Between theory and experience

The dia-logical nature of managerial knowledge – implications for the preparation of education leaders

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Abstract *Argues for the need to conceive managerial and administrative knowledge as dia-logical (as opposed to technical) knowledge and explores the implications for the preparation of education leaders. Although there is widespread agreement that knowledge-in-action (know how, intuition, tacit knowledge) is different from technical or propositional knowledge, the preparation of education practitioners continues to be conducted as if the acquisition of technical knowledge was all-important. Given that the university, as an institution, is always likely to favour technical over dialogical knowledge, it is important to demonstrate that the notion of "intuition", "experience" or "tacit knowledge" are anchored in the best traditions of pragmatism, as well as in the current surge of interest in knowledge management.*

Introduction: "sicklied over with the pale cast of thought"?

In his "to be or not to be" monologue, Hamlet ponders whether to revenge the murder of his father and thereby put his own life at risk, or to avoid risk and "in the mind to suffer the slings and arrows of outrageous fortune". Towards the end of his reflections, Shakespeare has Hamlet say:

> Thus conscience does make cowards of us all;
> And thus the native hue of resolution
> Is sicklied o'er with the pale cast of thought,
> And enterprises of great pitch and moment
> With this regard their currents turn awry
> And lose the name of action.

Paradoxically, the human ability to think rationally can weaken our will for action ("the native hue of resolution") because reason is indeterminate when applied to complex problems of action. Reason can limit the number of feasible responses to a problem, but after reason has done its work, there is still a gap between the dictates of rationality and the possibilities of reality that needs to be closed by action. Philosophers like Friedrich Nietzsche have made a career out of denouncing the myth of reason's omnipotence and insisted on the

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irreducible role of what he called "will to power" and what the Greeks called *thymos*.

Professional academic programs that prepare men and women for positions of organizational leadership like those in management, government, or education (but also those in medicine, and law) are saddled with this fundamental gap between science and action. Operating at the intersection of these divergent domains, they must continuously balance the conflicting needs of theory and practice, understanding and action. Their graduates must have an understanding of the complex phenomena of business and the economy, politics, or education, but for the most part they are not going to be economists, political scientists, or education scholars. They are practitioners, managers, leaders. Their role is to lead in matters small and large, by deciding, problem-solving, coaching, rallying, and cajoling. (The Shakespearean personification of this type is Henry V, Hamlet's counter-hero.) To that end, these leaders will engage in analysis, research, and reflection. But many of their important decisions will not be dictated by analysis alone. Inevitably, they draw on a second source of insight, which goes by a variety of names including experience, judgment, intuition, and tacit knowledge.

In the discussion about how to train and educate the men and women who will manage and lead our schools and colleges, the 1990s have produced a surprisingly far-reaching agreement that the balance of theory and practice has tilted too much towards theory, or perhaps more precisely, towards the wrong kinds of theory. It has been pointed out that the field of education administration has paid insufficient attention to the knowledge and skills that the future job of a leader actually requires; that it has given insufficient emphasis to developing the art of managerial judgment and has ignored the leadership achievements of potential candidates (Murphy and Hallinger, 1987a; Barnett, 1987; Bridges, 1992; Council of Chief State School Officers, 1996; Bridges and Hallinger, 1993; Prestine, 1993; Leithwood *et al.*, 1993). Similarly, it has been criticized that teaching methods, class content, and delivery format have typically been a thoughtless imitation of the practices used by its liberal arts cousins, ignoring and frustrating the particular learning needs and learning potential of students in the field.

A glance over to neighboring professions such as medicine, business management, or law, suggests that some of them do a better, more balanced job in training their practitioners (Bridges and Hallinger, 1993; Bransford *et al.*, 1989; Christensen *et al.*, 1991). Medical programs place great emphasis on the clinical portion of a future MD's experience. Business schools take previous leadership experience into account and draw on it in the course of a MBA program. They also offer a cohort-based curriculum that makes knowledge sharing among peers easier. It is also noteworthy that teachers in business schools routinely shuttle between the world of practice – where they work as

consultants, case researchers, and in other capacities – and the world of the classroom, where students benefit from the on-site experience of their teachers.

In other countries school leaders are prepared "on the job" training to a much greater extent than in the classroom (Bush and Jackson, 2002). In Europe and many Asian countries there is no specialized career path to prepare for administrative office in education. Instead, candidates who perform well in teaching and on the lower rungs of the administrative ladder will be singled out and recommended to apply for a job opening.

