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Teaching & Learning

Starting with Howard Gardner's *five minds*, adding Elliott Jaques's *responsibility time span*: implications for undergraduate management education

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Abstract

This article offers a perspective on management education derived from Howard Gardner's *five minds framework* and Elliott Jaques's *responsibility time span*. We describe the *five minds* (disciplined, synthesizing, creating, respectful, and ethical) and discuss some of the criticisms raised about Gardner's approach. We introduce Jaques's *time span* concept and suggest its applicability to the structuring of roles in a school of management. Putting Jaques together with Gardner allows us to explore questions about the five minds that could be addressed by deans, department chairs, and faculty members, each with a different responsibility time span.

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What should management students be learning?

What skills and abilities will be needed for effective management and leadership at work?

Following the 1988 publication of the Porter and McKibbin book, *Management Education and Development: Drift or Thrust into the 21st Century*, such questions have become commonplace in conference presentations, journal articles, keynote speeches, faculty meetings, and in everyday conversations in the cafeteria and faculty offices. For over 20 years, answers to these questions have uniformly suggested that change is needed, that older management models are not always appropriate for the world today, and that graduates, managers, and leaders need a new set of skills, sensibilities, and abilities (e.g., Wankel and DeFillippi, 2002; Gosling and Mintzberg, 2003, 2006; Seers, 2007; Weick, 2007; Bracken, 2008; Schoemaker, 2008). Each of these authors is a professional in management – as a practitioner or educator. However, as Holstein (*New York Times*, 2007) notes in his review of *The Future of Management* (Hamel, 2007) “... most innovative ideas in business these days are not coming from business schools, but from people who never went to B-school.”



Taking Holstein's lead, we base this article on Howard Gardner, often considered one of the most influential forces in education, and his 2006 book, *Five Minds for the Future*, published by Harvard Business School Press. As a professor at the Harvard Graduate School of Education, he is a voice from outside "our" academy. We believe, however, that Gardner's ideas are relevant to issues of "what and how" in management education. He argues that five broad uses of the mind, or *five minds*, are needed for the future, and therefore should be nurtured, starting in young children and continuing over the course of a lifetime. We use his conceptualization of five minds – the disciplined mind, the synthesizing mind, the creating mind, the respectful mind, and the ethical mind – to spur a conversation about undergraduate management education, and address what different institutional actors – deans, department chairs, and faculty members – might do to enhance the development of students' five minds.

We acknowledge that Gardner's formulation of the minds (and by extension what students should be learning) is but one perspective on education for the future. There have been numerous writers who have tackled questions about what we should be teaching and what students should be learning. We will briefly review some of this work, as it applies specifically to management education. We also acknowledge that Gardner's five minds approach has its critics (e.g., Sternberg, 2007; Pava, 2008). Nevertheless, we believe that using a framework like Gardner's stimulates our thinking and may change our discourse around management education. Coincidentally, Gardner's ideas are beginning to have an impact on the practice of business and management. In a *Wall Street Journal* article about management gurus (White, 2008, May 5), Gardner is ranked among the five most important management thinkers today. Among the top five, there were only two names one would typically associate directly with business (Gary Hamel and Bill Gates). The list included two journalists (Thomas Friedman and Malcolm Gladwell) and a cognitive psychologist, Howard Gardner.

The paper is structured in six sections. We first look at Gardner and writers on management education, and second, we describe the different minds, highlighting important aspects of each. In the third section we summarize and address some of the concerns and criticisms that have been raised about Gardner's approach. Fourth, we

introduce readers to Elliott Jaques's concept, "responsibility time span" and explain its applicability to the structuring of educator roles in schools of management. In the fifth section, we use Gardner and Jacques together to explore implications for management education, specifically the implications for different institutional actors in the education process (dean, department chairs, and faculty members), each with a different responsibility time frame. We close with some summary reflections.

Gardner and writers on management education

Gardner takes a holistic and general approach to identifying the cognitive building blocks that he believes are important for society as a whole and can be developed at home, at school, and at work. He has described five minds that he sees are needed in the future: the disciplined mind, the synthesizing mind, the creating mind, the respectful mind, and the ethical mind (described in more detail below). These are not the minds of managers, doctors, or professors; these are general minds that, as a society, we need and that should be nurtured in all. Because Gardner is not specifically addressing the needs of management education, it is not surprising that what he writes about is quite different from what we read in the general management/leadership literature and the management education literature (cf., Porter and McKibbin, 1988; Pfeffer and Fong, 2002; Gosling and Mintzberg, 2003, 2006).

