalog of learner types helps them to assemble targeted materials and lessons that smooth learning pathways. This confidence and comfort allows them to

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establish reading routines that promote independence and students’ sense of personal responsibility for learning outcomes. Individual and small group conferences enhance students’ abilities to self-assess reading difficulties and make appropriate learning choices.

Transitioning From Novice to Expert

According to Berliner, the novice stage occupies the first year of teaching. Most teachers reach the competence stage after three or four years, with only a modest proportion moving to the proficient stage and fewer still attaining expert status. The growth from novice to more expert teaching requires more than simple experience. It is also a highly personal voyage through the seas of adult development. Having a skilled navigator along to plot the course and find safe harbors increases the safety of the journey and allows one to enjoy the adventure. Skilled mentors come equipped with a chart, a compass, and knowledge of the route ahead.

Accompanying and focusing this journey are phases and changes in cognitive, ego and moral development. Awareness of these changes informs the quality and kinds of mentor-protégé interactions. It is important to remember that young teachers fresh out of college are not fully formed adults. They have many developmental challenges to master at the same time that they are mastering a new and demanding profession. Gaps in thinking, fragile egos and moral dilemmas are to be expected and will need to be supported.

Cognitive Development

Developing higher level thinking is a major goal of skillful mentoring. There are numerous studies correlating teachers’ conceptual development with improved outcomes for students. Teachers at higher conceptual levels are more able to read and flex in the classroom, continually adapting the learning environment and methods to better meet the needs of individual students (Hunt 1976; 1981). These greater conceptual abilities make expert teaching possible.

To develop such flexibility, mentors encourage and mediate thinking during learning-focused conversations, as outlined in Section Two, Learning-Focused Interaction. The Conversation Templates themselves are organized around specific cognitive processes. These are embedded directly within the questions at each phase of the conversations. The challenge for the mentor is to transcend episodic problem-solving and solution thinking to widen the frame beyond immediate issues. Higher level thinking involves the complex processes of formal operational thinking. (See Table 5.2: Piaget’s Levels of Formal Operational Thinking).

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TABLE 5.2 PIAGET’S LEVELS OF FORMAL OPERATIONAL THINKING (ADAPTED FROM FLAVELL, 1985)

- **ABSTRACT THINKING** Considering a variety of possibilities.
- **COMBINATORIAL THINKING** Considering all possible combinations of ideas.
- **HYPOTHETICAL THINKING** Considering what-ifs and potential scenarios.
- **PROJECTIVE THINKING** Thinking across multiple time horizons.
- **METACOGNITIVE THINKING** Awareness and self-regulation of one’s own thinking processes.
- **REFLECTIVE THINKING** Reflecting upon and learning from actions and experiences.

By intentionally crafting questions designed to focus and exercise complex thinking, and by modeling these processes themselves, learning-focused mentors offer access to increasingly sophisticated conceptual frames.

Adult Development

Studies of teacher development support the notion of stages through which all practitioners pass. King and Kitchener (1994) note that adult growth is slow, with no regressions and no skipping of stages. They also found that age by itself does not predict or promote growth in reflective judgment. Across a variety of adult settings, informal education and professional development experiences were the greatest contributors to growth. For novice teachers, mentors are an important resource for promoting progress in these areas.

Stages of ego and moral reasoning greatly influence the classroom environment that a teacher creates. Higher levels of moral reasoning inspire more democratic classroom practices, including teacher-to-student relationships, student-to-student relationships, discipline practices and overall emotional climate (Chang, 1994).

The various stage theories highlight important aspects of human development and offer a guide for mentors as they manage their relationship with protégés and attempt to balance the intersecting goals of supporting, challenging and facilitating professional vision. This equation computes differently for each protégé depending on present conditions and current stages of cognitive, ego and moral development.

