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Management Education and the Professions

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Ongoing concerns about a perceived disconnection between management education and management practice and the limited skill base of business school graduates are evident in the literature. These problems have been looked at through various lenses, and the professional model of education has shown promise in addressing perceived problems with business schools and their graduates. Using concepts from the sociology of the professions including jurisdiction, professional identity, and the nature of professional work, this article explores recent criticisms of management education and addresses the stages and issues involved in migrating to a model of education that mirrors those used in the professions. Organization Management Journal, 11: 47–56, 2014. doi: 10.1080/15416518.2014.903092

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Business schools are under fire. Sweeping criticisms of the value and relevance of management education are evident in the literature (cf. Khurana & Spender, 2012; Kilpatrick, Dean, & Kilpatrick, 2008; Rousseau, 2012) amid concerns that business schools face the prospect of becoming irrelevant if they continue with their current practices (Datar, Garvin, & Cullen, 2011; Hawawani, 2005).

Concerns about management education span several related areas. At the most general level, management education is seen as increasingly detached from the human elements of managing. That is, curricula (especially MBA programs) are seen as defined in terms of economic imperatives focused on maximizing shareholder value (Pirson, 2011), with considerably less attention directed toward a firm’s responsibilities to society (Dierksemeier, 2011). As a result, business schools are seen by some writers as producing graduates who are not prepared for the complexities of managerial work (Ackoff, 2002; Khurana, 2007; Khurana, 2011; Khurana & Spender, 2012; Mintzberg, 2004).

These higher level issues are reflected in more concrete criticisms about practices and pedagogy. Because managing is a human activity (Mintzberg, 1980), the strong focus on economics and quantitative analysis in business schools (Dehler, Welsh & Lewis, 2001; Weisweiler, Peus, Nikitopoulos, & Frey, 2011) has been criticized by some as creating a pedagogy–practice gap (Bennis & O'Toole, 2005; Pfeffer & Fong, 2004). Specifically, there is widespread concern that business schools graduate students who do not understand the process of managing and lack the skills to perform managerial work (Gosling & Mintzberg, 2006; Mintzberg, 2004; Pfeffer & Fong, 2004; Raelin, 2007, 2009; Rousseau, 2012; Shoemaker, 2008). Further, business school graduates (especially those with master’s degrees in business administration [MBAs]) are seen as overly concerned with extrinsic rewards (Pfeffer & Fong, 2004), operating with a win-at-all-costs mentality (Datar et al., 2011), to the detriment of the individual and of the broader society (Spitzoeck, 2011).

This debate about the mission and future direction of business schools, in turn, has led to rethinking the identity not only of business schools but of their graduates as well. Identity is important because it defines the values underlying management education and the role of business schools in society. Critics have argued not that business schools produce graduates with no values (a common theme in the popular press), but rather graduates with the wrong values (Khurana, 2007; Khurana & Spender, 2012; Pfeffer & Fong, 2004; Starkey, Hatchuel, & Tempest, 2004; Starkey & Tempest, 2009).

In addressing the related problems of relevance and value-driven actions, it has been suggested by several prominent scholars that business schools would benefit by adopting many or most of the practices used in professional education. These include a focus on solving practice-based problems, structured learning experiences in field settings, and the development of a professional identity (cf. Bennis & O’Toole, 2005; Khurana, 2007; Khurana & Spender, 2012; Pfeffer & Fong, 2004; Rousseau, 2012).

Although there is growing enthusiasm for the professionalization of management education as an outcome, considerably less attention has been directed to the process and problems involved in pursuing this path. In this
regard, while there is a rich body of theory and research focused on professional work and the sociology of the professions, hardly any of it is evident in the case for professionalizing management education. Further, support for the professional model is not universal, and work from the theory of the professions is also useful in understanding the shortcomings and challenges of a planned migration to the professional model.

This article draws on this unexplored body of research using concepts from the sociology of the professions including jurisdiction, professional identity, and the nature professional work to frame the issues and challenges in migrating to a professional model for graduate education in business. We begin with a discussion of the evolution of management education and then discuss different perspectives on practice-oriented pedagogy. Concepts from the sociology of the professions are then used to develop a framework for refocusing management education. Specifically, the concept of jurisdiction (cf. Abbott, 1988; Freidson, 1994) is used to define the value and relevance of managerial work in the larger society. Then the characteristics of professional work (Abbott, 1988) are used to define the competencies that business schools must build to justify jurisdictional claims. The article concludes with a discussion of the challenges associated with the professionalization of management and of the value of practice-based pedagogy in management education.