Given the wide variation in the rationale and practice of professional education, what can we expect from the current reconsideration of the training of education leaders and managers? How should we think of the relation between theory and practice, classroom and clinical training? How should we balance the know-what and the know-how of leadership? What pedagogical techniques hold the greatest promise? While these questions have been discussed in many recent scholarly treatments and policy documents by virtually all professional associations (see Leithwood and Riehl, 2003; Council of Chief State School Officers, 1996) involved in the preparation of education leaders, the status of experiential knowledge remains fuzzy and its prestige in professional schools dubious, if for no other reason than the academic values that professors of education needed to internalize in order to succeed in their career.

Administrative knowledge in education – critique of technical rationality

The way knowledge practitioners do their work has been a longstanding subject of inquiry among students of management and administration. Several decades ago Sir Geoffrey Vickers (1961) wondered about the "art of judgment" in a lecture to managers in which he maintained that good judgment is a crucial prerequisite of managers – a quality that would best be developed "on the job":

> The whole structure of industry is or should be a school of judgment, in the course of which individuals may develop, by practice and example, both the general qualities of mind, heart and will, which all judgment demands, and their own particular aptitudes which determine the kind of judgment in which they can become most proficient. In such a school everyone is both learner and teacher (Vickers, 1961, p. 200).

Schon (1987) has written one of the most influential critiques of the prevailing concept of professional knowledge as "applied" technical rationality. Challenging the notion that professionals simply "apply" general knowledge and ideas to concrete situations, he has argued that the process of "application" is, in fact, a process of reflection and judgment in which the problem at hand is constructed by the professional from the raw material of a situation. As Schon (1987) put it almost two decades ago:

> In the varied topography of professional practice, there is a high, hard ground overlooking a swamp. On the high ground, manageable problems lend themselves to solution through the

> application of research-based theory and technique. In the swampy lowland, messy, confusing problems defy technical solution. The irony of this situation is that the problems of the high ground tend to be relatively unimportant to individuals or society at large, however great their technical interest may be, while in the swamp lie the problems of the greatest human concern.

Schon echoes Dewey's (1933) pragmatic approach to reflective practice:

> In real-world practice, problems do not present themselves to the practitioner as givens. They must be constructed from the materials of problematic situations which are puzzling, troubling, and uncertain. In order to convert a problematic situation to a problem, a practitioner must do a certain kind of work. He must make sense of an uncertain situation that initially makes no sense (Dewey, 1933, p. 40).

Weick (1983) has argued that academics have imposed a false model of thinking on practitioners by using scientific research as a standard. Thinking has been seen as a process of deliberate problem solving or decision making that is removed from action, rather than taking place in action. The most sustained constructivist conception of management is developed by Bolman and Deal (1997). In essence, they argue that the core task of management is the "framing" and "reframing" of organizational problems. Bolman and Deal's (1997) treatment of management as "artistry" owes an obvious intellectual debt to the work of Schon (1987). But even before the latter began their campaign against falsely conceived notions of rationality in management, other pioneers of management like Fritz Roethlisberger (1977) had emphasized the importance of distinguishing between skill, clinical knowledge, and analytical knowledge as the competencies of managers.

With roughly a decade's delay, the above questions have been taken up in the field of educational administration. Murphy and Hallinger (1987b, p. 252) noted an "increasing disgruntlement with the university training model" among practitioners of education administration, and a "need to view administrators as adult learners" (p. 256). McCarthy's (1999) entry in the *Handbook of Research on Education Administration* provides an overview of the many sources and voices of criticism and the major themes that the critics have sounded.

Especially insightful was Blumberg's (1984) account of education administration's flawed effort towards "scientization". There he argued the following:

- Education administrators already possess their most important skills and abilities before beginning their graduate programs (among them "personality", "integrity", "strength of will").
- The administration of schools and colleges is a craft, not a science. Earlier assumptions that "this science would soon enable us to train people in a fashion that would leave few questions about their performance as school organization leaders' unanswered were wrongheaded" (Blumberg, 1984, p. 25).

