AN INTERDISCIPLINARY APPROACH TO BUILDING CREATIVITY SKILLS AMONG MBA STUDENTS

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Abstract

A key input to creativity is an ability to bring multiple perspectives to bear on a problem. When tasked with developing a curriculum to develop creativity skills in a new MBA program, we took this characteristic literally. In order to provide multiple perspectives to the students, three faculty members, from a mix of Arts & Sciences and Business disciplines, came together to teach creativity and innovation. Every aspect of the class was planned and executed together, from exercises to assignments to feedback. The faculty members involved were not shy about challenging each other, and the atmosphere of reasonable disagreement led to students who were more willing to challenge each other, and the faculty. This enriched the experience for all involved and resulted in a class wherein the students were able to discover true innovation.

Introduction and Context

In the summer of 2010 our institution began a quest to create an entirely new cohort based MBA program to supplement its part-time MBA. Faculty members involved in designing the program were told to start with a clean slate, and build a curriculum from the ground up. One of the more innovative aspects of the curriculum design process was that faculty from traditionally Arts & Sciences disciplines (e.g., English & Media Studies, Global Studies, Philosophy, History, Sociology) were included throughout the process of designing the new program. From the outset, we recognized the value of differing perspectives for the entire program.

This process resulted in a program structure consisting of four themes: leadership, value, environments and innovation.

In the value theme, students reflect on what value means and how that meaning can vary, understand how organizations derive value, and can align processes and resources to help build it. They learn about the various ways to generate value, for example, through new product development or merger and acquisition. The Leadership theme explores the nature of leadership, the extent to which it can be taught, the role of emotional intelligence in leadership success, and the range of challenges one faces in a leadership role. The Environments theme encourages students to consider the wider setting of the firm, community, country and world

when making decisions (information taken from the Institution's website; URL deleted to preserve anonymity, and available on request).

Finally, the Innovation theme is described as follows:

> "Leaders know the value of innovation and creativity in devising new models for the role of business in society. Innovation supports the other three themes of the [Institution] MBA. That is, to be innovative, leaders must understand the environments in which they operate, the ways that innovation may or may not lead to value, and the role of their decisions in building an organization where creativity can thrive." (URL deleted and available on request)

The Innovation Theme

Innovation is recognized as a key determinant of success in the business world, and business education programs are increasingly recognizing that creativity is a skill that can be taught to emerging business leaders. Kelley and Kelley (2012) cite a "recent IBM survey of chief executives around the world" that finds that creativity is the "most sought-after trait in leaders today." Petocz, Reid and Taylor (2009) provide a partial list of higher education institutions and employers that explicitly mention creativity and/or innovation skills as important to their missions.

In 1994, Ramocki called on the marketing discipline to take the lead in developing creativity skills in business students. While this makes perfect sense if we are limited to the business disciplines, we found ourselves in the unique position of *not* being so limited for this MBA. Indeed, we were *encouraged* to bring multiple perspectives to bear.

Originally, the Innovation Theme consisted of four distinct classes:

1. The Psychology of Innovation, which looks at decision-making from various disciplinary perspectives to understand how humans process information and generate creative ideas.
2. Enhancing Creativity, which examines theories of creativity for individuals and groups and allows students to practice creativity techniques.
3. Design for Business, which reviews the lifecycle of design, including how to define design goals, generate ideas, and assess those alternatives.
4. Exploring, Executing, Exploiting and Renewing Innovation, which integrates knowledge from the preceding three modules into the broader context of industry, organization and

competition.

Most relevant here are the first two classes: The Psychology of Innovation and Enhancing Creativity. Enhancing Creativity was based on a class that had been successfully taught at the graduate level a number of times by a member of the marketing faculty. Psychology of Innovation was based on a course that had been successfully taught at the graduate level by a faculty member from a discipline that spans Arts & Sciences and Business: Human Factors in Information Design.

The Teaching Team

These two faculty members quickly recognized the synergies that could be brought into play by combining these courses. Theories, practice, exercises and assignments in each course could build upon one another and lead to a more deep and rich experience for the students. We also recognized that if two perspectives were good, a third, and a purely Arts & Sciences one, would be even better. Thus, our third co-teacher, from the English and Media studies department, joined in the effort.

Each faculty member brought a unique perspective on creativity to the class, formed at least partially by their discipline. A brief summary of each can be found in Table 1. Another way to characterize our different perspectives is the way we think about the obstacles to creativity. In their Harvard Business Review article, Kelley and Kelley (2012) suggest that four fears hold people back from creativity: "fear of the messy unknown, fear of being judged, fear of the first step, and fear of losing control." In some ways, our diverse disciplinary backgrounds mapped the way the three of us blended in the class: The faculty member from Human Factors in Information Design tackled the first item, "fear of the messy unknown" through a reiterative design-thinking approach; the faculty member from Marketing tackled the second fear, "fear of being judged" by showcasing the benefits of playful improvisation and brain-storming activities, and the faculty member from English and Media Studies focused on the "fear of the first step" by introducing a variety of observational, reflective, and free-writing activities. All three of us attempted to address the fourth factor, the "fear of losing control," with various in-class exercises, and more importantly, with our own willingness to lose control of certain aspects of the class, something we discuss in greater detail below.