THE EVOLUTION OF MANAGEMENT EDUCATION

In order to assess recent criticisms of management education, it is helpful to explore the factors that have shaped business schools’ policies, curricula, and pedagogy. From their inception, business schools have struggled to gain legitimacy within the university. Despite successfully moving beyond the vocational model that characterized their beginnings (cf. Bennis & O’Toole, 2005), business schools were still viewed as second-class citizens within the academic community well past the post-World War II period (Khurana, 2007).

Khurana (2007) presents a well-documented history of business schools that we cannot do justice to in this article. Rather, we focus on his account of postwar reforms designed to increase their stature and legitimacy, because these changes are the genesis of many of the problems that are seen as responsible for business schools’ current struggles to meet stakeholder expectations.

The first reform was an emphasis on discipline-based scholarship. Although this notion was meant to give business schools status similar to their academic counterparts in other disciplines, it had significant unintended consequences. The first was to change the reward structure for business school faculty such that papers in high-quality academic journals became the most valuable component of career success.

As academic journals in business gained prestige and grew in number, emphasis was placed on methodological rigor and theoretical contribution at the expense of relevance to management practice. Business school faculty members, thus, were rewarded for papers testing abstract conceptual models intended primarily for other academics (Bennis & O’Toole, 2005). In the process, it has been argued that business problems were framed through an artificial lens in which stylized and simplistic analyses were substituted for the real problems of management practice (Pfeffer & Fong, 2004; Shoemaker, 2008; Starkey & Tempest, 2009).

The second reform was an emphasis on quantitative models as a means of guiding business decisions. This change also had significant consequences in that it established and reinforced the deterministic view of business that concerns current critics of management education (cf. Bennis & O’Toole, 2005; Pfeffer & Fong, 2004). In particular, several writers have suggested that curricula and degree programs rely heavily on quantitative models without adequate consideration of their limitations (Datar et al., 2011), leading to an oversimplification of the managerial role and the nature of managerial work (Mintzberg, 2004; Khurana, 2007). Taking this argument further, proponents of critical management education have raised concerns that the quantitative emphasis in current business school pedagogy limits students’ intellectual and personal development (Dehler, 2009).

While acknowledging that business schools have met the challenge of gaining legitimacy in the academic community, critics of management education have become increasingly concerned about the relevance of management pedagogy. The professional model, in turn, has received the most attention as a method of introducing practice-based pedagogy into management education (cf. Bennis & O’Toole, 2005; Pfeffer & Fong, 2004; Khurana, 2007; Khurana & Spender, 2012; Rousseau, 2012), although other approaches are also evident (cf. Chia & Holt, 2008; Raelin, 2007; Starkey & Tempest, 2009).

PERSPECTIVES ON DEVELOPING PRACTICE-BASED KNOWLEDGE IN BUSINESS SCHOOLS

It is noteworthy that just as increasing the academic stature of business schools was closely linked to adopting a new epistemology to generate scientific knowledge, rethinking management education also requires consideration of a new epistemology as it relates to transmitting practice-based knowledge (cf. Raelin, 2007). Although this article is focused on the professional model and its associated epistemology, it is important to note that it is not the only vehicle that has been proposed for developing a practice-based pedagogy for management education. Practice-based studies offer a second model and associated epistemology driven by immersion in field settings (cf. Corradi, Gheradi, & Verzelloni, 2010; Raelin, 2007, 2009).

Although these two perspectives share the same goal, they differ with respect to how it is to be attained. The professional model emphasizes formal socialization experiences and the development of a professional identity that includes formal ethical guidelines for professional practice (cf. Geer, Hughes, Strauss & Becker, 1960). Practice is defined in terms of domains
or jurisdictions that are claimed and defended by a profession based on specialized knowledge and expertise (Freidson, 1994). With respect to epistemology, the professional model is grounded in scientific inquiry to develop and expand specialized knowledge that can be used in practice (Abbott, 1998). Thus, unlike the research common in business schools, research in professional schools is linked closely to problems of practice within the claimed jurisdiction. Professionals are expected to remain current with regard to practice-based knowledge, which is transmitted through formal channels (e.g., professional conferences) and informally through professional communities.