There have been many calls for change away from "[t]he traditional paradigm of business schools, with its strong focus on analytical models and reductionism ..." (Schoemaker, 2008: 119. See also Mitroff, 2004; Bennis and O'Toole, 2005; Augier and March, 2007) With that common starting point, different authors have focused on different skills and abilities that they think managers and leaders will need to be effective in an increasingly ambiguous and complex world. For instance, Gosling and Mintzberg (2003) suggest that "the practice of managing ... involves five perspectives, which correspond to the five modules of [their] program (56)." These perspectives include what the authors have called the reflective mindset, the analytic mindset, the worldly mindset, the collaborative mindset, and the action mindset.

Other authors focus more specifically on identifying competencies and skills that they think effective managers need and, by extension, what



students should be learning and what we might be teaching. For example, Whetten and Cameron (2007) promote the importance of a number of management skills that they have grouped into three sets: personal, interpersonal, and group. For these authors, the core of what matters in management is knowing and managing self and having the skills to deal with others, one-on-one and in groups. Boyatzis (1982, 2008) and Boyatzis *et al.* (2002) group competencies, or the underlying characteristics of a person that lead to effective performance, into three general areas: cognitive, emotional, and social. Quinn and Colleagues (2007) identify eight roles of a “master manager” – director, producer, mentor, facilitator, monitor, coordinator, innovator and broker – each with several critical competencies necessary to fulfill the role.

Representing a more eclectic approach, Wankel and DeFillippi’s edited book (2002) includes chapters in which different authors present their ideas for changing management education. Suggestions range from content, for example, courses to develop political skills, to pedagogy, such as adding service learning courses. The result, as one reviewer commented (Rowley, 2004: 223), is a “highly diverse book ... [without a] roadmap in terms of putting it all together.” This criticism highlights a dilemma for all who research and write in the field of management education – how to provide both ideas for action and a more general model or holistic approach.

In a sense, one cannot compare Gardner to these (or other) writers on management education, because Gardner is not trying to provide guidance specifically for management education, or any formal educational program. He is talking about minds in general, minds for our collective future, as adaptive and effective societies. Indeed, it will be our job as management educators to take his ideas, if we find them useful, and make them actionable and practical. Of course, Gardner, even as a generalist, is not without his critics; we address some of the criticisms after describing each of the five minds.

Minds for the future: Disciplined, synthesizing, creating, respectful, and ethical

Gardner identifies “the kinds of minds people will need if they – if we – are to thrive in the world during the eras to come” (2006a: 1). In what he calls a “values enterprise” (1), his core question is: “What kind of minds *should* we be cultivating in

the future?” (Gardner, 2008: 17, emphasis added). His answer is the five minds he has written about: three cognitive and two relational minds. These minds transcend professional boundaries. These are minds for the future of the world, minds that should be nurtured, although what these minds might look like and how they might be cultivated will be different for different people, professions, and disciplines. Below we summarize each mind. (Interested readers may wish to explore Gardner’s website, www.howardgardner.com, to learn more about his publications, current projects, and blog posts.)

The disciplined mind

The disciplined mind embodies a search for knowledge and understanding at a deep level in a particular field of study: foundational concepts, big ideas, methodologies, and ways of thinking within a discipline. A metaphor for the disciplined mind is drilling down, developing depth of understanding. Gardner notes that “... students may have accumulated plenty of factual or subject matter knowledge, but [may] not [have] learned to think in a disciplined manner” (2006a: 21). No matter how extensive, subject matter content does not constitute a discipline. A discipline requires both a deep understanding of content and a way of thinking about content and questions. Gardner suggests the following in order to continue developing a disciplined mind: focus on foundational concepts and approaches to understanding rather than factual learning; learn to “see things” and ask questions as someone in this profession would; and set up “performances of understanding” because real understanding can be made visible through actions and demonstrations.

Gardner also reminds us of the second meaning of the word “discipline” with the statement that “all of us – scholars, corporate leaders, or professionals – must continually hone our skills” (2006a: 6). This takes discipline – a deliberate, concerted, and dedicated effort. In fact, he suggests that to become an expert takes approximately 10 years, during which time “[d]isciplines themselves change, ambient conditions change, as do the demands on individuals who ... achieved initial mastery” (Gardner, 2008: 17). Not surprisingly, Gardner sees the need to “continue to educate oneself ... over succeeding decades” (17). The disciplined mind forms the foundation upon which the other two cognitive minds are built.



