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How to Develop Strategic Management Competency: Reconsidering the Learning Goals and Knowledge Requirements of the Core Strategy Course

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ABSTRACT

The dominance of theory-based approaches to strategy teaching has not displaced the need for core courses in strategic management to cultivate broader management skills. Yet, limited attention has been given to explicating, first, why we need to teach these skills, second, which skills we need to teach, and third how they can to be developed in the classroom. To help answer these three questions we need to understand the linkages between theory-based and skills-based approaches to strategy teaching. We begin with the proposition that the purpose of the core strategic management is to develop the strategic management competency of our students. We then adopt a systematic approach to identifying the *why*, *what*, and *how* components of strategic management competency. We show why analytical tools need to be complemented by judgment, insight, intuition, creativity, and social and communicative skills. We outline what these skills are and where they come from. Finally, we derive implications for how we should design and deliver of the core strategic management course.

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INTRODUCTION

The rise of strategic management as a research-based discipline has been accompanied by a transformation in its teaching. Theory-based, analytical approaches to strategy teaching have displaced a-theoretic business policy courses. Yet, despite the emphasis given to theoretical tools, it is notable that most core courses in strategic management continue to espouse the development of management skills. However, the current discourse in strategic management education and research gives limited attention to the role of skills in relation to strategic decision making, the ways in which they complement the formal decision tools of strategy, or how they are best developed through strategy teaching.

The goal of our essay is to take a systematic approach to specifying the why, what and how of the knowledge and skills that the core strategic management course should seek to cultivate and the means for doing so. To answer these questions, we begin by proposing that the overarching goal of the core strategic management course should be: *to enhance students' competencies in making and executing strategic decisions*. We note that this task is difficult because the complexity and uncertainty that characterizes strategic decisions and renders them unamenable to logical decision tools. Hence, the need for these tools to be supplemented by additional skills. By disaggregating the strategy-making process into four stages—situation appraisal and diagnosis, strategic option generation, strategic choice, and strategy implementation—we are able to specify the merits and limits of the concepts, theories, and frameworks of strategic analysis and identify the cognitive and behavioral skills needed to fill the gap—notably judgment, insight, intuition, and social and communicative skills.

We draw on prior literature to explore the nature, role, and determinants of insight, intuition, creativity, and the interactive skills. However, we note the limitations of this literature in relation to strategic decisions. For example, much of the empirical research addressing intuition addresses decision situations that lack the complexity and ambiguity of most strategic decision situations. It is this complexity and uncertainty, together with the need for coordination among multiple organizational members that accounts for the distinctive pedagogic needs of strategic management. We also draw upon the educational psychology literature to identify the different types of knowledge that these cognitive and behavioral attributes draw upon.

In terms of specific implications for the design and delivery of core courses in strategic management, we begin with need for clarity over educational goals. Given the constraint of

limited class time, learning objectives need to be clearly defined, internally consistent, and realistic in the levels of attainment they aspire to. These learning objectives should balance the application of conceptual knowledge with its acquisition. This means restricting the conceptual content of core strategic management courses. We propose giving precedence to concepts and theories that inform fundamental aspects of strategic choice, have a wide domain of applicability, and permit the framing of complex strategic situations.

In selecting teaching methods and materials, we emphasize the need for their consistency with the types of knowledge targeted. Much of the learning that occurs in a strategy course is *implicit*: competencies such as insight, judgement and creativity cannot be taught in the formal sense. The role of the instructor is give the students a general map, and guide students in a process of reflection and discovery through which cognitive and behavioral skills are cultivated. This requires that instructors to manage the social and emotional context of the learning experience in order to foster involvement, reflection, communication, active listening, and cognitive awareness.

Finally, we note that that the learning objectives of core courses in strategic management—and, consequently, their content and instructional modes—need to be adapted to the characteristics of students and their instructors. In relation to students, the balance between acquiring conceptual knowledge and developing higher-level strategic decision skills depends upon the maturity and experience of the student. Maturity and experience expands students' capacity to address complex, uncertain situations and helps them to recognize their own cognitive conditioning and biases. In terms of instructor characteristics, we note the problems faced by academically-trained instructors in teaching strategic management competencies that they themselves possess only to a limited extent. Here we point to the role that *interactional expertise* can play as a substitute for executive experience.

THE CURRENT STATE OF THE STRATEGIC MANAGEMENT CORE COURSE

The required strategic management course—a feature of almost all graduate and undergraduate degrees in business—is a descendant of the business policy course established at Harvard Business School in 1911. Under the leadership of Roland Christensen and Kenneth Andrews, the Harvard business policy course developed as sequence of case studies in which "*students were asked to 'size up' the situation presented in the case, plan a course of action, and propose an organization to implement the plan, along with measures that would permit corrective action*" (Bower, 2008: 270). Following Gordon and Howell's report

on business education that recommended that, "*The capstone of the core curriculum should be a course in 'business policy'*" (Gordon & Howell, 1959: 206). Harvard's business policy course provided a model for other schools.

However, the rise of strategic management as a research-based field provided an alternative model for the teaching of business strategy: one in which the formulation of strategy is based upon theoretically-based, empirically-validated relationships between a firm's actions and performance outcomes.

The result was debate—and conflict—over how the strategy course should be taught. Should it course retain its traditional emphasis on developing the skills of the general manager—a morphed version of the original Harvard tradition—or should it furnish students with theory-based, analytical tools of strategic management? The rivalry inherent in these two approaches played out at Harvard Business School during the 1980s and 1990s when Michael Porter's course in Competitive Strategy challenged and eventually displaced the long-established Business Policy course as the core strategy course of the MBA program (see Bower 2008).

The debate between the rival merits of theory-based versus skills-oriented strategic management teaching has continued in journals and in forums such as the Academy of Management and Strategic Management Society. Proponents of an analytic approach have emphasized the rigor and the potential for generalization that the empirically-validated theories offer (Mahoney & McGahan, 2007; Grant 2008). Those who emphasize the development of managerially-relevant cognitive and behavioral skills advocate a more '*a-theoretic'* approach to strategic management teaching as an integrative, practice-based experience (Greiner et al, 2003; Mintzberg 2004; Gosling & Mintzberg, 2004; Bower, 2008). Yet, on the ground, the situation is clear-cut. As Greiner, Bhambri and Cummins observed over 15 years ago: "*the traditional required Harvard Business School policy course is barely alive and in most top business schools the strategy course is heavily based upon theory and analysis*" (Greiner et al, 2003: 404-405).