In contrast, practice-based studies are grounded in postmodern epistemology (Raelin, 2007). Practice-based knowledge is thought to be context dependent; that is, knowledge is seen as “knowledge-in-practice,” which is constructed by interactions with others such that knowing and doing are linked (Corradi et al., 2010). Compared to the professional model, there is less emphasis on structured learning experiences and greater emphasis on self-reflection, on immersive experiences with those who have mastered practices, and on tacit and local knowledge (Gheradi, 2000; Raelin, 2007). Practice-based pedagogy is defined in more informal and more experiential terms in that knowledge is thought to develop (as opposed to being transmitted), and connections between knowing and doing are thought to be personal and idiosyncratic.

Although these two perspectives appear to present an either/or choice with respect to reframing management education, we believe that to do so is a mistake. For business schools to meet the expectations of key stakeholders, it is necessary for them to develop learning experiences and curricula that prepare graduates for managerial work. Given the complex, multifaceted nature of managerial jobs (Mintzberg, 1980), it is likely that the professional model will require modification if it is to be adopted by business schools. Indeed, concerns have been raised about the degree of commonality between professional and managerial work (Chia & Holt, 2008). Practice-based studies, therefore, are more profitably viewed as presenting a complementary rather than an alternative epistemology in that there are ways of knowing related to management practice that go beyond evidence-based epistemology. Practice-based studies, in turn, offer a window in developing that knowledge.

THEORY AND RESEARCH ON THE PROFESSIONS AND THE PROFESSIONALIZATION OF MANAGEMENT

Although they have received surprisingly little attention, theory and research on the sociology of the professions are important in gaining a better understanding of the process and pitfalls of developing a professional model of management education. Early research on the professions was focused on occupational status hierarchies within society. Emphasis was placed on the tasks claimed by the professions and on the work of professionals (Hughes, 1958). Later work focused on the development of professional identities (cf. Beard, 1994; Fagermoen, 1997; Netting & Williams, 1996), relationships between professions and other occupations (cf. Macdonald, 1995), and practices of specific professions within society (cf. Birnbaum & Somers, 1986; Kunda, 2006).

Abbott (1988) distilled, integrated, and extended prior theory and research by taking a systems view of professions. We rely extensively but not exclusively on his seminal work because it is based on a framework that considers the nature of professions rather than the characteristics of a specific profession. This broader perspective is necessary to provide a context for analyzing management as a profession (cf. Khurana, 2007) and for capturing the defining elements of professional practice.

Jurisdiction and Identity

Professions are defined in terms of exclusive practice domains that determine the value of the profession in society and the identities of its members (Freidson, 1994). Abbott (1988) refers to these exclusive practice domains as jurisdictions that are maintained through the application of specialized knowledge. That is, professions exclusively claim the right to address a specific set of problems in society based on the unique expertise of their members.

Abbott’s (1988) systems view of professions is reflected by flux in jurisdictional boundaries as technology, cultural norms, and public perceptions shift. Thus, professions compete for tasks to increase their prestige such that higher status professions have the ability to take desired tasks from lower status professions. Jurisdiction, therefore, is best viewed as a process rather than an as an outcome that defines the identity of a profession and its claims to legitimacy within society. More importantly, jurisdiction defines professional practice in that the tasks claimed by a profession determine the proper role of its members (cf. Kunda, 2006).

Abbott’s (1988) concept of jurisdiction has been used to guide revisions in pedagogy and degree requirements for several occupational groups seeking to professionalize or to increase their professional status, including archivists (Bastian & Yankel, 2006), library scientists (O’Connor, 2009), information systems practitioners (Somers, 2010), and nurse practitioners (McMurray, 2010). Jurisdiction is seen as critical to establishing legitimacy through application of professional standards. It is also central to establishing a professional identity—that is, defining the parameters of professional practice.

Business schools have been criticized for not defining a clear jurisdiction and for not providing an identity for their graduates. Indeed, Pfeffer and Fong (2004) make the case that an MBA degree is often seen as a hindrance to managerial work rather than as preparation for it. While this argument is a bit overstated, weak jurisdictional claims have led to confusion about the societal problems managers are educated to solve and the methods that they use to solve them (Datar et al., 2011).