The synthesizing mind

The synthesizing mind, responsible for knitting together information from disparate sources into a coherent whole, is one that has become ever more important with the explosion of data resources. “The ability to decide what information to heed, what to ignore, and how to organize and communicate what we judge to be important is becoming a core competence for those living in the developed world” (Gardner, 2006b: 36). The synthesizing mind is able to weave information together in ways that make sense to both the synthesizer and also to other people. Theories, narratives, and even textbooks are all forms of synthesis.

As Gardner notes, synthesis can occur within a discipline or across disciplines, with interdisciplinary synthesis being the more ambitious form. It entails integration and building connections, not merely juxtaposition. Those with good synthesizing minds not only recognize the different ways in which different professionals might look at a “single” problem, they are also able to see things through the lenses of both and create a new interpretation, different from that of either professional perspective alone. To synthesize well, you need “a home area of expertise ... [and enough knowledge of other relevant disciplines] to be able to make judgments about whom and what to trust” (2008: 19).

The creating mind

The creating mind is able to forge new ground, to find and define new problems, to ask new questions, and to generate new solutions. The creating mind (in the academic realm) tends to emerge after an individual has mastered a discipline to some extent and is producing work within a particular domain. In the non-academic realm, the idea is similar – creating innovation and meaningful change in a domain of practice. In Gardner’s model, something new is defined as legitimately creative only when it is recognized as such or adopted by people in a field of practice. Developing a creating mind is a process that may take many explicit trials and visible failures and a long period of time. For Gardner, “creation is unlikely to emerge in the absence of some disciplinary mastery, and, perhaps, some capacity to synthesize, as well” (2008: 20).

Unlike the three minds above, that are largely cognitive, the other two minds (respectful and ethical) have more to do with relational capabilities – relationships people have with other individuals, groups, and within their communities.

The respectful mind

The respectful mind recognizes differences among people as natural and legitimate. Respect for others does not mean ignoring one’s own beliefs or necessarily accepting those of others. Demonstrating a respectful mind does require, however, an open mind, an eagerness to understand others on their own terms, and an acceptance of differences without devaluing the worth of others. Having a respectful mind means demonstrating a willingness to listen, engage in dialogue, and understand the views of others. It means giving others the benefit of the doubt and avoiding negative judgments that are founded on stereotypes and prejudice; a respectful mind truly values diversity. For Gardner, the respectful mind is a call for “all human beings to accept the differences, learn to live with them, and value those who belong to other cohorts” (107). Respect seems a prerequisite for many of the personal and professional growth opportunities that everyone faces in their daily lives – at home, at school, at work, and in their communities, a point that Gardner emphasizes by writing that, “[i]deally, the responsibility of engendering respect among different groups, and displaying that respect publicly, should be distributed across society” (109).

The ethical mind

The ethical mind tackles questions of responsibility and community, broadening the notion of respect into something more abstract and more self-conscious. The ethical mind moves beyond a concern for relations with certain other people. In a sense, the ethical mind is a larger mind, dealing with questions about responsibilities, roles, goals, and intentions in general. It looks at the implications of actions and decisions on all stakeholders. The ethical mind puts the collective good above individual self-interest.

Gardner’s premise is that with conditions in the world constantly in flux, people will continue to struggle with ethical dilemmas they have been poorly prepared to address. He argues for sharpening this mind so that people can become agents of ethical change as part of their responsibility to those around them and to the wider community. In essence, this mind asks, “[w]hat kind of person, worker, and citizen do I want to be? If all workers in my profession ... did what I do, what would the world be like?” (Gardner, 2007: 52). It is the ethical mind that allows someone to think of himself/herself in a universalistic manner. Gardner acknowledges



that having developed an ethical mind does not ensure ethical behavior. Indeed we may be blind to our own conflicts of interest and may not recognize ethical dilemmas. The environment or context matters greatly, and it is easier to develop an ethical mind and to behave ethically “when one inhabits an ethical environment” (2008: 22).

Not only are these the five minds needed for the future of society as a whole, but in Gardner’s view, it is also “desirable for *each person* to have achieved *aspects* of all five minds” (2008: 24, emphasis added.) This achievement is most likely to occur when people are in environments in which all five minds are modeled and considered important. Gardner challenges all educators to “provide support, advice, and coaching that will help inculcate discipline, encourage synthesis, prod creativity, foster respect, and encourage an ethical stance” (2008: 24). Each person, however, assembles the five minds building blocks in a unique way, frequently with particular strengths in only certain minds. There is no single formula or model for the “perfect” mind.