Not only have conceptually-based courses displaced a-theoretic, skills-oriented courses, but the courses themselves, both at MBA and undergraduate levels, have become increasingly similar in terms of structure. Certainly, there is considerable variation in the topics included in the core strategic management course (e.g., the inclusion or exclusion of topics such as game theory, corporate governance, business ethics, leadership, and corporate and environmental sustainability). Nevertheless, we can observe convergence around a dominant

design. Courses are structured around distinctions between business (or competitive) strategy and corporate strategy and between strategy formulation and implementation; their core analytic components are external analysis (principally the analysis of industry and competition, internal analysis (principally the analysis of resources and capabilities), and competitive advantage. This dominant design is reflected in the content and structure of most strategy textbooks.

Yet, the apparent dominance of teaching theory and concepts in strategic management is deceptive. A cursory review of the learning objectives included in the syllabi of core strategic management courses that were available on-line, reveals objectives that extend well beyond acquiring knowledge of the field's concepts, theories, and analytical frameworks. Additional objectives include: developing a general management perspective, synthesizing knowledge from other courses, cultivating critical thinking skills, developing awareness of social and ethical issues, and enhancing written and oral communication skills. Furthermore, most courses emphasize modes of teaching that reflect a much wider agenda than just teaching theory—notably, case study discussion, simulations, group exercises, and project work. But why are strategy courses teaching these skills, and using these techniques? What is their purpose in relation to the overall goal of the core strategy course?

In the next section we consider why we need to teach skills. In doing so, we hope to encourage those teachers who believe that theory is the most important aspect of strategy teaching to recognize the limits of theoretical knowledge and, for those teachers who view skill development as forming the core of strategy's teaching agenda, to appreciate which of the broad array of management skills are essential to strategy making.

THE NATURE OF STRATEGIC MANAGEMENT COMPETENCY

What is the purpose of the core strategic management course? Management is not an intellectual pursuit, it involves *doing*. So, with strategic management: "*Strategy is about action*" states Richard Rumelt (2011: 87). J.-C. Spender (2014: 4) agrees: "*'What are we going to do now?' is the key question.*" Teaching strategy involves teaching students about the nature of strategic decisions, the attributes of effective strategic decisions, and how to put those decisions into effect. Providing a list of learning objectives is not enough—the starting point for "*a strategy to teach strategy*" (Greiner et al, 2003) is to establish a single overarching goal. We propose that the educational goal for the core strategic management course should be: *Enhancing our students' abilities to make and execute strategic decisions*.

To determine what this goal implies for what we teach in the core strategy course and how we teach it, we need to recognize what is distinctive about strategic management, as compared to other areas of management, and what these distinctive features imply for the knowledge required for developing strategic management competency.

Two principal factors distinguish strategic decisions from the other decisions that managers face. First, they are *important* in relation to the overall business purpose of the enterprise—as such, they are typically irreversible and require substantial commitment of resources (Grant, 2015: 12). Second, they are *complementary* with one another: they cannot be considered in isolation: "*While operational excellence is about achieving excellence in individual activities, strategy is about combining activities*" (Porter, 1996: 70). Hence, when we refer to an organization's strategy we allude to a set of decisions that, in combination, determine the organization's overall positioning and direction—what Rumelt (2011: 84-87) refers to a "*guiding policy*."

The implication is that strategic decisions present challenges that extend well beyond those relevant to typical functional and operational issues that can be resolved by taking account of a limited number of factors and, as a result, are amenable to formal decision-making tools.

The earliest writers in our field recognized this point, when they stressed that management is both art and science. For example, Chester Barnard observed that: "[The Executive Process] *transcends the capacity of merely intellectual methods of discriminating the factors of the situation. The terms pertinent to it are, 'feeling,' 'judgment,' 'sense,' 'proportion,' 'balance,' 'appropriateness.' It is a matter of art and it is aesthetic rather than logical*" (Barnard, 1938: 235; quoted by Mahoney, 2002: 160). For Frank Knight, the basis for decision making "*is not reasoned knowledge, but 'judgment,' 'common sense,' or 'intuition'*" (Knight, 1921: 211). The need for judgment in the face of uncertainty provides the foundation for Knight's theory of the firm.

In relation to strategic management practice, the need for analysis to be complemented by additional sources of knowledge—notably judgment, insight, intuition, and creativity—is well recognized. Kenichi Ohmae, former head of McKinsey & Company's Tokyo office, observed: "*Great strategies, like great works of art or great scientific achievements, call for technical mastery in the working out but originate in insights that are beyond the reach of conscious analysis*" (Ohmae, 1982: 4). Some 30 years later, despite the huge advances in theoretical and empirical research in strategy, Richard Rumelt made the same observation:

"*The most powerful strategies arise from such game changing insights*," and further advised that, "*To generate strategy, one must put aside the comfort and security of pure deduction and launch into the murkier waters of induction, analogy, judgment, and insight.*" (Rumelt, 2011: 10, 245). For Henry Mintzberg (1994), the essence of strategy making is strategic thinking—a process based upon intuition and creativity rather than analysis.

As we have already observed, this need for the analytical tools of strategy to be complemented by additional competences is well recognized by teachers of strategic management—and not just within the Harvard business policy tradition. Hence, the emphasis that strategy courses give to developing a broader range of cognitive and behavioral skills in addition to familiarity with strategy's conceptual and theoretical tools. The problem, however, has been inadequate attention to defining and describing these skills, investigating the pedagogy for their development, and integrating them with analytical approaches to strategy teaching. For example, a guide to the case method by prominent Harvard teachers is titled "*Education for Judgment*" yet offers limited attention to the nature and dimensions of judgment (Christensen, Garvin, & Sweet, 1991).

Our challenge is to specify more precisely the knowledge needed to cultivate strategic management competency and then to determine what this implies for the design and delivery of the core strategy course. Figure 1 provides the reader with a map of our argument concerning why we need to teach skills, which skills are essential, and what knowledge these skills embrace. We start with considering the issues on the left-hand side of the figure – the stages of the strategy making process.

FIGURE ONE NEAR HERE

THE STRATEGY MAKING PROCESS AND ITS KNOWLEDGE REQUIREMENTS

We characterize strategy making as a four-stage process: (1) situation appraisal and diagnosis, (2) strategic option generation, (3) strategic choice, and (4) strategy implementation.[1] Let us examine each of these stages to investigate the types of knowledge needed to perform them.

[1] This normative conceptualization of how the strategy making process is distinct from the "strategy as practice" approach, which is concerned with how organizations discuss and execute strategy decisions (see, for example, Jarzabkowski, Balogun, & Seidl, 2007).