Establishing a jurisdiction for management, thus, has several benefits. To begin with, it defines and clarifies the parameters of practice-based knowledge. In this regard, while a jurisdiction does not influence the procedures for generating and
communicating practice-based knowledge, it does shape the
domain in which that knowledge is operative. Further, a jurisdic-
tion sets the stage for developing a professional identity and
for shaping the professional socialization process (cf. Khurana,
2007).

The Nature of Professional Work

Professional work reflects the activities associated with pro-
fessional roles. Research on this topic is typically focused
on specific professions such as nurses and engineers with an
emphasis on the potential conflicts between professional and
organizational roles (cf. Birnbaum & Somers, 1986; Kunda,
2006); that is, this research is driven by the psychological and
sociological implications of assuming the role of a professional.

Abbott (1988) offers a broader view of professional work
by developing a conceptual framework based on commonalities
among the tasks that professions have claimed within society.
Thus, rather than defining the work of a profession, Abbott
(1988) makes the distinction between professional work and
work performed by other occupations using three key con-
cepts: diagnosis, treatment, and inference. For our purposes, it
is important to note that Abbott’s (1988) framework has been
used to assess efficacy of professional degree programs and to
guide the direction of degree programs seeking to attain profes-
sional status in society. In particular, the concepts of diagnosis,
treatment, and inference have been used to establish the value
of practice-based pedagogy in professional degree programs
(Bisman, 2001; Kemp, 1998) and as a framework for shaping
curricula in occupations seeking professional status or whose
professional status is in jeopardy (Fidalogo, 2006; Purinton,
2010; Somers 2010).

Diagnosis and treatment. Diagnosis affords the right to
members of a profession to define and categorize prob-
lems related to its jurisdiction. Abbott (1988) suggests that
two processes drive diagnosis: colligation and classification.
Colligation is a structured assembly of information to form a
mental picture of the problem at hand. Classification is then
used to take the results of colligation and place them into the
system of legitimate problems as defined by the profession’s
knowledge base. Treatment refers to the corrective actions
designed to solve the problem as diagnosed by the practitioner.
As is the case with diagnosis, treatment is organized using a
classification system tied to common problems that make up
the profession’s work (Abbott, 1988).

For example, with respect to managerial work, a manager
might be faced with a demotivated employee whose behav-
ior is affecting the performance of a project team. Diagnosis
involves determining the reasons for the low level of motivation
(e.g., inadequate technical skills, intergroup conflict, etc.), and
treatment involves devising a solution (e.g., skills training).

Practice-based pedagogy in professional degree programs is
designed to build skills in colligation and classification so that
graduates can build the necessary diagnosis–treatment linkages.
Doing so necessarily involves contact with practitioners, but
it is structured and subject to formal evaluation (Geer et al.,
1961). Further, the fundamental knowledge on which diagno-
sis and treatment are based is derived from scientific study
and scientific evidence, which evolve with changes in nature of
professional practice.

Diagnosis and treatment, therefore, are closely aligned with
recent interest in evidence-based management (EBM; Charlier
et al., 2011) and evidence-based pedagogy (Rousseau, 2012).
Work in this area offers the view that business school curric-
ula should be grounded in knowledge generated by scientific
study and supported by empirical evidence. As scientific evi-
dence becomes codified, it can serve as the basis for analyzing
problems (diagnosis) and developing solutions (treatment). 

Inference. The nature of professional practice is such that
there are problems that fall outside of the diagnosis–treatment
methodology; that is, some problems are ambiguous and com-
plex so that they are not easily classified or understood
(Abbott, 1988). Professionals use inference when the connec-
tion between diagnosis and treatment is not obvious. Inference
operates by exclusion or construction. Exclusion works by rul-
ing out certain diagnoses while providing general treatments
designed to address the problem. Construction operates by
building as many viable treatments as possible to increase the
probability of success (Abbott, 1988). For example, in business,
construction might involve a detailed plan modeling various
scenarios to respond to anticipated actions of competitors to
ensure that a response is in place should they act in the predicted
manner.