Mentoring Across Developmental Stages

A protégé’s developmental stage influences a mentor’s decisions regarding the stance to take with a given issue. Given various combinations of a novice’s craft knowledge, conceptual, ego and moral

development, an attuned mentor balances her approach and navigates across the continuum of interaction; consulting, collaborating and coaching as is most appropriate to support the developmental needs of her protégé. The hardest call is knowing when to stand firm and help a novice struggle through a difficult decision-making process rather than solving the problem for him or her. What is obvious and appropriate to the skilled veteran is often hidden from the novice’s view. By appreciating these instances as developmental differences, we are then able to seize the teachable moment and support learning and growth in a meaningful way.

Metacognition as an Organizer for Professional Practice

Experts think differently about their practice than do novices. They also think about their thinking differently. Metacognition refers to two aspects of higher thinking processes. One is awareness of one’s thinking processes while they are occurring. The other is the self-regulation of these processes.

A skilled chemistry teacher notices something is not right in her classroom. The noise level and level of student attention to the lab task does not match her sense of what is most appropriate for this lesson. As an expert teacher and expert thinker she first notices her own awareness, remembering how she might have responded in her first years of teaching. She quickly scans the class to gather additional information to formulate her next decision. She controls the impulse to admonish students for their behavior. The wisdom of experience has taught her that when students are off-task, there might be something wrong with the task itself. These thoughts and the monitoring of these thoughts all occur in split seconds as she mentally sorts out possible issues and possible actions.

Moving to the center of the lab, she calls for a pause in the action and calmly asks selected students to describe the source of their confusion. This action restores a sense of order and purposefulness to the room. By noticing and controlling her thinking, this master teacher is able to resolve this issue and smoothly extend student learning. Had she reacted impulsively, without monitoring and controlling her inner responses, she might have broken the lesson flow by contributing to student distraction and breaking momentum for all involved.

Expert teachers exercise metacognitive skills in a variety of ways, monitoring decisions, choices and the impact of actions. This is the inner voice of expertise. As they access this resource, master teachers continually sort through their internalized knowledge-bases about the structure of the discipline they are currently teaching, their instructional repertoire, knowledge of the individual students with whom they are working and knowledge about their own goals, values and beliefs. We describe these knowledge-bases in more detail later in this section. As they sort this treasure-trove of options, master teachers mentally articulate and apply clear criteria for their selections.

It is the kinds and qualities of their filters that most separates experts from novices. Expert teachers are able to pursue multiple goals for a

wider variety of students during the flow of the lesson than are novices. They always have big picture outcomes for thinking and social skills and continually reinforce them. They manage relationships with the whole class at the same time that they intervene with and support individual learners. Experts design specific lessons that fit within a bigger curriculum plan that is operating all the time. Beginning teachers tend to be more immediate, intent on managing the flow of a specific lesson plan or controlling student behavior.

Self-regulation of thinking processes is the essence of intention-driven action in the classroom. This vital feedback loop helps alert teachers calibrate their choices and behaviors with their intentions, encouraging in-flight reflection and self-monitoring. This attention might mean monitoring the pace of one's speech and use of pauses to elicit student thinking. It also might mean controlling emotions when responding to a difficult student. In essence, it is the thermostat of self-control that regulates attention, task-focus, impulsiveness, humor and a host of emotional, mental and physical responses.

Opportunities to Develop Complex Thinking Skills

• REFLECTION

Just as technical repertoire and deeper conceptual understandings of the craft of teaching develop over time and are enriched and accelerated by supportive mentoring, so is the skill and disposition for increased metacognition. The Reflecting Template detailed in Section Three, is especially important in this area. Inquiries that support reflection on actions taken and not taken can be enlarged to explore the cues and thinking processes that stimulated the protégé's decisions and behaviors. Such explorations help novices to understand themselves as teachers and to realize the ways in which their patterns of attention and thought create the classroom environment around them. Over time, this awareness leads to increased confidence and a greater sense of efficacy—a belief that they can direct and control positive outcomes for their students (Chester & Beaudin, 1996; Tschannen-Moran, Hoy & Hoy, 1998).