Situation Appraisal and Diagnosis

At the start of any strategic decision process is the need to appraise the current situation. For an existing business this means asking: What is the current strategy? How satisfactory is its performance? What issues does it face now and in the future? Once we have recognized what issues are present, we can diagnose their causes. Typically, this investigating the causes of the business's superior/inferior performance and how the changing situation will impact future performance.

Dutton, Fahey, and Narayanan (1983) define a strategic issue as "*an emerging development which in the judgement of some strategic decision makers is likely to have a significant impact on the organization's present or future strategies*," They note that such issues are "*likely to be broad, diffuse, and ill-specified*." Hence, in appraising a strategic situation, students must grapple with uncertainty over what is the core problem. Strategic issue identification and diagnosis involves translating "*ambiguous data and vaguely felt stimuli*" into "*focused issues*" and then interpreting these issues (Dutton et al, 1983: 307-308). The starting point for all strategy formulation is answering the question: "*What's going on here?*" (Rumelt, 2011: 79).

Identifying strategic issues is more than simple observation. We must discern what is important in the organization's overall situation. This requires awareness of the purpose of strategic management. This is usually assumed to be enhancing the long-run performance of the organization. Hence, performance appraisal plays a central role in identifying strategic issues.

In diagnosing these strategic issues, analysis takes center stage. Theoretical concepts—such as economies of scale and scope, network externalities, transaction costs, organizational routines, and legitimacy—and the theoretical relationships that link them to their antecedents and consequences, provide the basis for understanding superior or inferior performance. Yet, problems of complexity still confound the application of these analytical tools. Even if the strategic situation can be reduced to a single performance variable—loss of market share, declining profitability, or lack of innovation—causation is likely to involve multiple factors that interact in complex ways.

To address multiple sources of causation, students of strategic management need to deploy *frameworks*: analytical devices that structure a strategic situation by identifying the factors that impact a phenomenon thereby providing a systematic picture of multiple causative factors and their interactions. Different types of framework have different types of

functionality. Some are purely classificatory devices. For example, "SWOT" analysis is simply a set of "buckets" for categorizing favorable and unfavorable internal and external influences. Similarly, the "PEST" framework classifies external influences into political, economic, social and technological forces. Yet, such categorization can offer a useful first step in coming to terms with complexity. Other frameworks are grounded in theory and can generate predictions. For example, Porter's "five forces of competition" framework for analyzing industry attractiveness has its roots in the structure-conduct-performance model of industrial organization economics. Similarly, Barney's "VRIO" framework for appraising the potential for an organization's resources and capabilities to generate economic rents is based upon analysis of the sources and sustainability of competitive advantage.

Despite the diagnostic power of theories, concepts, and analytical frameworks, they are not enough. Sizing up the prevailing situation requires distinguishing what is important from what is less important. This entails recognizing linkages—how one issue related to another. Analyzing the causes of strategic issues means selecting the most appropriate concepts and theories to apply to the situation. This requires bridging the gap between the precision and specificity of concepts and theories and the messiness and uncertainty of the real-world situation. The predictions of our theoretical tools must be interpreted. For example, the application of Porter's five forces of competition framework may predict that certain forces will cause increasing competition while others with will cause a weakening of competition—how do we assess the net result?

Thus, theories, concepts and analytical tools/frameworks can provide an organizing structure and diagnostic guidance for comprehending a strategic issue, but their application requires additional cognitive skills these include judgement in prioritizing issues, choosing among analytical tools, and interpreting predictions; insight into complex causal interactions, and intuition in recognizing patterns and anticipating changes.

Strategic Option Generation

Formulating strategy requires perceiving opportunities for doing things differently. Applying the knowledge embodied in strategic theories and concepts to diagnosing problems inevitably provides pointers to their solution. However, the potential for deductive analysis to generate a range of solutions is limited by *ceteris paribus* assumptions of most theoretical relationships—i.e. the relationship between a single independent variable and a single dependent variable isolated from all other causal factors. The tendency for analysis to

concentrate on such unitary relationships inhibits a system-wide view in which a desired outcome may be achieved by interventions in different parts of the system.

The limited ability for strategic analysis to generate strategic options is exacerbated by the cognitive traits of the human mind. Decision makers limit the range of strategic options they consider as a result of bounded rationality and satisficing behavior (Simon, 1991) and a preference for exploitation over exploration (March, 1991)—just two of the elements that Gavetti (2012) builds into a behavioral theory of strategy where managers' cognitive structures constrain their recognition of opportunities for competitive advantage. More generally, the ability of decision makers to generate multiple possible solutions to problems is limited by *cognitive fixation*—the tendency to settle on a single solution to a problem, usually one that has worked in the past.

While the application of conceptual tools may allow the mind to break away from habitual solution sets, the main opportunities for extending the range of strategic options under consideration arise from liberating the imagination. We shall revisit the role of creativity and insight later in the paper.

Strategic Choice

In principle, the impact of environmental and strategic decision variables on firm performance could be formally modelled, allowing the effects of different strategies to be simulated. However, attempts to estimate the quantitative impact of strategic variables on performance outcomes, such as the PIMS project (Buzzell & Gale, 1997) are doomed by the number of factors impacting firm profitability and the complexity of their interactions. To capture contextual specificities, formal modelling can only generate clear predictions by addressing specific strategic situations (see, for example, Casadesus-Masanell & Yoffie, 2007).

Predicting the precise outcomes of different strategies is further constrained by the fact that strategic choices tend not to be fully specified action plans, but more general notions of how the firm will position itself and what its overall direction of development will be—what the strategy literature has traditionally referred to as "*grand strategy*" (Hitt, Ireland, & Palia 1982) and Rumelt (2011) calls "*guiding policy*." Hence, strategic choice tends to be based on qualitative analysis that applies the principle of *strategic fit*: Which strategic option is most consistent with the goals of the firm, with emerging conditions in the external environment, and with the firm's resources and capabilities? Ultimately, such analysis does not, by itself, generate choices: as with the other stages of the strategy process, conceptual analysis must be

complemented with subjective judgement. Such judgement goes beyond an understanding of causality. It includes synthesizing knowledge from multiple sources, assessing probabilities when information is scarce, using heuristics, and avoiding cognitive biases. Exercising judgment in situations of complexity and uncertainty inevitably involves intuition, a topic that we will discuss in the next section.