Abbott (1988) suggests that problems of inference require
theory development and high-level research conducted by uni-
versity faculty to resolve. He is somewhat vague about how
resolution of these abstract, difficult problems is to occur,
but solutions are clearly grounded in the scientific method.
Similarly, proponents of EBM acknowledge that there are prob-
lems encountered in managerial work for which a body of
evidence has yet to accrue, and they are equally vague about
how the knowledge to address these problems is to be generated

There seems to be an element of management practice, there-
fore, that is closely aligned with Abbot’s (1988) definition of
inference, but that is not satisfactorily addressed by Abbott’s
(1988) proposed solution of high-level theory development. For
example, Bennis and O’Toole (2005) offer several practice-
based problems that fall into the realm of inference, such as
“How does one design global operations so that they are at once
effective and equitable?” and “What is the purpose of a corpora-
tion beyond the creation of shareholder value?” (p. 99), that do
not lend themselves to resolution by Abbott’s (1988) processes
of exclusion and construction or by EBM principles.

Work in the area of practice-based studies seems more rel-
vant to addressing ambiguous, difficult problems because it is
based on constructionism, that is, the idea that practice-based
knowledge is social and transactional (Raelin, 2007). In this
regard, the problems that Bennis and O’Toole (2005) pose are
not likely to be solved with a grand organizing theory, but rather through interactions among practitioners (e.g., managers) who are struggling with the same issues. Therefore, in adopting practices and principles from professional schools, business school deans and their faculty need to carefully assess where a fit is present and where one is not. We believe that the professional model and practice-based studies are not incompatible and they can both be used to guide management pedagogy to prepare students for the full scope of managerial work.

MIGRATION TO THE PROFESSIONAL MODEL

The appeal of the professional model for management education is that it goes beyond practice-based pedagogy to address other problems that business schools are facing. Specifically, theory and research on the sociology of the professions point to the importance of establishing a jurisdiction or domain that legitimizes the profession in society (Abbott, 1988; Freidson, 1994), an area where business schools have struggled (Datar et al., 2011; Pfeffer & Fong, 2004). Further, professional education fosters the development of a professional identity that defines the proper work of the profession and that establishes standards of professional conduct, areas where business schools have been subject to increasing and increasingly severe criticism (Khurana, 2007; Khurana & Spender, 2012).

Jurisdiction, Legitimacy, and Identity

Claiming a jurisdiction or domain defines the purpose and parameters of professional practice. A jurisdiction positions a profession in the occupational status hierarchy by delineating what problems that profession solves and why they matter. Defining a jurisdiction is a critical step in the professionalization of management. In so doing, business schools must clearly communicate the societal problems that they educate managers to solve and make a case that business school graduates are the best qualified members in society to solve those problems. This task has proven to be a challenge for business schools, as critics of management education have suggested that business school curricula have little relevance to management practice (Navarro, 2008; Rubin & Dierdorff, 2008) and might be a hindrance to performing managerial work (Mintzberg, 2004; Pfeffer & Fong, 2004).

A potential jurisdiction for management is presented in Figure 1. The domain of management is cast in terms of the structural, relational, human, and process capital such that these areas capture the unique, specialized knowledge that defines the real work of managers. It should be noted, however, the list of subelements in Figure 1 is intended to be representative and not inclusive. A jurisdiction evolves based on interactions with competing professional and occupational groups (Abbott, 1988) and is shaped by professional organizations and other governing bodies. It cannot be decreed, but rather must be negotiated.

The value of management knowledge is defined in terms of aligning these forms of capital to generate balanced returns for shareholders, other stakeholders, and society. Managers, in turn, act to integrate and apply this knowledge to problems within the jurisdiction in performing their work as professionals. The problems they face involve determining the correct configuration of various forms of capital (by using diagnosis, treatment and inference) to achieve outcomes that meet the needs of multiple constituencies.

A jurisdiction not only claims an area of expertise, it also carries with it a professional identity and associated standards for professional practice (cf. Khurana, 2007). The model depicted

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FIG. 1. Proposed jurisdiction for management as a profession.
in Figure 1 presents managers as uniquely qualified to manage and integrate various types of capital; that is, it defines the identity and the value to society of the professional manager. It also indicates that the ethical component of managerial work involves balancing the needs of various stakeholders to achieve equitable outcomes. It should be noted, however, that ethical dilemmas can also result from forces in other areas, such as the macro-economic environment and sociopolitical environments. Ethical choices from these external environments can be incorporated into professional socialization through educational programs and codes of professional conduct.