Skilled teachers typically consider three areas as they reflect upon lessons—technical dimensions, practical considerations and critical aspects (Calderhead, 1996). Technical reflection focuses on whether learning objectives for that lesson were met. This reflection is based on specific success criteria. Practical reflection focuses on the appropriateness and effectiveness of particular strategies and the outcomes of those actions. Critical reflection focuses on the deeper purposes of lessons, learning and learning processes.

By reflecting with the protégé after lessons have been taught, mentors support the re-examination of earlier thinking and help novices make connections as they analyze successes and review shortcomings.

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• PLANNING

In addition, lesson planning is an important opportunity for mentors to support the development of a novice's thinking capacities (Clark and Peterson, 1986). By encouraging detailed planning that explores choice points and monitoring strategies, mentors help novices develop the habits of mind of more skilled practitioners. By observing and participating in a protégé's planning, mentors gain insight into mental processes and can develop tailored strategies to support and extend thinking in this area.

By noting where in the planning process a novice needs the most support, a skilled mentor can decide when and how to move from coaching to consulting during a given conversation. She can also note general patterns of thought for this protégé and know when to support, and when and how to challenge this individual.

• CLASSROOM OBSERVATION

Classroom observation is another useful arena for gathering information about the protégé's thinking processes. Detailed observations about choice points, transitions, lesson structure and student responses can all be used to frame inquiries into the novice's immediate focus and what he or she needs to anticipate in future lesson plans.

An Expert Teacher's Professional Lenses

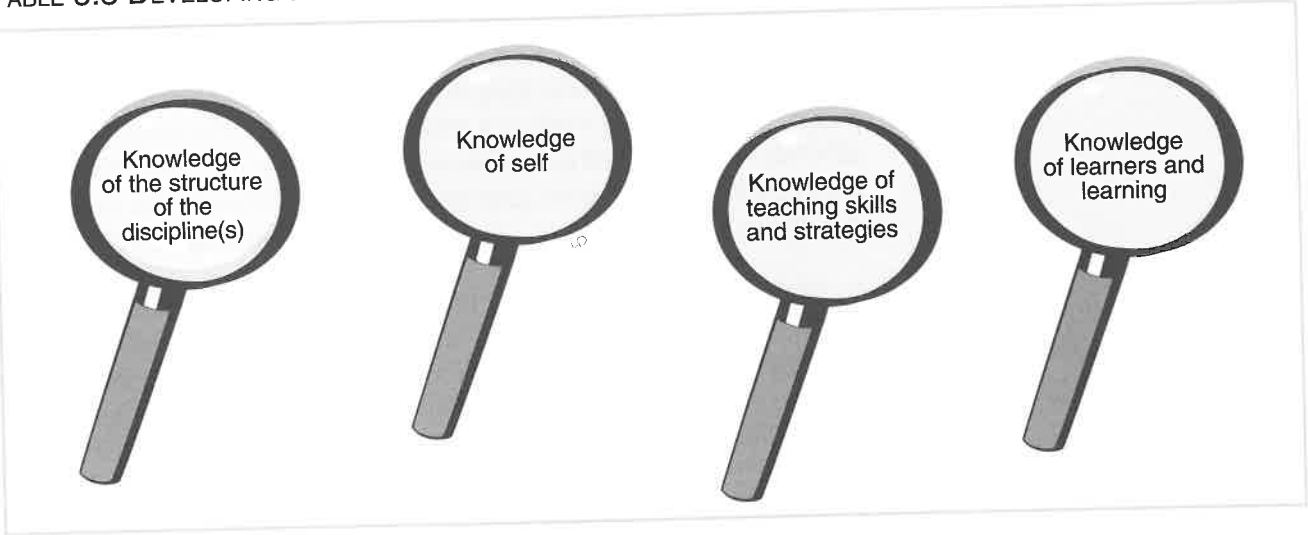
The knowledge base on teaching is both wide and deep (Saphier and Gower, 1997). For our purposes, we are organizing it here within four broad regions. We examine knowledge of the structure of the discipline(s); self; teaching skills and strategies; and learners and learning.

These lenses provide frameworks for exploring growth areas for novice teachers. They provide organizers for the mentor to structure learning-focused conversations with a protégé; to set learning goals; and to assemble resources for supporting and sustaining growth in personal and craft knowledge. These lenses are also useful to a mentor for her own teaching and work with other colleagues.