- High performing principals are distinguished from their peers not by their command of academic knowledge, but by vision, commitment, secure sense of identity, tolerance for ambiguity, and trust in their intuitive sense of problem solving. Most of these qualities, Blumberg (1984) argued, they did not acquire in graduate school.
- Much research produced by education scholars has little impact on practice: "the craftsperson's skill comes with experience and sharing it with other craftspeople. Neither the experience nor the sharing of it . . . are likely to take place at the university. . ." (Bloomberg, 1984, p. 37).

Given his highly revisionist view of the utility of education administration programs, Blumberg (1984) suggested a sharp retrenchment of graduate training of education administrators. Mainly, programs ought to limit themselves to helping future administrators to "know themselves" (for example through exercises of self-assessment and group training) and thus help them to become better practitioners.

Hoy (1996) has also weighed in against the false dominance of a "scientific" model of training in management and leadership. The "mantra" of science, he points out, is the controlled experiment in which we hold "everything else equal". However, "practitioners function in a world where other things are not equal. . ."(Hoy, 1996, p. 373). In professional practice, messiness, fuzzyness, and ill-structured problems are the rule, not the exception. Transforming ill-structured problems by way of abstraction, into well-structured problems amenable to abstract modeling, often changes their very essence. The problem that is solved is not the problem that confronts the professional. Just as a good medical doctor cannot simply "apply" the body of scientific knowledge available to a given set of symptoms that a patient presents, neither can the education professional merely use the body of knowledge of her field to solve the problems she encounters.

The nature of pragmatic belief

If professional knowledge is not an applied science, what is it? A variety of terms have been suggested to replace the idea of an "applied science":

- craft (Blumberg, 1984);
- reflection in action (Schon, 1987);
- artistry (Bolman and Deal, 1997);
- personal knowledge/tacit knowledge (Polanyi, 1958);
- judgment (Vickers, 1961); and
- intuition.

All of these terms cover a form and type of knowledge that Immanuel Kant called "pragmatic belief":

> The physician must do something for a patient in danger, but he does not know the nature of his illness. He observes the symptoms, and if he can find no more likely alternative, judges it to be a case of phthisis. Now even in his own estimation his belief is contingent only; another observer might perhaps come to a sounder conclusion. Such contingent belief, which yet forms the ground for the actual employment of means to certain actions, I entitle pragmatic belief (in Menand, 2001, p. 227).

Pragmatic belief is a bet, an informed guess on which action is based. One of the key tenets of pragmatism is to temper and moderate the claims of rationality: we act under the norm of rationality even though we know that our diagnosis of the case is only possibly correct. Where rationality requires certainty, pragmatism offers only probability. As a result there is inevitable tension between the professed goal to act rationally and the known fact that we are really only "muddling through" (Lindblom, 1995).

To be sure: in practice, the devil is in the details, and differences of degree are of great importance determining our chances of success in muddling through. Is the damage a doctor might do, if his diagnosis is incorrect, small or large? Is there an intervention that might help make the diagnosis more reliable? Rational analysis can help narrow the margins of error for any given problem and thus sharply increase our chances of success.

The growing use of terms like "experience" and "intuition" reflects an epistemological reorientation concerning the nature of professional knowledge and its knowledge base. One of its sources is American pragmatism, the idea that all beliefs are contingent or heuristic, tentative approximations to a never fully grasped reality (Menand, 2001). Writers like Polanyi (1958), Schon (1987), and, more recently, Nonaka and Takeuchi (1995) have made signal contributions to advance this line of thinking. A key idea is that professional knowledge does not reduce to the explicit knowledge applied to practical problem settings (the "applied science" model). Rather, there is a portion of that knowledge that evades easy classification but yet determines how managers decide, physicians diagnose, judges rule, and educators decide.

The knowledge-in-action theorem

The following are some tenets of what can be called the "knowledge in action" theorem.

Tenet 1. We know more than we know. The portion of our knowledge that is not systematic and explicit can be called "tacit".

Tenet 2. We accumulate "tacit knowledge" without deliberately setting out to do so; it comes to us as a by-product of being involved in other actions (Elster, 1983). (For example, we learn models of causality as a by-product of learning our native language.) Consistent with this model of tacit knowledge is the finding that professionals adopt new mental models typically not prior to, but rather after changing their practice.