Gardner’s critics

Gardner’s views are not without critics. In his critique of Gardner’s *Five Minds for the Future*, Robert Sternberg (2007) raises several issues. First, he challenges the notion that Gardner’s five minds are really distinct, saying that [Gardner’s five minds] “appear to be aspects of minds that most people agree would be good to have” (2007: 3 of 6). To us, the question of whether these are distinct minds, or aspects of minds, seems less important than whether they are exhaustive, which we discuss later. Sternberg also wonders why these are really minds “for the future,” arguing, instead, for their timeless relevance. While Sternberg may be correct that Gardner’s views are not relevant solely to the future, our interest is in change in management education. Necessarily, change has a future orientation, with management educators asking what minds, skills, and competencies will be needed in the future.

Another issue for Sternberg is that Gardner offers no empirical evidence for the existence of five types of minds, which, in fact, he does not. On the other hand, Gardner is not claiming to present a research-based theory of minds. Rather, he is following a long and glorious tradition in management – armchair theorizing, based on experience and a great synthesizing mind. We have interpreted Gardner’s work as a call to think holistically about

education, and that his way is to break the whole into five parts, tightly woven together to make the whole.

If we return to the question of whether these minds are exhaustive or not, Sternberg would argue that they are not. He suggests that “it is not clear that there is anything special about these kinds of minds, as opposed to others one might conceive: the wise mind, the practical mind, the critical mind ... the far-reaching mind” (2007: 4 of 6). Such criticism seems inevitable, however, as any given theorist is likely to delineate different minds. Moreover, it is entirely reasonable to conceive of the minds that Sternberg offers as cutting across Gardner’s five minds. So, for example, take Gardner’s disciplined mind that focuses on mastery and expertise. Overlaying Sternberg’s critical thinking, wisdom, practicality, and far-reachingness (accepting that as a word) may provide useful elaboration and different ways to understand the mind. The bottom-line is that Sternberg raises important questions about Gardner’s work, but, in our view, his concerns do not lessen the relevance of Gardner’s ideas to the ongoing conversations about the purpose, content, and process of management education.

In a 2008 critique of Gardner’s five minds, Moses Pava also outlines several concerns, some of which are similar to those raised by Sternberg and some of which are not. In common with Sternberg, Pava suggests that Gardner does not offer sufficient evidence for the existence of five minds nor for the education policy implications of the minds he identifies. Pava does acknowledge, however, that Gardner’s book is a “reasoned and reasonable call to re-consider what it is that we are doing in our classrooms and organizations when we make the large and important claim that we are educating and teaching students for the future” (Pava, 2008: 286).

Like Sternberg, Pava argues that Gardner’s five minds are not exhaustive. Pava would also like to lengthen or adjust the list. He differs from Sternberg in what he wants to add, listing minds like “the caring, critical, intersubjective, spiritual, and joyful minds” (2008: 285). While he argues for each of these additional minds, like Gardner and Sternberg he does not adequately address the question of why these and not others. Inevitably all those who try to identify a complete set of minds, mental dispositions, competencies, or skills that are needed for the future will be plagued by the legitimate criticism of incompleteness,



yet each list may encourage educators to reflect on some interdependent mental competencies or approaches.

Roles and responsibility time spans

Before we apply Gardner's ideas to what different educator roles can do to cultivate students' five minds, we want to introduce readers to Elliott Jaques's concept, "responsibility time span of [a] role" (1988: 37; 1990: 130). We will then use this concept, together with Gardner's five minds, to draw implications for deans, department chairs, and faculty members. We believe the responsibility time span concept can help refine the implications of Gardner's ideas and help differentiate among the educator role responsibilities. We go into this more fully in the next section.

Drawing on work that goes back more than 30 years (cf., Jaques, 1964, 1986, 1990), Jaques contended that hierarchy done badly is indeed responsible for many organizational and personal ills. At the same time, he argued that, done well, hierarchy "can release energy, creativity, rationalize productivity, and ... improve morale" (1990: 127). In his research, Jaques found that well-done hierarchies had two common attributes: first, increasing complexity of work higher in the organization, and second, that this work "separates out into distinct categories or types of mental activity" (129). He characterized as "startling" his finding that "the level of responsibility in any organizational role ... can be objectively measured in terms of the target completion time of the *longest* task, project, or program assigned to that role" (130). He originally called this objective measure "the time span of discretion" (1964), later renaming it "the responsibility time span" (1988: 37; 1990: 130). Further research showed that discontinuities in hierarchical responsibility time spans occur at "three months, one year, two years, five years, ten years, and twenty years" (1990: 131).