Knowledge of the Structure of the Discipline

Teacher knowledge of the structure of a given content discipline correlates highly with student success in that area. This understanding moves beyond content knowledge alone and into the organization of knowledge within each domain. The structure of the discipline means knowing the big ideas within a content area; the organizing principles, key concepts and the ways in which they influence one another (Shulman, 1987). In elementary mathematics, for example, understanding means being able to explain and illustrate a sense of

TABLE 5.3 DEVELOPING PROFESSIONAL CAPACITIES



number and how various operations such as addition and subtraction relate to each other. In social studies, it means showing students how to apply geographic, political, historical, economic and social perspectives to a given situation.

These deeper understandings greatly influence lesson design and lesson flexibility so that students can develop meaningful cognitive maps of their own (Darling-Hammond, 1997). When teachers have fragmented understandings themselves, they transfer these to their students and contribute to student misconceptions within that content area.

Teachers with rich structural knowledge are more flexible and resourceful in meeting the challenges that arise during classroom lessons. Real learning is messy. Students do not always fit neatly within the boundaries of lesson plans. Therefore, teacher content knowledge must always be greater and more complexly structured than that of their students. This allows teachers to prioritize and select those content objectives most appropriate for their students.

During planning and reflecting conversations, mentors need to listen carefully for gaps in a novice teacher's understanding of important curricular ideas. Creating a climate in which it is safe for a protégé to ask for help with content understandings is a necessary condition for growth. No one, least of all a beginning teacher, knows everything about a discipline. This is especially true for elementary teachers and others who teach more than one content area. Providing resource materials and including mini-tutorials during conversations reduces the novice's anxiety and at the same time helps to ensure content accuracy for that teacher's students.

It is important for teachers to understand and be able to model the specialized ways of thinking in a given field. Literature and physical science, for example, each have their own principles of inquiry. In social studies, ideas are organized in specific ways. Mathematics has a rich problem-solving repertoire. Writing narrative text is different than writing expository text. Each of these ways of knowing is a rich element within its content area. By promoting these skills and perspectives, teachers help students discover how those who produce knowledge and knowing in a specific domain develop and modify ideas. So, too, mentors create these understandings for their protégés.

Each content area is a minefield of misconceptions. Experienced teachers learn to anticipate these as they appear within curriculum topics. Their lesson plans reflect this thinking as they design ways to surface and dispel these barriers to deeper understanding. Knowing which misconceptions are developmentally appropriate at certain stages of learning is valuable craft knowledge. Knowing how to help students work through them is even more useful. The blend of content knowledge, learner knowledge and teaching knowledge that connects subject matter to targeted learning strategies is called pedagogical content knowledge (Shulman, 1987). Expert teachers assemble and draw upon a rich collection of analogies, models, memory aids and explanatory approaches to represent ideas and understandings to their students. They also develop tricks-of-the-trade for helping students to grapple willingly with misconceptions and to accept these as part of the learning process. Helping a protégé anticipate likely misconceptions and sharing instructional solutions is one way that mentors welcome novices to the joys of teaching and learning in a given content area.

For mentors it is important to remember that individual teachers approach each subject differently (Shulman, 1987). For elementary teachers this means the ways they approach specific content areas such as reading or mathematics. For secondary teachers this usually means specific topics within a curriculum.

One study of first year biology teachers noted that when the novices were presenting topics with which they had great depth of knowledge, they let their classes explore ideas as they asked questions that were more open-ended and promoted richer classroom discourse. When the novices were less confident of their own content knowledge, lessons were structured more rigidly the teachers themselves talked more and asked lower cognitive level questions (Carlson, 1991).

A novice's approach to specific subject areas is a special consideration for mentors of both elementary and secondary teachers. The choice of stance—consulting, collaborating or coaching may need to be weighted differently for different content areas or curriculum topics. While beginning teachers encounter a general set of universal challenges,

content specific issues need to be analyzed for possible interventions. If classroom management issues crop up at specific times of day, the protégé's comfort with a specific subject area may be a factor to consider.