This proposed jurisdiction is meant to stimulate debate and not end it. Our intention is to demonstrate the relationship between a well-defined jurisdiction and the professionalization of management education, and not to decree a jurisdiction. As indicated in Figure 1, the proposed jurisdiction identifies a specialized knowledge base and ties it to problems of practice. In this case, the jurisdiction opens up the opportunity for specialization (e.g., a focus on human capital, financial capital), but the specialization is grounded in a larger system of knowledge that is common to all members of the profession.

**Practice-Based Pedagogy and Management Education**

Pedagogy in the professional model is designed to achieve mastery of foundation knowledge and to tie this knowledge to professional practice. This general notion is not new to management education. It has been recognized that that business schools have an obligation to transmit fundamental knowledge that is grounded in theory and supported by scientific evidence to prepare graduates for managerial jobs (Rousseau, 2012). It has also been recognized that there are elements of managerial work for which an evidence-based approach is not sufficient either because evidence is not conclusive or the nature of the problems at hand are not amenable to scientific inquiry (Rousseau, 2012).

Abbott’s (1988) typology of professional work is useful in addressing these components of managerial work. Foundation knowledge applied to structured problems falls into the realm of diagnosis and treatment, while the more abstract and difficult problem areas are associated with inference. Thus, in developing practice-based pedagogy for management education, it is necessary to consider both components of managerial work with the understanding that it might include a greater degree of inference in relation to other professions.

In this regard, pedagogical techniques for developing skills in diagnosis and in inference differ in term of method. Applying scientific knowledge to structured problems (i.e., diagnosis) is accomplished using active learning techniques. Specifically, for business schools, building skills in diagnosis is most effectively accomplished by deemphasis of the lecture method coupled with a greater focus on learning exercises where students are required to assimilate and integrate foundation knowledge to solve practice-based problems (cf. Auster & Wylie, 2006). In contrast, building skills in inference requires immersion in field settings where students face difficult and ambiguous problems that must be resolved through interactions with others. Action learning is best suited to building this type of practice-based knowledge (Raelin, 2007).

**Diagnosis, treatment, and foundation knowledge.** Students in professional programs first gain mastery of foundation knowledge because it provides the basis for practice-based experiences. EBM has been suggested as a means to develop and extend foundation knowledge in management and link it to practice (Chalier et al., 2011; Rousseau, 2012). The prevailing epistemology is grounded in the scientific method, and pedagogy is focused on using research-based knowledge to solve commonly encountered management problems (e.g., diagnosis, treatment, and diagnosis–treatment connections).

Professional schools have devised pedagogical methods that communicate foundation knowledge such that it is well integrated with practice-based experiences that come later in degree programs. For example, in preparing students for clinical experiences, medical schools have used problem-based learning (PBL) to communicate and integrate foundation knowledge (cf. Medical News Today, 2006; Nandi et al., 2000). PBL is based on the principle that problems encountered in the world are ill structured by nature, thereby requiring practitioners to generate and evaluate multiple hypotheses about causes and possible solutions (Albanese & Mitchell, 1993). Further, PBL operates such that courses are less structured, are typically team taught, emphasize integrative knowledge, and are designed so that instructors act as facilitators of knowledge integration and application rather than as subject-matter experts delivering specialized knowledge. Medical students taught with PBL are more self-directed and better able to cope with uncertainty than are those taught with conventional methods (Moore, Block, Style, & Mitchell, 1994).

PBL is not offered here as a panacea, but rather as a means demonstrating the value of linking foundation knowledge to practice-based experiences. For example, presenting students with multifaceted problems of practice such as “How do I develop and communicate a business idea?” or “How do I increase the motivation and performance of my team?” early in their MBA programs can be used to foster thinking across business disciplines to enhance skills in colligation, diagnosis, and treatment.

Foundation knowledge must then be linked to practice-based experiences so that students become proficient in diagnosis, in building diagnosis-treatment connections. Given that the professional model represents a significant departure from prevailing business school pedagogy, we believe that it is best to proceed cautiously. Students need not be placed immediately into work settings. Rather, practice-based experience need only expose students to critical elements of managerial work. For example, simulations are well suited to integrating foundation knowledge and practice-based problems. In legal education, moot court (a behavioral simulation) is used to introduce students to the practice of law in that it requires them...
to understand the legal issues at hand (colligation), find appropriate case law (diagnosis), and then develop a strategy to bring about a resolution in their client’s favor (treatment).