Jaques argued that hierarchical structuring of positions should be defined based on the length of time to complete the longest task, project, or program. Using break points in responsibility time spans suggests what an effective hierarchy would look like. Each layer in the organization would have associated with it a particular responsibility time span. A layer above would have a longer one; a layer below would have a shorter one. Jaques found that organizations that adhered reasonably closely to the time breaks he identified were more productive and healthier places for

people to work. It seems that people tend to "accept as natural and appropriate" time span levels in the hierarchy (1990: 132).

Although Jaques was talking about how to structure positions in traditionally hierarchical organizations, his notions about time spans and organizational levels can be usefully applied to our discussion of the roles of those directly involved with the educational process – a hierarchically structured process that is not always viewed this way, particularly by faculty members. In this discussion, we are focused only on the hierarchy as it relates directly to the educational process. Thus, we might imagine a faculty member thinking about what he or she will be teaching over the next year, while the department chair might worry about faculty resources and hiring needs for the next couple of years, and the dean might be thinking about what departments should be expanded and what new technological innovations to introduce into the curriculum over the next 5 years. (Of course, while a faculty member might have a 1-year responsibility time span when it comes to teaching, the same faculty member might have a much longer time horizon with respect to research and writing. Similar time span differences would be found for the other roles, as well. Again, here we are focused on the hierarchy of roles only as they relate to the direct education of students.)

Most relevant then for our discussion from Jaques's work on time span levels are 5 years (dean), 2 years (department chair), and 1 year (faculty member), although in thinking about a university, Jaques's 10-year responsibility time span might apply to a provost or academic VP, his 20-year responsibility time span might fit well for a president, and a 3-month responsibility time span might reasonably characterize an adjunct faculty member.

For our purposes, the responsibility time span helps allocate duties and tasks (directly relating to education) among deans, department chairs, and faculty members. Each role may support the development of the five minds, but using a responsibility time span perspective helps differentiate what some of the big issues and questions might be for each role. In the next section, we focus on the kinds of issues, questions, and tasks relevant to undergraduate management education, looking 5 years in the future (as the dean might), 2 years in the future (as a chair might), and a year into the future (as a faculty member might).

As we apply Jaques’s ideas to our different institutional roles, it is important to note that he did not suggest that the various time horizons are absolute – for example, that a role with a 5-year responsibility time span includes only projects, tasks, and responsibilities with that long a time horizon. A dean, for instance, may be responsible for a school’s vision, mission, and reaccreditation (all long-term concerns). At the same time, a dean would also be expected to focus attention at a 2-year level – hiring and budgets, for example. Indeed, the dean’s tasks and responsibilities would have various time horizons, with the longest at about 5 years. Similarly the time horizons for the department chair and faculty member would vary as well, with the longest tasks and projects for a department chair having about a 2-year time span, and a faculty member, about a year. Each of these different roles would also have shorter tasks and projects, some of which will be shared across the different roles (for example, modeling respect on a daily basis).

Implications for deans, chairs, and faculty

In Tables 1–3, we identify issues and question related to each of the five minds that each educator role might address. Table 1 is for a dean, Table 2 is for a department chair, and Table 3 is for a faculty member. For each of these roles, we give a fictitious (but plausible) job description and identify the related responsibility time span for undergraduate management education. Within each table, there are five columns, one for each of the minds. Entries in the columns are examples of the issues and concerns (in the form of questions) for someone in this role, at his/her responsibility time frame (long term for the dean, medium term for the department chair, and relatively short term for the faculty member). We believe that taken together, the fusion of Gardner and Jaques may provoke management educators to think differently about roles, responsibilities, and tasks with respect to cultivating students’ minds for the future.

Table 1 The Dean

Role of the Dean

Dean’s job description: Provides vision and leadership in the areas of strategy, resources, and academics. Manages a large budget for personnel and programs. Leads in different arenas. Facilitates dialogue among diverse individuals and groups.

5-year time span of responsibility for undergraduate management education.