A mentor's own content knowledge is a factor here as well. We all have our stretch areas. Sharing these with a protégé communicates a belief in lifelong learning. It is possible that the protégé may have content strengths to share with the mentor and can contribute to mutual learning in that manner.

Knowledge of Self

Knowledge of self includes the territories of conceptual, ego and moral development mentioned earlier in this section. It also includes knowledge of the personal values, beliefs and standards that guide daily decision-making. If teachers are to be effective with an increasingly diverse student population, they need to recognize and understand their own worldviews before they can appreciate and honor the worldviews of their students (McAllister & Irvine, 2000).

Values and beliefs shape the perceptions and judgments that carry teachers through their days. They undergird the goals teachers set for themselves and for their students. Beliefs and values are the most influential element in the type of classroom culture and learning environment that teachers develop with their students (Pajares, 1992).

Beliefs about the nature of learning and the purposes and process of teaching shape curricular and instructional preferences. These beliefs also shape personal standards for what students should learn and the desired qualities of student performances and products. In what ways is learning about the transmission of important cultural knowledge and the development of basic skills? In what ways is it about developing students' thinking and problem-solving skills and capacities? In what ways is it about developing a just society infused with democratic principles? In what ways is it about helping students discover and reach for their full potentials as human beings? And in what ways is it about promoting students' ethical and spiritual development (Eisner, 1994)?

These goals often overlap. In the heat of teaching and with the press of the clock and calendar, each teacher makes decisions about what to emphasize and what to let slide. These choices are at heart a matter of values and beliefs. Bringing these to conscious attention helps a protégé navigate conflicting options and the sometimes conflicting goals he or she encounters when his or her own beliefs bump headlong into institutional beliefs and values. Current stages of adult development influence how each teacher resolves these dilemmas. Caring mentors support these explorations as vital lessons on the road to developing confidence and expertise as a teacher.

Knowledge of one's own learning style preferences is a special area of self-knowledge. It is important for novice teachers to realize that their preferred style may not be that of all of their students. Some of us perceive and process the world globally. Others prefer more sequential approaches. Some of us are task-driven and others are relationship driven. Some of us are visually dominant and others orient towards kinesthetic or auditory processing strategies (Guild & Garger, 1998).

All these style preferences, and the many subtle ways they manifest themselves, appear in our teaching. The ability to stretch against one's own preferred style is the hallmark of flexibility and the mark of a master teacher who can connect with a wide variety of learners.

Style is also an important area for mentors to consider in their interactions with protégés. Flexibility in approach is especially important when the mentor and the protégé have very different learning style preferences. The mentor needs to remember that these are preferences and that the most resourceful people can stretch and flex as needed. It is also useful to remember that under stress we revert to our most dominant learning styles. This means that mentors need to be especially aware of this dimension during times of predictable stress as noted in the phases of first year teaching we describe in Section One, The Mentor's Role. It is also an important consideration when a protégé has had a particularly trying experience and needs to process it.

The reflecting conversation, detailed in Section Three, Maximizing Time and Attention, offers an opportunity for sorting out the dilemmas and tensions novices encounter in their daily work. Blocks or confusions in thinking are often a sign that the protégé has encountered a situation with students, parents or colleagues that violates some deeply held value or belief. This belief may not have consciously surfaced yet, but it is at the heart of this particular matter. A skilled mentor will focus the conversation by exploring tensions from the protégé's point of view to help him or her discover the values that he or she perceives are being violated. With self-knowledge as a frame, the mentor and protégé can then pursue other perspectives and possible approaches to the situation. The mentor may also need to take a consulting stance to share other viewpoints and alternative explanations that have not occurred to the protégé.