Strategy Implementation

Ultimately, strategy needs to be translated into action. If strategy exists only in the minds and pronouncements of leaders, then it is *intended strategy*. Only with its execution does it become *realized strategy* (Mintzberg & Waters, 1985). The scope of strategy implementation is vast—it encompasses the entire range of management activities, including every functional strategy. Hence, for the purposes of the core strategic management course, the scope of implementation must be tightly circumscribed—e.g. by including only management activities in the "*first tier*" of strategy execution (such as resource allocation, setting performance targets, and organizational design) and those which are fundamental to competitive advantage (such as developing core competences). In most business programs, the greater part of strategy implementation is covered outside the core strategic management course (by courses in organizational behavior, corporate finance, operations management, human resource management, and marketing).

For strategy implementation, the concepts, theories and frameworks of strategic management provide valuable guidance to management action. For example, real options and portfolio planning matrices facilitate resource allocation decisions; balanced scorecards can be used to set and monitor performance targets; the principles of organizational design can guide choices over corporate structures and management systems. Indeed, virtually every aspect of strategy implementation from the development of organizational capabilities, to the design of strategic alliances is informed by a substantial theoretical and empirical literature.

Yet, as with every other stage of the strategy process, analysis based upon cause-and-effect theories is easily overwhelmed by complexity—including the large number of decision variables that strategy implementation encompasses and the plethora of analytical tools that can be applied to them. Again, *judgment* is needed to establish priorities and in select the most appropriate analytical tools, and *insight* is required to recognizing how particular interventions may yield systemic changes.

Finally, it is the implementation stage where social and communicative skills are most critical to the effectiveness of the strategy. For a strategy to be implemented, it must be

communicated to all members of organization. Moreover, given divergence of individual motives from organizational goals, the members of the organization need to be persuaded—hence J.-C. Spender's emphasis on the centrality of rhetoric to the strategy process (Spender, 2014: 227-244). However, the role of communication limited to the implementation stage of the strategy process: communication is important in relation to diagnosis, option generation, and strategy selection. As we shall see, communication is not simply about sharing information and analysis, once we move from individual to organizational decision making, communication—and social interaction more generally—is important in enhancing judgment, countering individual and group biases, and fostering creativity.

Finally, we need to appreciate that strategy implementation is not separate from strategy formulation. Strategy making is not a sequential progress: strategies are formulated in the course of their implementation (Mintzberg, 1994) and the formulation of strategy must take into account how it will be implemented. To the extent that formulation and implementation can be distinguished, it is in the terms of, first, relevant conceptual knowledge and, second, detail—strategies begin as "guiding policies," as they are translated into action, they become articulated in greater detail.

BEYOND CONCEPTUAL KNOWLEDGE

We have established that strategy making requires that conceptual knowledge needs to be supplemented by other types of knowledge. We have noted that is not a novel proposition: it has been widely recognized both by academics and practitioners. However, our discussion of the strategy process has enables us to be more precise than thitherto about the role and the limitation of analytical tools at each stage of the strategy process and specifying more precisely the additional competencies required to supplement theoretical analysis—specifically: judgment, insight, intuition, creativity, and social and communicative skills. None of these, at first sight, appear to be grounded in conceptual knowledge. If we are to become more effective in teaching strategic management, we need a deeper understanding of the nature, role, and determinants of these cognitive and behavioral attributes.

Judgment

Despite the importance accorded to judgment as a management attribute describing its nature and antecedents has proven difficult. Here again, classical writers help us, as they debated these topics extensively. For Barnard, judgment formed the essence of leadership whose essential attribute was the capacity to synthesize across the three essential systems of

knowing: physical, personal, and social (see Spender, 2014: 225). In Knight's (1921) analysis of economic organization, judgment provides the basis for action when objective knowledge is absent. It includes an individual's "*capacity by perception and inference to form correct judgments as to the future course of events in the environment*" and an individual's capacity to assess the competencies of other individuals (Langlois & Cosgel, 1993: 261).

If as Knight (1921) and Spender (2014) propose, judgment provides the basis for entrepreneurial/strategic action when objective knowledge is absent, we can use the limitations of logical strategic analysis to pinpoint the essential attributes of judgment that are required for strategic decisions. For example, in relation to situation assessment and diagnosis, we have established that judgment is needed in prioritizing issues, choosing which concepts and frameworks to deploy, understand causality, and interpret predictions. In assessing the overall situation, generating strategic options and selecting among them, synthesis—the ability to integrate information and understanding from multiple sources—is an important component of judgment.

Developing judgment involves enhancing the factors that facilitate good judgment and eliminating its impediments. If conceptual knowledge involves knowing *what*, judgment requires knowing *how*. This comprises not only procedural knowledge in a technical sense—what Aristotle referred to as *techne*—but also *phronesis*, the practical wisdom that can ensure that one's actions are appropriate in a specific situation (Nonaka & Takeuchi, 2011). Practical wisdom is a complex and sophisticated attribute that involves synthesizing ethics, social capital, communication, power, and systems thinking. Like other high-complexity activities, its acquisition requires experience with similar or related problems then distilling that experience into heuristics (Sturman, 2003).

Other aspects of judgment require recognizing and avoiding the cognitive biases that distort our perceptions and impair our decision making – in other words *metacognitive knowledge*. These biases include overconfidence, confirmation bias, inappropriate weighting of "*inside*" and "*outside*" views, failure to distinguish luck from skill, and incorrect updating of probabilities in response to new information (Tetlock, 2007; Kahneman, 2011). Cultivating metacognitive knowledge requires avoiding and correcting cognitive biases through reflective introspection, and/or receiving external intervention.

Insight

Insight refers to the notion of "*inner sight*": gaining a deep understanding of a phenomenon or artefact. Insight learning is revelatory, in contrast to learning-by-doing; it occurs "*when a person suddenly reinterprets a stimulus, situation, or event to produce a nonobvious, nondominant interpretation*" (Kounios & Beeman, 2014: 71). Insight is especially important in diagnosing strategic situations in terms recognizing the essential characteristics of a situation and identifying the fundamental forces that have brought it about. Although insight has been viewed as a spontaneous, mainly unconscious process, it can be facilitated by conscious cognitive activities. For example, concepts such as transaction costs and economies of scope provide insights into how to draw the boundaries of the firm; and thinking about the interplay between resource idiosyncrasies and legitimacy offer deep understanding of the challenge of optimal strategic differentiation. Insight also comes from cognitive discernment that goes beyond the application of conceptual knowledge. For example, when addressing novel situations, or situations with idiosyncratic features, insight can be facilitated by analogies and contraries (Branchini, Bianchi, Burro, Capitani, & Savardi, 2016).