Primary responsibilities in relation to educating students for the future: Defining programs and ensuring consistent learning goals and outcomes; developing programs and opportunities to support learning goals; faculty sufficiency; assessment of programmatic outcomes.

Examples of questions for a Dean

| <i>Disciplined mind</i> | <i>Synthesizing mind</i> | <i>Creating mind</i> | <i>Respectful mind</i> | <i>Ethical mind</i> |
|--|---|---|--|--|
| What disciplines will matter in 5 years? | What interdisciplinary programs should be developed? | How do we create points of distinction for the school? | What role should foreign languages, service learning, study abroad, and other cultural experiences play in our programs? | What should be the role responsibilities of managers and what role should different organizations play in society? |
| What disciplines should we teach? | How do we support interdisciplinary programs, for example joint appointments, team teaching? | How will our graduates use their learning to create a better world? | How are different voices (students, faculty, and community) heard in governance and decision making in the school? | How do we develop and sustain an ethical culture for the school? |
| How do we prepare to teach them? | What pedagogies support interdisciplinary programs, for example, problem-based learning, case studies, simulations? | How do we raise funds and visibility to support our emerging points of distinction? | Where do students and faculty members learn the skills of respectful interaction? | How fair and universally applied are our academic policies and procedures? |

Table 2 The Department Chair

Role of the Department Chair

Department Chair's job description: Broad responsibility for faculty deployment, mentoring, development, and performance assessment. Responsible for facilitation of curriculum review and development in their majors as well as initiation of events, processes, and services that are integral to the department's majors. Coordinates with other university departments to provide seamless and consistent service. Resolves everyday problems with faculty and students.

2-year time span of responsibility for undergraduate management education.

Primary responsibilities: Faculty sufficiency, competence, and development. Proposal of new courses.

Examples of questions for a Department Chair

| <i>Disciplined mind</i> | <i>Synthesizing mind</i> | <i>Creating mind</i> | <i>Respectful mind</i> | <i>Ethical mind</i> |
|--|---|---|---|---|
| How do we assess the disciplinary expertise of our full-time and part-time faculty? | How does our department develop students able to make sense of conflicting data and sources of information? | How do we expose students to innovative processes and theories to stimulate their creative minds? | How do we build a community across faculty differences (e.g., rank, status, sub-discipline, or philosophy)? | What are the ethical dilemmas and questions of social responsibility that our graduates may face at work? |
| In areas where additional disciplinary expertise is needed, do we develop current faculty or hire? | How do we teach our students to draw conclusions and make decisions when faced with conditions of uncertainty or ambiguity? | How do I encourage department faculty to use innovative pedagogies and technologies? | How do we ensure that faculty members treat students and colleagues respectfully? | How should issues of ethics and social responsibility be addressed within our courses? |
| What depth of disciplinary expertise should our graduates have; how is this reflected in our learning objectives? How do we assess depth and rigor in our curricula? | In what ways can we partner with other departments to support interdisciplinary learning? | How do we acknowledge and showcase the creative work of our majors and faculty? | How do faculty members create classroom and online environments in which students will treat each other respectfully? How do I make sure that students and faculty feel comfortable coming to me with their issues and concerns? | As a department, how do we ensure that our conduct and our teaching are in line with our values? |

From questions to action

The questions we have included in Tables 1–3 may not be new, but the organization of them into this Gardner–Jaques framework is. We have provided examples of questions that are appropriately the purview of the different educator roles, each with a different job description and responsibility time frame. There are other questions one could add, but our purpose was to present a small number that would demonstrate the implications of fusing Gardner and Jaques – namely that cultivating students' five minds is a process that involves different roles with different time horizons. At the same time as the different educator roles focus on developing each of the five minds, they should also

be reminded that Gardner's approach is holistic and that the five minds are tightly bound together in individual people.

In any organization (including schools of management), it is often the case that longer time horizon projects and tasks get pushed out of the way by more pressing everyday concerns. These tables can be useful in reminding us of the different time horizons and kinds of questions and issues to which different institutional actors in schools of management should devote energy. While the dean should focus a good deal of attention on the long term, the department chair should be thinking medium term, and the faculty member should be focused on the near term. In reality, it may not be

Table 3 The Faculty Member

Role of the Faculty Member

Faculty Member’s job description: Teaching, research, and professional activities, and other duties associated with academic teaching positions. Develops and delivers courses, assesses student learning. Has disciplinary expertise, and a willingness to work with others on curriculum issues – at both the course and program level.