One form of tacit knowledge is intuition. For example, as mathematicians solve complex problems, they acquire an "intuition" as to the likely nature of

the properties of a good solution. Good mathematicians know the importance of this intuitive part of their knowledge and trust it (Polya, 1957). The recently celebrated mathematician and Nobel-laureate John Nash is a case in point. One of Nash's peers characterized Nash's approach to problem solving:

> Whatever a mathematician does has to be justified by a rigorous proof. But that's not how the solution presents itself to [John Nash]. Instead, it's a bunch of intuitive threads that have to be woven together. And some of the early ones present themselves visually (Martin Davis, in Nassar, 1998, p. 129).

Nash (Nassar, 1998, p. 160) had a "great confidence in his own intuition". Similarly, the seventeenth century French mathematician and philosopher Blaise Pascal argued:

> We know the truth not only through our reason but also through our heart. It is through the latter that we know first principles, and reason, which has nothing to do with it, tries in vain to refute them. ... Principles are felt, propositions proved, and both with certainty, though by different means ... As if reason were the only way we could learn! (Pascal, 1966, p. 28).

And, for good measure, there is always Isaac Newton's dictum that "any great discovery begins with a bold guess".

Tenet 3. "Tacit" or "non-explicit" knowledge is of strategic importance for professional practice. We can also describe this as the difference between the "know what" (explicit knowledge) and the "know how" (tacit knowledge). For example, in school teaching the know-what consists in the knowledge of subject matter. The know-how consists in pedagogical experience and knowledge how to transmit this knowledge to students (e.g. the "knowledge" that seemingly "stupid questions" may reveal "different learning styles").

Tenet 4. Intuition has a cognitive as well as a physical and emotional dimension. A solution often "feels" right or wrong before we can make our reasons explicit.

Tenet 5. Know-how or tacit knowledge cannot be acquired intentionally. One cannot become a master-craftsman by following a prescribed set of rules, or taking a prescribed set of classes; it cannot be gained by accumulating textbook knowledge. It can be acquired only by placing oneself under conditions where it may come about as a by-product. This has important implications for the role and significance of internships in administrative training programs. Apprenticeship or mentoring models are likewise important.

Tenet 6. Professional knowledge combines universal and local knowledge. Local knowledge is the experience and intuition that practitioners of similar occupations or similar responsibilities have collectively accumulated about the work in their specific locale. If local knowledge is neglected, or its importance minimized, a number of organizational failures are likely. Top management is cut-off from the flow of local knowledge because lower level employees have no incentives to share what they have learned with superiors. Second, because rules from above are poorly articulated with local conditions, they tend to be

ignored or circumvented by lower-level employees, with the result that top- as well as bottom-level organizational members have only a dim view of the organization's true "big picture". Third, organizational members on all levels fail to learn how to transform tacit into explicit knowledge and thus systematically under-exploit a crucial source of organizational knowledge.

It is this restricted knowledge flow (rules down, exceptions up) that ultimately debilitates bureaucratic organizations. Omniscience being unavailable on all levels of the organization, the only way to solve organizational problems is to combine "global" and "local" knowledge, the knowledge of the textbook, and the knowledge of the particulars of a given setting or situation. Von Hayek (1945) took pains to demonstrate that economic and organizational problems cannot be resolved if we assume the presence of a mind equipped with all relevant data and knowledge to interpret them. A more realistic assumption is that all participants possess only partial knowledge of the situation:

> The problem is thus in no way solved if we can show that all the facts, if they were known to a single mind (as we hypothetically assume them to be given to the observing economist), would uniquely determine the solution; instead we must show how a solution is produced by the interactions of people each of whom possesses only partial knowledge. To assume all the knowledge to be given to a single mind in the same manner in which we assume it to be given to us as the explaining economists is to assume the problem away and to disregard everything that is important and significant in the real world (Von Hayek, 1945, p. 526).

Post-bureaucratic organizations facilitate the effective combination of local knowledge (knowledge management) in an organizational culture that encourages the generation of new ideas, projects, and products (entrepreneurialism), and that provides its members with optimal conditions to tap the organization's dispersed knowledge and make it available where it is needed (networks).

The dia-logical nature of professional knowledge

I will now suggest a definition of the nature of "knowledge-in-action", drawing on the discussion above: knowledge in action is the collective experience of the members of a community of practice which is surfaced by peer practitioners as they engage in problem-focused dialogue. (*The American Heritage Dictionary* defines dialogue as "exchange of ideas or opinions". The word's root is the Greek *dialogos* = discussion.)