Intuition

Intuition is the understanding that occurs without conscious reasoning. Experts have the ability to make intuitive decisions whether they are chess grandmasters, car drivers, or business executives. The basis for intuition is therefore familiarity with previous situations and stored memories of these situations and the actions which either worked or didn't work (Simon, 1987). In the case of strategic decisions, intuition can allow cognition to extend beyond the limits of logical analysis in terms of synthesizing multiple facets of a strategic situation. This capacity to quickly synthesize multiple sources of knowledge, is the primary advantage advanced by the proponents of intuitive decision making (Khatri & Ng, 2000; Gladwell, 2005). Not all intuition is valuable. The quality of intuition depends upon the expertise of the decision maker and the extent to which the decision environment is "*high validity*": that is the relationships between decision variables and outcomes are stable (Kahneman & Klein, 2009). In unstable environments when wholly new situations appear, intuition becomes unreliable and creativity is called for.

Creativity

Creativity relates to the capacity to perceive opportunities that are not derived from deduction and is especially relevant to the generation of strategic options. Mintzberg reminds us that

most major creative advances in both science and business are not acts of genius, but interpretations of mundane observations that have surprising implications (Mintzberg, 2015). Despite a traditional view that creativity is a spontaneous, exogenously-determined capacity to think "*out-of-the-box*," a growing body of evidence points to creativity as a learned skill that utilizes analogous thinking and social interaction to loosen the cognitive conditioning that limits the imagination. Analogies can be valuable not only in giving a strategic decision maker confidence in an unfamiliar situation, but also in suggesting strategies that worked in a previous situation that are unconventional in the new context. Analogies are dangerous when they are based upon superficial similarity and when they encourage *anchoring*—the tendency for decision makers to fixate on an initial solution to a problem (Gavetti & Rivkin, 2005). To counter anchoring, decision makers must be willing to abandon initial solutions and seek an even better on—a process Rumelt (2011: 263-273) describes as "*create-destroy*."

Social and Communicative Skills

The components of strategic management competency we have discussed so far relate principally to individual cognition. Yet, as the process and practice-based schools of strategy explicitly recognize, strategic management is an inherently social process. In the face of uncertainty and complexity, organizational members must develop a shared understanding of the situation and consensus over what actions to take—a process known as "*sense-making*" (Weick, Sutcliff, & Obstfeld, 2005). If strategy formulation is a social process, strategy implementation is even more so: as strategy cascades down the organization it must be elaborated in ever-increasing detail, posing huge challenges for cooperation and coordination among organizational members.

Communication skills—the ability to share knowledge, convey meaning, persuade, provide instructions, listen, and understand—essential to the social processes of strategy formulation and implementation. The social skills that support strategic management also extend beyond communication to include attributes that support social awareness (such as empathy, attunement, and social cognition) and social facility (such as self-presentation, synchrony, influence, and concern)—skills that have collectively been referred to as "*social intelligence*" (Goleman & Boyatzis, 2008).

Linking Strategy Competencies to Bloom's Taxonomy

To appreciate what these different attributes mean for how we teach strategic management, it is useful to draw upon research in educational psychology—specifically, Bloom's taxonomy

of educational objectives as revised by Krathwohl (2002). By locating the different skills that constitute strategic management competency within the Bloom/Krathwohl framework, we can appreciate the broad scope of strategic management teaching in terms of the different types of knowledge it seeks to develop and guide us towards the educational processes through which these types of knowledge can be cultivated.

The Bloom taxonomy identifies three domains of learning: the *cognitive* (relating to mental skills), the *psychomotor* (relating to physical skills), and the *affective* (relating to feelings and emotions). Our emphasis, so far, has been the cognitive domain, which Bloom views as a hierarchy of ranging from the simple (memorizing) to the complex (creating) (Bloom et al., 1956). These processes correspond to a hierarchy of knowledge that ranges from facts, to concepts, to procedures, to "*metacognition*"—knowledge about cognition, including awareness of one's own cognition. Figure 1, mentioned earlier, shows how the different cognitive and social components of strategic management competency which we have identified map onto Bloom's taxonomy.

Although our cognitive decision skills lack a precise correspondence to Bloom's hierarchy of cognitive processes, all four of the cognitive skills we emphasize are located at the upper end of the Bloom hierarchy— the ability to apply, analyze, evaluate, and create. Given the correspondence of cognitive processes with different types of knowledge, the implication is that judgment, insight, intuition, and creativity draw upon procedural and metacognitive rather than factual or conceptual knowledge.

As hinted above, procedural and metacognitive knowledge is acquired through learning processes that are different from those needed to acquire conceptual knowledge. Procedural knowledge is gained through practice: accumulating expertise in applying concepts, theories and frameworks to strategic situations that are complex, uncertain, and idiosyncratic. In principle, experience-based procedural knowledge can be substituted with codified knowledge in the form of checklists, decision trees, programs, and algorithms. In practice, the complexity, uncertainty and context specificity of strategic decisions means that such decision tools are woefully inadequate—judgment can never be dispensed with.

Judgement, insight, intuition, and creativity also draw upon metacognitive knowledge. Such knowledge is obtained through two main processes. The first is *introspection*: reflecting on one's own cognitive processes, patterns of success and failure in diagnosis and prediction, and the emotions that impact on one's decision process. Rumelt (2011: 240, 271) advocates

using an "*imaginary panel of experts*" for "*expanding the scope of your thinking and subjecting your ideas to deeper criticism*." Secondly, external stimuli and interventions can provide valuable triggers to facilitate insight. By observing the reasoning processes of others, engaging in dialogue with others, and having one's own reasoning processes and outcomes challenged by others, reflection is stimulated and, through evaluating and corroborating one's own cognition, perspective is acquired.

It is important to realize that with many students such learning involves adapting and developing pre-existing the cognitive frames—the thought processes through which the world is interpreted and accorded meaning. These cognitive frames are embedded in language and narratives and, ultimately, within the synapses of our brains (Lakoff & Johnson, 1999). The tendency for such frames to be shared among the members of an organizational—or even an entire industry—can prevent the recognition of opportunities and become major barriers to change (Porac, Thomas, & Baden-Fuller, 1989). The implication is that social and communicative skills are important not only for the more explicit aspects of strategic management (e.g. the execution of strategic plans through direction) but are also relevant to decision-making cognition. Hence, the social nature of strategic management means that affective knowledge— our ability to deal with our feelings, emotions, values, motivations, and attitudes—is relevant to all stages of the strategy making process.