1-year time span of responsibility.

Primary responsibilities in terms of teaching: Course design and delivery, working with students.

Examples of questions for a Faculty Member

| <i>Disciplined mind</i> | <i>Synthesizing mind</i> | <i>Creating mind</i> | <i>Respectful mind</i> | <i>Ethical mind</i> |
|---|---|--|---|---|
| What significant concepts and ways of thinking that characterize the discipline should be incorporated in my courses? | What disparate information sources and multiple points of view on single issues or topics can be brought into the course? | How can I learn the new and creative ideas in my field and bring them into the classroom? | How can I encourage students to focus on process and not just on content when they work together in a group? | What ethical issues exist within the profession, which students should learn about in my courses? |
| What readings and assignments can capture depth and disciplinary rigor? | What assignments can be designed that require students to make sense of different perspectives and conflicting information? | How can I design assignments that encourage a disciplined approach to creativity and innovation? | How can I know how students are treating each other and how to intervene if students are disrespectful to each other, in or out of class? | In what ways do I communicate and model ethical behavior and academic integrity in my classes? |
| How can I set up “performances of understanding” so that students’ learning can be made visible? | How do I help students appreciate that much of what they read, including textbooks, is a synthesis of original material? | How can I encourage students to share new ideas and to critique the new ideas of others? | How can I help students practice respectful disagreement in the classroom, in their work groups, and with faculty? | How do I encourage students to address ethical dilemmas in both real situations at school or work and in simulations or case exercises? |

that clean and neat, since problems often come without address labels or time frame stickers. There will be crises and opportunities that shift everyone’s time horizons; this is to be expected. Nonetheless, we believe that displays such as these tables can be useful, and possibly more so if they are expanded to include other questions and issues, some of which will be unique to particular schools.

The questions in our tables have no simple answers. Although it is tempting to become prescriptive, we believe we should not go from questions to specific action items because answers are dependent on many factors – the institution’s mission, the school’s size and its mission, the departmental arrangement of the school, the particular players in the various roles, and the kind of management students in the school.

At any particular school, different people will answer our table questions differently. Therefore, not only does one need to look at the “objective” context in which the questions are situated, one

needs to recognize how important values are in answering each of these questions. As Gardner reminds us, education is a values enterprise. Thus addressing these questions requires sensitivity to the organizational and cultural context and recognition of the role of values in everyone’s answers. Even additional questions generated by people in different schools will reflect their organizational and cultural context and values.

It is our contention that leaving this paper at the level of questions is appropriate. To go to the level of action is too dependent on situations, circumstances, and values. This is part of the conversation we hope is spurred by this article.

Summary reflections

While we cannot cultivate fully all five minds in any undergraduate management program, we can build on students’ past growth and development and provide new foundations for further development. We can help students see the minds and



what is possible. The way they develop them over time, and use them in their professional careers and in their communities, will become part of their individuality. Each institutional actor has a role to play in the process of educating undergraduate management students. Their roles are somewhat overlapping, but distinct, especially when considering their different responsibility time spans. They may focus on different issues and questions, but they need to work together to accomplish specific tasks and activities to support student learning across the five minds.

In this inter-connected world, Gardner reflects on how important it is that we prepare our students to “deal with what is expected and what cannot be anticipated” (2006a: 2) in order for them to be contributors to their local and global communities in the future. Yet, many of us have experienced traditional doctoral education that may have narrowed our views about teaching, service, and scholarship, and subsequently narrowed our vision for students and their learning for the future. Experience, good mentors, and development activities can help us all become more effective participants in management education.

As deans, department chairs, and faculty members, we are all important actors in the education enterprise, albeit with different issues, concerns, and opportunities to address. Still, through our actions and decisions, we impact students’ learning journeys and help them become critical thinkers, life-long learners, innovators, communicators, change agents, collaborators, and world-centered individuals. We all share in the teaching and

modeling of the five minds. We should also share in the design of “performances of understanding” across the five minds. Such an approach to assessment of learning would be consistent with accreditation expectations and would make students’ learning visible to others.