Knowledge of Teaching Skills and Strategies

Expert teachers, like concert violinists, consciously develop their performance repertoires. They assemble and hone micro routines that are combined and applied to fit a wide variety of conditions and settings. Master teachers automatize many routines and basic moves to free cognitive space for more sophisticated sensing of the needs of their learners. Such unconscious competence is the mark of an expert in the

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classroom. The lack of automaticity with basic moves, such as getting and maintaining student attention, giving clear directions and establishing routines for smooth classroom transitions, consumes the emotional and physical energy of beginning teachers. This is why these and other areas of basic classroom management are usually the first level of concerns addressed in the mentor-protégé relationship. Until these fundamentals are under control, there is often little space for more sophisticated investigations of instructional practice.

Lack of comfort in these arenas blocks protégé's openness to ideas and resources that address other areas of teaching practice. It is often useful to front load face-to-face time at the beginning of the school year to share practical strategies and routines that work well in the mentor's own classroom. This is a prime area for initial Idea Banks or to supply a 'tip-of-the-week.'

Content specific pedagogy is an important variable that increases student success (Wenglinsky, 2000). Students whose teachers help them to develop higher-order thinking and problem-solving skills linked to specific content areas outperform students whose teachers only convey lower-order skills (McLaughlin & Talbert, 1993). Mentors support this essential part of the novice to expert journey when they conduct model lessons for novices that emphasize these aspects of teaching. They also extend the protégé's skills during planning activities when they inquire into these elements. This is a place where the consulting stance adds great value at the point in the conversation when specific teaching techniques are being considered.

Knowledge of Learners and Learning

Knowledge of who learners are and how each learns best guides the special relationship between teacher and students. The greatest teaching repertoire in the world is wasted if it is not well matched to the needs of learners (Saphier & Gower, 1997). The push for smaller class sizes and smaller schools is a response to the need to know one another. In an increasingly diverse world, personal knowledge and close relationships help to connect learners to teachers, to important ideas and to each other.

The exploding knowledge base about brain development, learning styles, multiple intelligence, developmental differences and cultural patterns energizes Lee Shulman's conception of the need for pedagogical learner knowledge on the part of all teachers (Shulman, 1987). Developmental differences extend far beyond the primary grades. Over the years, these differences amplify as the span between students widens in Piagetian terms. There are many middle school and high school students who operate at a solid concrete operational level. These learners often run headlong into a curriculum organized by abstractions introduced through symbol systems. When teachers recognize these learning patterns and

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they approach instruction flexibly, they begin lessons and units with concrete experiences, then help students represent ideas with pictures and graphics as they support student language development and meaning making. This pathway leads students to firmer conceptual development and richer understandings of abstract ideas (Lipton & Wellman, 2000).

Given a changing student population, there is an increasing need for culturally respectful approaches to teaching and learning. Materials and methods that engage one population of learners may confuse or offend another. There is an important overlap here for teachers between this area and knowledge of self. How a teacher came to know an idea or discipline may not be an appropriate or effective cultural match for the students to which he or she is now teaching that same material. Mentors support novices by providing teaching tips in this arena. In fact, attending to and celebrating cultural diversity is a good area for which to develop Idea Banks.

Language differences are emerging as an important variable for teachers to consider. There is a critical variance between students' social discourse and their formal knowledge of the structure and norms of academic discourse in specific content fields (Lee & Fradd, 1998). Skilled teachers help students bridge their own language to formal academic language, integrating personal and cultural relevance with content understandings. This learning is more robust and more likely to be retained by students. This concept means that ultimately all teachers, no matter what their content specialties, are teachers of language and teachers of thinking.

Mentoring as a Professional Vision

As mentors gain experience and perspective on the craft of mentoring, they gain new insights into themselves as teachers and as learners. This learning occurs on multiple levels. On one level, mentors develop richer understandings about the craft of teaching. While engaging in personal reflection and articulating their own knowledge base to novices, they deepen and integrate personal knowledge about professional practice. On another level, mentors revisit their own history as teachers as they monitor the growth of their protégés and come to see the parallel between this journey and the journey all learners take in any new field of endeavor. Yet on another level, the mentor is learning about the art of supporting novice teachers. This, too, becomes a voyage of discovery in the passage from novice to expert mentoring.

*To mentor is to teach.
To teach is to learn.*