A good illustration of the above conception of knowledge in action is Oliver Wendell Holmes' characterization of the common law approach to justice, according to which the common law decides "the case first, and the principle afterwards" (quoted in Menand, 2001, p. 338). If law is not based on principle, what is it based on? Holmes answer: "experience", defined as the sum of beliefs, sentiments, customs, values, policies, and prejudices of a people in a given age. In the common law (in contrast to European Code Law) a case is decided by

experience, not abstract rules. Rather than viewing a given action as a mere instance of a general class of actions, a case is seen as a "unique fact situation". Slight variations in situational factors can make a big difference in our judgment. For example, a person who breaks a promise in order to keep harm from a friend might be excused for breaking his promise, whereas a person who breaks a promise for selfish reasons might be judged quite differently.

Any judgment of a concrete case has to answer to multiple, conflicting imperatives. In law these may include:

- justice;
- continuity of precedence;
- social welfare; and
- perceptions of changing standards of public opinion.

In administration these might be:

- organizational stability;
- effectiveness;
- efficiency;
- equity;
- accountability; and
- reputation, etc.

For a school principal some of the relevant standards might include:

- stability and order;
- innovation;
- intellectual growth of teachers;
- involvement of parents;
- efficiency;
- excellence; and
- accountability.

Given that relevant standards often conflict, one can argue that there is an overriding meta-imperative – balance – the idea that no single imperative ought to decide the outcome. Instead, the solution that produces the best "fit" between the facts of the case and a balanced use of the applicable standards might be said to be the best (Menand, 2001, p. 339).

How do practitioners arrive at a good judgment? By engaging in (a silent or explicit) conversation with members of their community of practice, their peers, or the members of their network. Just as there is, according to Holmes, a vast difference between knowing the "black letter law" and being able to render sound judgment on a legal case, there is a similar difference between knowing one's field "know-what" and having the "know-how" for a sound decision.

"Knowing what" versus "knowing how"

In professional practice we must distinguish between knowing what and knowing how. Just as individuals who know the rules of chess are not necessarily identical with individuals who play chess well, we must distinguish between knowing what (rules of chess) and knowing how (being able to play well). The left column of Table I shows some examples of individuals with a lot of know-what but little know-how.

Competent performance in education is less and more than the knowledge of the competent scholar/researcher.

If the knowledge of administrative practitioners is dialogical, if it emerges in conversations among members of a community of practice, improving administrative knowledge requires improving the co-operation of researchers and practitioners. A key question of education administration program reform thus becomes, how we can institutionalize the dialectical movement from practice to theory and back to (a transformed and improved) practice?

Implications for education administration program reform: new forms of professional graduate education

Expanded objectives

A lot has been written about new forms of teaching and learning in professional education in general and in education administration in particular. Anyone interested can find a host of ideas, methods, and approaches, running the gamut from "problem-based learning" (Bridges and Hallinger, 1993), "reflective learning" (Spalding and Wilson, 2002) to proposals to replace the

People who know what	People who know how
Constitutional scholar	Political founder/leader
Professor of education	Education leader
Art critic	Artist
Linguist	Speaker of a foreign language
Chess instructor	Master chess player
Monday morning quarterback	Quarterback
Propositional and experiential knowledge in education leadership (examples)	
Psychology of decision making	Creative problem framing
Economics of education	Implementing a tuition raise
History and politics of education	Building a successful change agenda
Accounting	Implementing a new accounting scheme
Methods of teaching and learning	
Research, reading, writing	Simulations, case studies, experiential learning, in-basket exercises; university-school partnerships.
Teachers as scholars.	Teachers as scholar-practitioners.
Cognitive/intellectual learning	Clinical learning; peer learning; continuous learning.

Table I.
Propositional versus experiential knowledge

"sage on the stage" by the "guide on the side". While the field is in dire need of fresh ideas and practices that address the special conditions and requirements of educating professionals for action, the best methods and practices are bound to lose their effect if they are not sustained by a shared commitment to certain key ideas and principles. The following might be among the goals of a professional education program for organizational leadership in education administration:

- shape the student body into a community of practice;
- surface student-practitioners' tacit knowledge;
- help student-practitioners to hone, and develop their "theories in use";
- institutionalize an ongoing dialogue between scholars and practitioners; and
- develop and continuously refine new methods of teaching and learning appropriate for dialogical knowledge creation.