As a final reflection, it is ironic to note that faculty members have the shortest responsibility time span in the fusion of Gardner and Jaques, but in practice, they may “outlast” their department chairs and their deans. Sometimes they leave their faculty positions to become department chairs or deans. And, not infrequently, chairs and deans return to faculty positions. Yet, each of the different roles in the management education hierarchy can be associated with a different responsibility time span, a perspective on undergraduate education that helps highlight both what is distinctive about the different roles and how they might work together toward the common goal of educating undergraduate management students. It is our hope that bringing together Gardner and Jaques in this article will provoke readers to think about the different minds our students will need in the future and to realize the different and complementary roles that faculty members, department chairs, and deans all play in the process.

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References

- Augier, M. & March, J. (2007). The pursuit of relevance in management education. *California Management Review*, 49(3): 129–146.
- Bennis, W. & O’Toole, J. (2005). How business schools lost their way. *Harvard Business Review*, 83(5): 96–104.
- Boyatzis, R. (1982). *The competent manager: A model for effective performance*. New York: Wiley.
- Boyatzis, R. (2008). Competencies in the 21st century. *Journal of Management Development*, 27(1): 5–12.
- Boyatzis, R., Stubbs, E. & Taylor, S. (2002). Learning cognitive and emotional intelligence competencies through graduate management education. *Academy of Management Learning and Education*, 1(2): 150–162.
- Bracken, P. (2008). Futurizing business education. *The Futurist*, 42(4): 38–42.
- Gardner, H. (2006a). *Five minds for the future*. Boston, MA: Harvard Business School Press.
- Gardner, H. (2006b). The synthesizing mind. *Harvard Business Review*, 84(2): 36–37.
- Gardner, H. (2007). The ethical mind. *Harvard Business Review*, 85(3): 51–56.
- Gardner, H. (2008). Five minds for the future. *Schools: Studies in Education*, 5(1/2): 17–24.
- Gosling, J. & Mintzberg, H. (2003). The five minds of a manager. *Harvard Business Review*, 81(11): 54–63.
- Gosling, J. & Mintzberg, H. (2006). Management education as if both matter. *Management Learning*, 37(4): 419–428.
- Hamel, G. (2007). *The future of management*. Boston, MA: Harvard Business School Publishing.
- Holstein, W. (2007). Orders from on high? That’s so yesterday. *The New York Times*, 30 December, 3, 6.
- Jaques, E. (1964). *The time-span handbook*. London: Heineman.
- Jaques, E. (1986). The development of intellectual capability: A discussion of stratified systems theory. *Journal of Applied Behavioral Science*, 22(4): 361–383.
- Jaques, E. (1990). In praise of hierarchy. *Harvard Business Review*, 68(1): 127–133.



- Mitroff, I. (2004). An open letter to the deans and the faculties of American business schools. *Journal of Business Ethics*, 54: 185–189.
- Pava, M. (2008). 'Loving the distance between them': Thinking beyond Howard Gardner's "Five Minds for the Future". *Journal of Business Ethics*, 83: 285–296.
- Pfeffer, J. & Fong, C. (2002). The end of business schools? Less success than meets the eye. *Academy of Management Learning and Education*, 1(1): 78–95.
- Porter, L. & McKibbin, L. (1988). *Management education and development: Drift or thrust into the 21st century*. New York: McGraw Hill.
- Quinn, R., Faerman, R., Thompson, M., McGrath, M. & St Clair, L. (2007). *Becoming a master manager: A competing values approach*, 4th edn. Hoboken, NJ: John Wiley & Sons.
- Rowley, R. (2004). Review of "Rethinking Education for the 21st Century" by Wankel and DiFillippi. *Academy of Management Journal of Learning and Education*, 3(2): 222–223.
- Schoemaker, P. (2008). The future challenges of business: Rethinking management education. *California Management Review*, 50(3): 119–139.
- Seers, A. (2007). Management education in the emerging knowledge economy: Going beyond "Those who can, do; those who can't, teach". *Academy of Management Learning & Education*, 6(4): 228–267.
- Sternberg, R. (2007). Five minds for the future, or maybe six, or four ... oh, never mind! *PsychCRITQUES*, 52(31), article 16, 6 pages.
- Wankel, C. & DeFillippi, R. (Eds) (2002). *Rethinking management education for the 21st century*. Greenwich, CT: Information Age Publishing.
- Weick, K. (2007). Drop your tools: On reconfiguring management education. *Journal of Management Education*, 31(1): 5–16.
- Whetten, D. & Cameron, K. (2007). *Developing management skills*, 7th edn. Upper Saddle River, NJ: Prentice Hall.
- White, E. (2008). New breed of business gurus rises. *The Wall Street Journal*, 5 May, B1.

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