Business schools can use behavioral simulations in similar ways. Students can interact with practitioners in simulated situations that depict various components of management practice (e.g., making the case to launch a new product; developing a corporate or unit level strategy) by integrating foundation knowledge with diagnosis and treatment. For example, in launching a new product, students must identify fundamental marketing knowledge (colligation) to develop a marketing plan that integrates financial and market analyses to justify a competitive position (diagnosis) and that generates desired returns (treatment).

Computer simulations have also been used to model certain elements of managerial work. For example, Virtual Leader is a computer simulation that builds leadership skills by presenting problems that managers typically encounter in managing people and projects. This simulation requires that ambiguous and increasingly complex scenarios be interpreted and acted upon. Similarly, the Manager’s Hot Seat presents students with various scenarios tied to different aspects of a manager’s job (e.g., performance appraisal, selection, project management) that capture the practice elements of managerial work. Simulations also exist for other disciplines such as marketing and strategy.

Simulations, however, are not a substitute for contact with practitioners. The final step in the professionalization of management education is to offer practice-based experiences in organizational settings. There are many vehicles to accomplish this objective including internships, consulting assignments, and field experiences. An internship is a degree requirement in some professional programs (e.g., architecture), and business schools should consider the option of a 3- or 6-month placement during the last year of study as a graduation requirement (see Figure 2).

Inference, practice-based immersion, and enacted knowledge. Managerial work goes beyond the application of foundation knowledge to diagnose problems and to develop solutions (Bennis & O’Toole, 2005; Raelin, 2007). That is, managers often face problems that do not fit into an evidence-based paradigm. Thus, in addition to preparing graduates to apply foundation knowledge, business schools must also offer pedagogy and curricula that build skills in resolving complex, ambiguous problems that are broad in scope.

Work in the area of practice-based studies offers both a perspective and a pedagogy that foster the development of practice-based knowledge through immersion in organization settings. Immersion fosters assimilation of practice-based knowledge through social interactions and knowledge sharing that develops familiarity and competence with respect to the practices of a community (Corradi et al., 2011).

These experiences are critical to understanding the limits of foundation knowledge and its application. Raelin (2007) has proposed a practice-based pedagogy based on action learning in which students are immersed in organizations and faced with problems that challenge their assumptions and expectations. Through reflection and interaction with others, new ways of looking at problems emerge and long-held beliefs come to be questioned. Using our terminology, these experiences should be structured so that students are faced with problems where foundation knowledge is not applicable so that a diagnosis cannot be made. Rather, through interactions with practitioners, knowledge embedded in the practices of a community must be assimilated to develop linkages between knowing and doing (Carlile, 2004; Strati, 2003).

Practice-based experiences that build skills in inference require difficult problems that are addressed in groups over a sustained period. Examples include projects related to strategic planning or change management (cf. Raelin, 2007), not only because these areas present problems that are complex, but also because their resolution requires social interaction with
practitioners. By working with practitioners, students have the opportunity to test their ideas and assumptions and to learn established practices in organizational settings.

**CHALLENGES AND PROGRESS**

Rethinking graduate level management education, regardless of the approach taken, is centered on business schools’ relevance and efficacy (Datar et al., 2011). The professional model of education has received considerable attention from critics of business schools because it is broad in scope, covering key areas such as identity, standards and ethics, and practice-based pedagogy (cf. Khurana, 2007). Thus, there is growing support for the professionalization of management and the adoption of principles and practices in professional education by business schools.

It is a mistake, however, to assume that support for the professional model is universal. Despite moderate to strong interest by many writers for the adoption of most or all of the professional model (cf. Bennis & O’Toole, 2005; Khurana, 2007; Pfeffer & Fong, 2002; Pfeffer & Fong, 2004; Khurana & Spender, 2012; Rousseau, 2012; Rousseau & McCarthy, 2007), others have raised concerns about whether it is suited to educating managers (cf. Chia & Holt, 2008; Mintzberg, 2004; Raelin, 2007). Specifically, critics of the professional model are concerned that there is too much slippage between professional work and managerial work. Thus, while the professional model might be able to address the pedagogy–practice gap to a limited degree, professional education is not seen as being able to adequately prepare students for managerial work (Chia & Holt, 2008).