Redefined relations between (and among) student-practitioners and faculty

If it is true that the mere diffusion of propositional knowledge is not enough to produce good managers and leaders and if competent professional practice in education cannot be treated as an "applied science", then we need to redefine the relations between and among student-practitioners and teacher-researchers. The key relationship in the conventional academic setting is the relation between faculty member and student. Peer-to-peer and student-practitioner learning are often neglected. If student-practitioners are grouped in classes with other student-practitioners, it is to exploit economies of scale rather than peer interaction and peer learning. The knowledge that can be surfaced when student-practitioners interact plays no systematic role in the planning and design of professional school curricula. The same is true for the knowledge that can be surfaced in the interactions among researcher-consultants and between the latter and student practitioners.

Last but not least, the conventional academic organization of professional education provides no systematic opening to facilitate the learning of faculty-researchers. The assumption is that faculty learn as they undertake research (which is one of their sources of new knowledge). A sustained dialogue with practitioners who can be consulted for their insights and tacit knowledge has no regular place in professional education.

While the conventional class facilitates learning only via the professor-student channel, the post-reform classroom will facilitate learning via multiple channels:

- student-practitioners learn from each other (peer networks of collegial expertise; community of practice; cohort);
- faculty researchers learn from practitioners and each other (school of education-school partnerships; consultancies);

- student-practitioners learn from master-practitioners (internship, mentorship);
- student-practitioners learn from faculty-researchers (classroom instruction; field projects, case studies, etc.).

A new role for master-practitioners

As a result of tapping systematically into the experiential knowledge of master-practitioners, their role in professional education will become more central as the accomplished practitioner plays a key role in surfacing and passing on a field's tacit knowledge from one generation of practitioners to another. In Zen Buddhism, the Zen Master is a key figure who is appreciated not for his book knowledge, but for his lived experience and accumulated wisdom. In other "master-apprentice" traditions, the "master-practitioner" is a pivot in maintaining and passing on complex skills and practical knowledge to new generations of practitioners. Some countries use this model in teacher and administrator training. In Germany, the preparation of new teachers is in the hands of master-teachers who head the teacher seminaries where novice teachers spend two years as teacher-apprentices to develop their skills and prepare for their careers.

The key point here is the master-practitioner can be a more effective teacher of experiential knowledge than the scholar-researcher. First, the master-practitioner is promoted based on his or her practical accomplishments, recognized and rewarded by other practitioners. The master's ability to influence and lead people in practice is one of his or her most valued skills. Second, by the nature of her accomplishments the master-practitioner is more a coach than a teacher. Hers is not a distinct "body of knowledge" that she wants to impart to students, but rather a "way of seeing", a way of making sense and learning from experience. By contrast, contemporary promotion practices of administrators often divorce the future leaders from their peers and disengage them from their discourse.

New forms of teaching and learning

Cohorts, partnerships, guided field experiences, scholar-practitioner roundtables, networking, case studies, and problem-based learning are among the new forms of teaching and learning that are currently being discussed. Some of the assumptions underlying these practices are:

- teaching by telling is less effective than teaching by facilitating discovery;
- student-practitioners' experience is an important source of learning;
- the adoption of new mental models frequently follows rather than precedes changes in the learner's behavior.

Hori (1998) provides an example of techniques that are used in Zen Buddhism to pass on tacit knowledge. Zen Buddhists, although highly spiritual, are not

interested in producing philosophers or scholars; they want to produce individuals who live and breath the Zen tradition. Some of the principles on which Zen teaching is based are:

- The important learning is deep philosophical and mystical insight which cannot be taught directly. It emerges as a by-product of following an exacting routine of ritual formalism. "In fact, it [Zen Buddhism] teaches mystical insight by means of ritual formalism" (Hori, 1998, p. 20). An example is the tea ceremony. Students who ask for the rationale for this or that aspect of the tea ceremony are told: "Don't ask questions. Just do it this way for three years and you will know" (Hori, 1998, p. 23). The idea is that to penetrate the core of a philosophy, it's not helpful to teach it, but rather to have the students discover it and penetrate its meaning on their own.
- For real learning to occur the student must be ready and eager. Confucius said: "only one who bursts with eagerness do I instruct". This means that the student becomes a pro-active member in the learning process: "that new disciple is no good. You have to tell him everything" (Hori, 1998, p. 31). To achieve the proper attitude Zen Buddhists demand that the student take on new tasks (such as preparing meals for all members of the monastery) and complete them perfectly right from the start. Zen masters explain that by placing the student in a situation of generalized anxiety they heighten his attentiveness to every detail in his surroundings and his "learn by observing" (Hori, 1998, p. 34).
- Physical and emotional habituation precede mental learning. "Each particular ritual act in Confucianism has not only a prescribed behavioral form but also a prescribed attitude, emotion, or state of mind" (Hori, 1998, p. 41).
- Willingness to learn coupled with heightened anxiety and stress eventually lead to deep insight.