Thus far, we have pointed to the role of procedural and metacognitive knowledge—as well as communication and social skills—in complementing conceptual knowledge. But is it possible that conceptual knowledge could *substitute* for these addition forms of knowledge, in particular for attributes such as judgment, insight and creativity? It is notable that in complex strategic games such and chess and go, computers now outperform even the best human players. So, is it not possible that in business strategy too, increasingly sophisticated analytical tools and take decisions in the absence of human cognition? Mahoney & McGahan (2007: 80) are optimistic that broadening strategic management research to "*generate new integrative theory based upon empirically validated insights*" will also build "*creative complementarities between teaching and research*." It appears to us that a number of the concepts and frameworks introduced into strategic management in recent decades have greatly extended the effectiveness of our analytical toolkits and, in the process, reduced the need for some of the higher cognitive skills we have identified such as judgment, insight, and creativity. For example, systems theory and complexity models have increased our ability to comprehend situations where multiple variables interact. Conceptualizing the firm as an

activity system allows intuitive notions of strategic fit to be replaced with more precise considerations of complementarities between the elements of strategy, structure, and management systems (Porter & Siggelkow 2008). Similarly, business models and their application to configuring firms' relationships with their ecosystems components of strategy and relationships within the firm's ecosystem can potentially substitute for imagination and creativity in generating strategic options (Baden-Fuller & Mangematin, 2013; De Jong & Van Dijk, 2015).

However, for the most part, these tools provide guidance and direction to judgment, insight, and creativity but they do not substitute for it. Ultimately, it is the uncertainty and contextual idiosyncrasies of strategic situations that rules out mechanistic analysis. Explicit recognition of the inability of conceptual knowledge to substitute for procedural, metacognitive, and affective knowledge is important because of the propensity for academically-trained teachers to seek conceptual solutions to educational problems. For example, advocates of practice-based approaches to strategy teaching emphasize advocate the teaching of analysis "*through such sociological lenses as ethnomethodology, dramaturgy and institutional theory*" (Jarzabkowski & Whittington, 2008). Yet, furnishing students with theoretical and empirical knowledge relating to the processes and practices of strategy making, will not necessarily equip them with procedural knowledge of how to assess and diagnose strategic problems: this knowledge has to be developed experientially. Similarly, teaching students cognitive psychology may give them extensive knowledge of the nature, manifestations, and causes of cognitive bias, but may not help them to avoid such biases in their own decision making.

IMPLICATIONS FOR COURSE DESIGN AND DELIVERY

The major part of our essay has been devoted to examining why competency in strategic management is much more than knowing the theories and the analytical tools of the strategy theorists. It requires the addition of 5 core skills: judgement, insight, intuition, creativity, and social skills. These core skills may to some extent encompass other skills that appear in course objectives, such as critical thinking, general management perspective, sensitivity to ethical issues, ability to integrate different themes of management teaching, and ability to negotiate; but we suggest they are not substituted by these other objectives. More critically, we suggest that it is essential that teachers of strategy consider how these 5 core skills will be

addressed in their courses. Below, we give some hints as to how teachers might address this challenge.

Specificity and Consistency of Learning Objectives

Many of the course syllabi in strategic management that we surveyed appeared to lack coherence among the learning objectives they espoused. A strategic approach to course design implies selecting individual learning objectives that complement one another to form a unified purpose for the course and are tailored to resource constraints and environmental conditions. The dominant constraint limiting the scope and attainment levels of course objectives is *time*: the typical core strategy course has between 16 and 45 class hours. Hence, even the mundane objective of acquainting our students with the conceptual knowledge of strategic management is implausible given the field's ever-expanding breadth and depth. For learning objectives to be realistic, they need to be specific, clearly defined, realistic, and internally consistent. Broad objectives such as developing "*a general management perspective*" or "*critical thinking skills*" need to be more explicit about what these imply for the competencies that students are expected to demonstrate as a result of the course. Multiple learning objectives are likely to be more achievable when they are consistent with one another and, ideally, complementary. Hence, the value of subsuming learning objectives within an overall education purpose—such as the one that we proposed: *Enhancing students' abilities to make and execute strategic decisions*.

Limiting Conceptual Content

The need to limit the conceptual content of strategic management core courses also arises because of the primacy we give to the application over the acquisition of conceptual knowledge. We have established that concepts and theories of strategic management offer penetrating insights into the causes of strategic issues as well as providing organizing frameworks for comprehending complex situations and assisting higher cognitive processes such as synthesis and creativity. Yet, given that strategy theories and concepts are insufficient to formulate and implement strategy, then it is essential that the core strategy course allows space for students to acquire the procedural and metacognitive knowledge needed to complement conceptual knowledge.

Selecting which theories, concepts and analytical framework to include within the core course requires cost-benefit calculations. Theories, concepts and frameworks that have a wide domain of applicability and inform fundamental aspects of strategic choice confer greater

benefits than those relevant to particular contexts. Hence, if the primary goal of strategy is posited to be enhancing the long-term profitability of the business, the relevant tools are those that permit the identification of the primary drivers of profit—competitive advantage and industry attractiveness. If the greatest challenge of strategic analysis is addressing complexity, then frameworks that permit multiple causal factors to be categorized and their interrelationships mapped are particularly valuable. Concepts such as business models and business ecosystems, and frameworks such as complexity models and activity systems, support such analysis while reinforcing creativity through assisting the identification of strategic options.

Emphasis on Application

We have shown that the key skills of judgement, insight, intuition and creativity are associated with procedural, metacognitive, and affective knowledge. But how is this knowledge is acquired? For the most part—and especially for procedural knowledge--it is acquired by *doing*. Through applying the conceptual tools of strategy to real or realistic situations, students gain expertise in analytic procedures: distinguishing the critical from the superficial aspects of a situation, choosing which analytical tools to deploy, identifying fundamental causes, and drawing upon prior experiences through analogous thinking.

Such applications allow students to develop *metacognitive* knowledge: awareness of their own cognitive processes—including the biases that distort perception and limit the imagination. Yet, here again, we, as teachers, need to be realistic in our aspirations. When teaching strategy, we do not encounter the *tabula rasa* of our students' minds. The tools, concepts, and insights we seek to convey are superimposed upon our students' existing cognitive frames—their structures of interpretation and meaning—in ways we cannot predict or fully comprehend. Thus, rather than furnishing our students with an entirely new cognitive framework for analyzing strategic situations and selecting courses of action, we are adapting and augmenting a pre-existing one. Hence, we teachers need to acknowledge that, because each student begins the course with a different cognitive frame and knowledge base and processes new knowledge in a different way, at the end of the course each student will still have a different cognitive frame. Our aspiration should be that the revised frame is more sophisticated, better informed, and less biased than its predecessor.