A key challenge for the professionalization of management, thus, is to develop practice-based pedagogy that is consistent with the characteristics of managerial work. There is little to argue with the view that a significant component of managerial work includes holistic thinking, use of inference, learning through interactions with others, developing tacit knowledge, and experiential learning that is sometimes serendipitous. As such, the challenge for business schools is not adopting the professional model, but rather adapting it.

Progress is evident both in developing practice-based pedagogy that builds skills in applying foundation knowledge and in solving complex, ambiguous problems. With regard to the former, interest in linking foundation knowledge to practice by placing students in field settings is evident in new program offerings and new curriculum structures. For example, the Rady School at the University of California at San Diego MBA curriculum includes a unique Lab2Market (L2M) component based on a sequence of courses where students assess the commercial viability of new technologies. L2M includes contact with practitioners through field experience and requires students to make judgments about the commercial prospects of emerging technologies (University of California at San Diego, 2010). Similarly, The Open University requires students to complete a 30-credit practice-based learning experience. Students must complete an improvement project in the field guided by an evidence-based initiative.

With regard to the latter, progress in developing enacted knowledge through action learning is also evident. The University of Connecticut has integrated experiential learning into its MBA program by using practice-based accelerators that link students, faculty, and industry executives to ensure that the MBA program includes an action learning component to link pedagogy to practice. Similarly, MIT has incorporated action learning into its MBA program with a course sequence that links theory, practice, and reflection. Students work in interdisciplinary teams, and immersive, experiential exercises are administered through Action Labs.

More generally, business schools have recognized the value of increased contact with practitioners by modifying courses and instructional methods. For example, Stanford University offers an executive challenge event to first-year MBA students where they participate in a series of leadership challenges that are judged by chief executive officers (CEOs) and senior executives. New York University (NYU), Wharton, and other leading business schools have also modified instructional methods to ensure that students are exposed to current management practices.

Practice-based experience carries with it the responsibility for practitioners to behave ethically. Business schools (especially MBA programs) have struggled in this area despite concerns among stakeholders about ethical lapses of business school graduates (Datar et al., 2011). The professional model is relevant because professional education emphasizes adherence to codes of conduct (Pfeffer & Fong, 2004), but progress with respect to developing curricula that communicate professional values and inculcate professional standards has been slow.

Several leading business schools (e.g., Harvard, University of Texas at Austin) require students to take a pledge or affirm that they will act in an ethical manner, but this practice is clearly not consistent with socialization experiences in other professional schools (cf. Geer et al., 1961). Work, however, is underway to socialize business students to behave ethically. For example, the Giving Voice to Values (GVV) program fosters value-driven leadership by educating students to reflect on how they would solve certain problems in a manner consistent with their own values (Gentile, 2011). The program was developed based on interviews with practitioners and business school faculty and is designed to present students with problems of management practice that must be resolved in a manner consistent with one’s values. Those values can easily become the values of the professional manager, thereby melding practice-based problems and professional values. Such an approach is superior to a mandatory course in business ethics, a tactic that is consistent with current business school pedagogy as ethics are analyzed rather than acted upon.

Similarly, Jarvis (2011) argues for a business school pedagogy based on Kantian metaphysics. Like the GVV program, this pedagogical approach is focused on practice-based
problems that emphasize moral judgment and accountability. Critical elements include seeking relevant knowledge, evaluating it, and then focusing on the proper (e.g., moral) actions and their desired outcomes. The reflective nature of the pedagogy is consistent with the nature of professional work especially with respect to problems of inference, where the right thing to do both practically and morally is not always clear.

CONCLUSION

The debate about management education is an implicit acknowledgment that business schools face significant challenges in adjusting to an increasingly demanding set of stakeholders (Bennis & O’Toole, 2005; Datar et al., 2011; Hawawini, 2005). Although the professional model is not and should not be viewed as a panacea, a deeper understanding of professional education can provide valuable insights into bridging the theory–practice gap, developing practice-based pedagogy, and setting a foundation for establishing codes of conduct and ethical standards for business school graduates.

As the conversation evolves from problem recognition to problem resolution, the epistemological and pedagogical underpinnings of management education might be subject to significant rethinking and revision. The professional model provides a context for this conversation, as does the rich body of theory and research concerned with the professions and professional socialization.

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