I cite the case of Zen-Buddhistic forms of apprentice-induction because it shows vividly the possibility of educating without teaching. Of course, there are many cultural assumptions underlying Zen that would clash with Western beliefs, such as the unconditional acceptance of the master's authority, the acceptance of ritual formalism, and even the acceptance of physical discipline. Still, because its teaching stresses the development and passing on of tacit knowledge, intuition, and wisdom, these techniques should be of interest for everyone who wants to complement our conventional teaching of explicit, codified knowledge by the cultivation of experience and intuition.

Summary

I argue here for an epistemological reorientation in preparing professionals for leadership roles by raising the status of experiential knowledge, cultivate the

development and dissemination of such knowledge and give it a more prominent place in education administration training programs. Methods such as internships, peer-learning, case and field studies would move from the periphery to the center of our instructional programs, and master-practitioners would assume a valued place alongside scholars and researchers in programs of instruction. While implementation of these and other reforms runs counter to the prevailing academic orthodoxy that privileges technical-rational knowledge, this reorientation resonates strongly with key tenets of pragmatist philosophy as well as the expressed preferences of many student-practitioners, an association that can help to bolster the legitimacy of the needed changes.

References

Barnett, B.G. (1987), "Peer-assisted leadership: peer observation and feedback as catalysts for professional growth", in Murphy, J. and Hallinger, P. (Eds), *Approaches to Administrative Training in Education*, State University of New York Press, Albany, NY, pp. 131-49.

Blumberg, A. (1984), "The craft of school administration and some other rambling thoughts", *Education Administration Quarterly*, Vol. 20 No. 4, pp. 24-40.

Bolman, L. and Deal, T. (1997), *Reframing Organizations*, 2nd ed., Jossey-Bass, San Francisco, CA.

Bransford, J., Franks, J., Vye, N. and Sherwood, R. (1989), "New approaches to instruction: because wisdom can't be told", in Vasniadou, S. and Ortony, A. (Eds) *Similarity and Analogical Reasoning*, Cambridge University Press, New York, NY, pp. 470-97.

Bridges, E. and Hallinger, P. (1993), "Problem-based learning in medical and managerial education", in Hallinger, P., Leithwood, K. and Murphy, J. (Eds), *Cognitive Perspectives on Educational Leadership*, Teachers College Press, New York, NY, pp. 253-67.

Bridges, E.M. (1992), *Problem-based Learning for Administrators*, ERIC Clearinghouse on Educational Management, University of Oregon, Eugene, OR.

Bush, T. and Jackson, D. (2002), "A preparation for school leadership. International perspectives", *Educational Management and Administration*, Vol. 30 No. 4, pp. 417-29.

Christensen, C., Garvin, D. and Sweet, A. (1991), *Education for Judgment*, Harvard Business School, Boston, MA.

Council of Chief State School Officers (1996), *Interstate School Leaders Licensure Consortium: Standards for School Leaders*, Washington DC.

Dewey, J. (1933), *How We Think*, Dover Publications, New York, NY.

Elster, J. (1983), *Sour Grapes*, Cambridge University Press, Cambridge.

Hori, S.G.V. (1998), "Teaching and learning in the Rinzai Zen Monastery", in Rohlen, T. and LeTendre, G. (Eds), *Teaching and Learning in Japan*, Cambridge University Press, New York, NY, pp. 20-49.

Hoy, W.K. (1996), "Science and theory in the practice of educational administration: a pragmatic perspective", *Educational Administration Quarterly*, Vol. 32 No. 3, pp. 366-78.