Equally, the strategic management core course offers a social environment where the development of *procedural and metacognitive* knowledge is enriched by affective learning. In the classroom and through group-work we should mirror the processes of knowledge

integration that characterize strategic decision making in real-world organizations. The strategic planning systems of most organizations are social processes in which strategies are formulated through communication, debate, disagreement and consensus among multiple organizational members. The basic principle is that the knowledge and perceptions of multiple individuals is superior to those of a single individual.

Different types of application are conducive to the development of different combinations of skills. The majority of core courses in strategy utilize case analysis where students' pre-class case analysis provides the basis for in-class discussion. The case method provides opportunities for students to encounter the complexity of strategic situation requiring them to grapple with uncertainties over which are the critical issues to address, which concepts and frameworks are most appropriate for their diagnosis, and which strategic options offer the most promising way forward. Case discussion allows students to listen to others articulating their ideas and recommendation and gain insight into their own cognitive frames and biases. While all cases simplify and structure the real situations they describe, the extent of such simplification and structuring varies, typically the cases we select for more mature students in graduate and executive programs involve greater levels of complexity and ambiguity than more "*packaged*" cases we offer undergraduates. The greater the level of complexity and ambiguity, the greater the potential for developing judgment, insight, and synthesis. We are encouraged by increasing diversity in the case material used by instructors. Video cases and current media reports allow students confront ambiguity and uncertainty in strategic situations while economizing on the preparation time required by traditional Harvard-style cases

The learning that occurs through case studies also depends heavily upon the ways in which students engage with the cases. The use of cases to illustrate theory in action will enhance understanding of concepts and theories allow appreciation of procedures for their application, but will do little nurture judgment, insight, or creativity. In general, the more an instructor can get out of the way and give space for the class to initiate—and disagree over—recommendations and lines of argument, the greater the development of upper-level cognitive and affective skills, though possibly at the cost of less systematic acquisition of conceptual knowledge. Introducing role play into case discussion can be especially effective in developing communication and social skills and encouraging student to recognize and adapt their cognitive frames.

"*Live*" cases, where students engage directly with a company to analyze a current strategic issue, and team projects allow even closer proximation reality. Jarzabkowski and Whittington, (2008: 285) recommend consulting projects where student teams can engage in and reflect upon the reality of "*doing strategy*." However, the set-up costs and levels of instructor engagement that these forms of experiential learning demand deter their more widespread adoption.

In contrast, computer-based business simulations typically involve less ambiguity—because the structure of the simulation is already set. There is always a danger that the challenge becomes one working out the algorithms of the program rather than addressing a realistic—if stylized—business situation. The strength of computer-based simulations is their effectiveness in developing systems thinking and insight into the complementarity of strategic decision variables. Like other forms of team-work—consulting projects, group exercises, and group presentations—business simulations offer group environments that can be highly effective contexts for metacognitive and affective learning.

Managing the Social and Emotional Dynamics of the Learning Experience

The range of learning objectives together with the fact that several of them are cultivated through learning-by-doing has critical implications for managing the learning process. We have observed that developing cognitive and behavioral skills requires students to engage in reflective and critical thinking. We have also noted that developing analytical skills requires adapting and reformulating existing cognitive frames. Recent evidence from neuroscience shows that cognitive capabilities are critically dependent on emotional development—in particular, "*the critical role of emotion in bringing previously acquired knowledge to inform real world making in social contexts*" (Immordino, Yang , & Damasio, 2007: 6).

At a practical level, the basic requirement is for students to be emotionally, as well as cognitively, engaged in their learning. While such engagement is a precondition for effective learning in almost any educational context (NASBE, 2015), we argue that, because so much of strategic management learning is implicit and is dependent upon instructor-student and student-student interactions, such engagement is especially important for strategy courses. Hence, a key responsibility for the instructor—and one that is essentially unchanged since the bygone days of business policy teaching—is establishing a social and emotional environment in the class that that provides a secure environment within which individuals can express their views; a challenging environment in which students are expected to participate, to contest one

another's analyses and opinions, and to defend their views; and a collaborative environment in which the individual contributions are integrated to form a cohesive, multifaceted view.

Managing engagement is one of the most challenging tasks for strategic management teachers requiring establishing expectations then reinforcing these expectations through incentives and establishing behavioral norms. Grading for class participation establishes incentives for class preparation and class involvement, while cold-calling can be a highly effective both in encouraging case preparation and in helping less vocal students to engage in class discussion. The more instructors can take exploit the knowledge and experience base of individual students, the more class members will feel that they and their class contributions are valued. This, of course, requires that instructors know more about their class members than just their names. In addition, for those students who for personality or cultural reasons have difficulty to class discussion, individual counselling from the instructor can be highly beneficial both for them personally and for the overall class dynamic.

The effectiveness with which strategic management competences are developed is likely to require a learning environment not always comfortable for students. All human beings are averse to uncertainty. Students—whether undergraduate or MBA—experience anxiety when presented with situations where the problems are ill-defined and solutions elusive. Yet, these types of situations are typical of those faced by managers and to simplify such situations into highly-structured problem scenarios or program them in a way that makes them amenable to decision rules denies students the opportunity to develop higher-level strategic management skills. We instructors must be wary of giving our students what they want. Highly effective teachers of strategic management tend to be those that can create a supportive classroom environment with the civility and trust that encourages students to express themselves, but also with the unpredictability and challenge that are triggers to metacognitive and affective learning.

Explicit and Implicit Learning Processes

A major part of students' learning in core strategic management courses occurs through implicit rather than explicit learning. In applying analytical tools to practical problems, strategic management has much in common with medicine, law, engineering, and other applied sciences. In all these subjects, teachers simulate real world problems within a class room context and—through requiring students to meet the difficulties of applying concepts, principles, and theories to complex, unstructured problem situations—nurture the additional skills to which we have referred.

In strategic management teaching, *metacognitive* skills are best addressed implicitly rather than explicitly. Whilst some kinds of judgment skills required for topics such as criminal law can be developed through systematic training to recognize and counter decision biases (Kahneman et al, 2011), the judgment of concern to us is more complex and is best learned implicitly. This learning can occur in the course of applying analytical tools, because it is inevitable that students will need to go beyond deductive logic to deploy additional cognitive skills, while also being encouraged to reflect as a result of having their judgments challenged.

Similarly, with behavioral skills—particularly the communicative and interpersonal skills required by the social dimension of strategic management. While some of these can be developed explicitly through guiding students in how to give presentations, the skills we want are those of more informal communication and rhetoric, and these are honed through learning-by-doing. Hence, the emphasis on interactive teaching: it is through articulating their perceptions and analyses of strategic issues, listening to others, responding to the interventions of other class members, and being challenged to formulate and defend recommendations, that students develop their skills of listening and communication. So too with team-based interpersonal skills: through working in groups on assignments, projects and presentations, student gain practice in persuasion, accessing the knowledge and insights of others, and consensus building.