Leithwood, K. and Riehl, C. (2003), "What we know about successful school leadership", American Educational Research Association, Division A, available at: www.cepa.gse.rutgers.edu/whatweknow.pdf

Leithwood, K., Hallinger, P. and Murphy, J. (1993), "The expertise of educational leaders", in Hallinger, P., Leithwood, K. and Murphy, J. (Eds), *Cognitive Perspectives on Educational Leadership*, Teachers College Press, New York, NY, pp. 268-80.

Lindblom, C.E. (1995), "The science of 'muddling' through", in Theodoulou, S. and Can, M. (Eds), *Public Policy: The Essential Readings*, Prentice-Hall, Englewood Cliffs, NJ, pp. 113-27.

McCarthy, M. (1999), "The evolution of educational leadership preparation programs", in Murphy, J. and Louis, K.S. (Eds), *Handbook of Research on Educational Administration*, Jossey-Bass Publishers, San Francisco, CA.

Menand, L. (2001), *The Metaphysical Club. A Story of Ideas in America*, Farrar, Strauss, and Giroux, New York, NY.

Murphy, J. and Hallinger, P. (1987a), "New directions in the professional development of school administrators: a synthesis and suggestions for improvement", in Murphy, J. and Hallinger, P. (Eds), *Approaches to Administrative Training in Education*, State University of New York Press, Albany, NY, pp. 245-73.

Murphy, J. and Hallinger, P. (Eds) (1987b), *Approaches to Administrative Training in Education*, State University of New York Press, Albany, NY, pp. 131-49.

Nassar, S. (1998), *A Beautiful Mind*, Simon & Schuster, New York, NY.

Nonaka, I. and Takeuchi, H. (1995), *The Knowledge-Creating Company*, Oxford University Press, New York, NY.

Pascal, B. (1966), *Pensees*, Penguin, London.

Polanyi, M. (1958), *Personal Knowledge*, The University of Chicago Press, Chicago, IL.

Polya, G. (1957), *How to Solve It*, Princeton University Press, Princeton, NJ.

Prestine, N. (1993), "Apprenticeship in problem-solving: extending the cognitive apprenticeship model", in Hallinger, P., Leithwood, K. and Murphy, J. (Eds), *Cognitive Perspectives on Educational Leadership*, Teachers College Press, New York, NY, pp. 192-212.

Roethlisberger, F. (1977), *The Elusive Phenomena: An Autobiographical Account of My Work in the Field of Organizational Behavior at the Harvard Business School*, Harvard University Press, Boston, MA.

Schon, D. (1987), *The Reflective Practitioner. How Professionals Think in Action*, Basic Books, New York, NY.

Spalding, E. and Wilson, A. (2002), "Demystifying reflection: a study of pedagogical strategies that encourage reflective journal writing", *Teachers College Record*, Vol. 104 No. 7, pp. 1393-421.

Vickers, G. (1961), "The art of judgment", in Pugh, D.S. (Ed.), *Organization Theory*, Pelican, London, pp. 183-201.

Von Hayek, F. (1945), "The use of knowledge in society", *American Economic Review*, Vol. XXXV No. 4, pp. 519-30.

Weick, K.E. (1983), "Managerial thought in the context of action", in Srivastva, S. (Ed.), *The Executive Mind*, Jossey-Bass, San Francisco, CA, pp. 222-36.

Further reading

Buckner, K. and Bradshaw, L. (2001), "Student self-assessment of leadership skills: a useful tool in preparation programs", in Kowalski, T.J. and Perreault, G. (Eds), *21st Century Challenges For School Administrators*, Scarecrow Press, Lanham, MD.

Hoyle, J.R., English, F.W. and Steffy, B.E. (1998), *Skills for Successful 21st Century School Leaders*, AASA, Arlington, VA.

Kelsey, J.G.T. (1993), "Learning from teaching: problems, problem-formulation, and the enhancement of problem-solving capability", in Hallinger, P., Leithwood, K. and Murphy, J. (Eds), *Cognitive Perspectives on Educational Leadership*, Teachers College Press, New York, NY, pp. 231-52.

Lugg, C. and Shoho, A. (2002), "UCEA review revisits the work of the National Commission for the Advancement of Excellence in Educational Administration", *UCEA Review*, Vol. XLIII No. 2.

Murphy, J. (1992), *The Landscape of Leadership Preparation: Reframing the Education of School Administrators*, Corwin/Sage, Newbury Park, CA.

National Policy Board for Educational Administration (2002), "Standards for advanced programs in educational leadership", available at: www.npbea.org