Yet, the implicit nature of much student learning does not mean that instructors can adopt a passive role. At the outset, instructors need to distinguish between those learning goals that can be achieved through explicit, systematic learning (primarily the acquisition of declarative knowledge concerning strategic management) and those that involve implicit learning (principally the acquisition of cognitive and behavioral competences). The role of implicit learning in developing "*higher-level*" cognitive faculties such insight, judgment, and the capacity for synthesis, requires instructors to give careful attention to selecting the problem situations they give to students, and the way in which these situations are presented and addressed within the classroom so that students can be encouraged to engage in reflective and critical thinking. There may also be opportunities to blend explicit and implicit learning. For example, creativity—a critical mental attribute in generating solutions to strategic problems—tends to be an innate attribute that is stimulated interaction with others. However, the generation of creative solutions can also be facilitated by tools that facilitate and guide exploratory search such as alternative business models (Teece, 2010) or analogical reasoning (Gavetti & Rivkin 2005).

Adapting to Student Characteristics

We are keen to emphasize that our recommendations should not be interpreted as our recommending a uniform dominant design for the core course in strategic management. Learning objectives may be similar, but the priorities among them vary across instructors and across institutions. In particular, course design and delivery need to take account of the knowledge attributes of students and instructors.

Among students the most important differentiators are maturity and experience. The relative immaturity and limited experience of undergraduates encourages strategic management teaching to be more conceptually grounded and feature less complex applications than is typical for MBAs. Conversely, seasoned executives are likely to be more adept in addressing complex, unstructured situations and accommodating a wider range of general management issues. Thus, in selecting applications for strategic analysis, the balance between tractability and accessibility, on the one hand, and complexity and uncertainty, on the other, will depend largely on the students' levels of experience. So too will instructors' expectations regarding the issues to be considered by students with different levels of maturity and experience. For example, in evaluating Amazon's 2017 decision to purchase the up-scale supermarket chain, Whole Foods, for $13 billion. An undergraduate class, might be expected to consider the wisdom of the price paid for the company, identify basic synergies from combining the companies, and apply the tools of competitor analysis to view the emerging battle between Amazon and Walmart. Additional issues that MBA students might address would include the option value of Whole Foods to Amazon, a dynamic capabilities approach to exploring the longer run synergies of the merger, and the challenged of integrating Whole Foods within Amazon. Finally, at the executive level, we might expect a pondering of deeper issues concerning Amazon's strategy, how Amazon is able to defy conventional wisdom concerning the limits to diversification, and some of the social and public policy issues that arise from Amazon's disruption of the retail sector.

Adaptation to student characteristics needs to take account of their needs as well as their capabilities. Given that the required strategic management course is typically positioned in the latter part of undergraduate business programs, these students tend to have well-developed conceptual and analytical knowledge from their prior courses. Hence, the strategic management course can offer them a rewarding exposure to the realities of the business world and to synthesize and deploy their accumulated conceptual knowledge. Equally, our experiences with executive MBAs suggest students with extensive business backgrounds can

derive can derive tremendous value using concepts and theoretical frameworks to interpret and give precision and refinement tot their experiential knowledge.

CONCLUSION

The underlying theme of our essay is that we need to apply the principles of strategic management to the design and delivery of the core course in strategic management. The strategy literature emphasizes the need for strategies to be coherent—the pieces need to fit together (Teece, Rumelt, Dosi, & Winter, 1994; Leinwand & Mainardi, 2010; Rumelt, 2011: 87-94). So, too with our strategy teaching. We argue for coherence, first, among learning objectives themselves, and second, between learning objectives, course content, and modes of teaching. Attention to these issues of consistency and alignment does not necessarily imply radical changes in our courses, either in content or teaching methods. What we are arguing for is greater awareness of what we are doing in our teaching of the core strategy course and why we are doing it.

Beginning with the overall educational purpose of the core strategic management course we have outlined the process of making and implementing strategy, identified the knowledge requirements of this process, and derived implications for the design and delivery of the course. Our recommendation is that, while the core strategy course should be based on theories, concepts and analytical tools, its emphasis should be on application. This requires conceptual knowledge to be augmented by procedural, metacognitive, and affective knowledge. Only by teaching both the theory and the practice do students learn to appreciate the power and limits of the field's knowledge. Our objective will also make students *better strategists.* Our course design and teaching methods need to give explicit attention to how we are helping our students to develop judgment, insight, systems thinking, and creativity; how they can become aware of their own thought processes and cognitive biases; and how they can improve their social and communicative skills needed to engage in organizational strategy processes. An important element of our teaching is guiding the overall social and emotional ambiance of the class so as to ensure individual engagement within an active learning community that is simultaneously cooperative and challenging.

This emphasis upon such a broad array of cognitive and social skills poses a huge challenge for teachers of strategic management the majority of whom have academic backgrounds and limited experience in the practice of strategic management. However, a lack of executive experience, should not be viewed as a barrier to effectiveness in guiding

students' acquisition of the skills that we have identified as essential complements of conceptual knowledge in the development of strategic management competency. The key argument here is that teaching—even teaching skills whose basis is not conceptual knowledge—requires different competences than performing. In relation to psychomotor knowledge, there is a wealth of evidence showing that performing the skill and teaching the skill draw upon different competences: sports champions are rarely great coaches; great musicians are seldom the most effective music teachers (Flegal & Andersson, 2008). Collins (2004: 125) proposes *interactional expertise*— "*the ability to converse expertly about a practical skill or expertise, but without being able to practice it*"—as an intermediate form of knowledge lying "*between formal propositional knowledge and embodied skill*". This interactional expertise results from "*immersing yourself in the linguistic culture pertaining to a practical domain rather than the practice itself*" (ibid, 127). Such interactional expertise may also play an important role in the strategic management expertise acquired by students. The time available for students to acquire cognitive and behavioral skills through experiential learning in the core strategy course is limited, however, "*linguistic socialization*" allows students to be conversant with the issues relating to taking and implementing decisions in complex, ambiguous strategic situations without extensive immersion practice.

Teachers of strategic management do not need to become experts in making and implementing strategic decisions. The expertise they require is in teaching strategic management. This requires taking a strategic approach to the required strategic course: being explicit about learning objectives, recognizing the knowledge requirements of these objectives, and ensure that course content and course delivery are aligned with these knowledge requirements.

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FIGURE 1 Linking Strategic Management Competency to Bloom's Taxonomy of Educational Objectives