Our diverse disciplinary perspectives were also reflected in the three main books we showcased as examples from the dozens if not hundreds of books published on creativity. Students were asked to read excerpts from three different books: *Creativity: Flow and Psychology of*

Table 1: Perspectives on Creativity

Discipline	Perspective
English and Media Studies	Creativity is part and parcel of our human existence: whether found in fiction, film, performing arts, poetry, music, or visual arts, creativity is what defines us as human beings. It is especially important to foster creativity in the context of a business university where many students are focused on highly analytical skills. Cultivating creativity in business students enriches their abilities to observe, listen, empathize and reflect. As they become keen observers of the world around them, students learn to step back, understand multiple perspectives, and make better informed decisions—all skills necessary and important for successful business leaders.
Human Factors in Information Design	The human factors discipline considers human behaviors that underlie the creative process and the innovation that follows. In particular, making students self-aware of behaviors that naturally support creativity and, perhaps most importantly, those behaviors that offer obstacles or insurmountable barriers. These behaviors are considered at the level of the individual, group, organization and the larger cultural milieu.
Marketing	Creativity is a skill that can be taught and must be practiced, and today's educational system tends to bias against creativity. To be judged as creative, something must be new and useful. Creativity adds value to everyone's lives, but of particular interest is the value it adds to the creator's and the consumers' lives.

Discovery and Invention (by Mihaly Csikszentmihalyi) addresses the psychology of creativity and aligns closely with the psychology background of the faculty member who teaches in Human Factors and Information Design; the *Creativity in Business* (by Michael Ray and Rochelle Myers) captures the reflective, contemplative, and introspective approach that resonates most closely with the English and Media Studies faculty member, and the *Where Good Ideas Come From: The Natural History of Innovation* (by Steven Johnson) looks at creativity and innovation from an historical and business perspective, one that resonates closely with the improvisational, creative approach brought to bear by the faculty member in Marketing.

The Classroom Experience

What truly made the class unique and, we believe, contributed to the learning of the students, was the interdisciplinary team teaching. The main objective of structuring the course as we did was to show the students the value and richness that can result when multiple disciplines,

backgrounds and viewpoints come into play. Specifically, we wanted to enrich course materials and complicate discussions by bringing these different perspectives to bear on each other. That is, we realized that our varied perspectives would challenge students to push their boundaries more deeply than they would with only one faculty member and one disciplinary perspective represented. Another objective was to show students that in an atmosphere of trust and support, conflicting perspectives can lead to better, more creative outcomes. According to David Kelley, founder of the Hasso Plattner Institute of Design at Stanford—most often referred to simply as the d.school—"people learn best by collaborating with others who have radically different points of view, so classes should be made up of students and teachers from a variety of disciplines—the more the better." (Geer 2011)

In order to achieve the full integration of our multi-disciplinary perspectives, we decided to team teach each and every day, each and every hour this course met. Rather than alternating faculty members for designated time slots, or providing impromptu guest lectures (two common approaches to team teaching), the three of us spent four weeks, six hours per day, teaching this course together. The faculty members co-designed all the main assignments for the course. All three faculty members actively participated in the in-class activities, discussions and exercises. All three faculty members were responsible for providing feedback on each assignment (though one faculty member often took the lead for individual components). As a result, students had to consider business and art & sciences perspectives as they set out to complete each assignment, which may have slowed down their teamwork, but enriched the solutions they developed. Most importantly, we all consciously decided that disagreements between us were not to be feared, but rather embraced and used. We did not know where this approach would lead when we started; we think it led to a unique and rich learning environment for the students and for the faculty.

It is interesting to note that in our approach to teaching we needed to embrace the same fears, unknowns, and messiness that we asked students to embrace. All three of us were willing to encounter the "fear of losing control" (Kelley and Kelley 2012). The faculty member from Marketing illustrated his willingness to lose control with a variety of brief, interactive, in-class creativity exercises that called for volunteers to improvise, act, or perform in unexpected ways. He often volunteered to be the first participant in a given exercise, thus allowing laughter, learning, and insight to arise at precisely the moment he gave up all control.

The faculty member from English and Media Studies asked students to give up control during brief, timed, in-class writing exercises that asked participants to let go of the inner critic or censor by not allowing any editing, correcting, rereading, or crossing out of words during the timed exercise. She participated in this exercise along with students and her colleagues, and as an added safety valve, she reassured students that this spontaneous piece of writing would not be collected, graded, or shared, unless volunteers were willing to do so. Hence, students were willing to experience some loss of control and gain insights into how the process of letting go can foster creativity, leading to unexpected insights, surprising images, and new perspectives.

The faculty member in Human Factors stressed letting go of control when he assigned a "design sprint" early on in the course that forced students to engage with the many stages of problem solving and innovation in a very limited amount of time. During a two-hour studio slot, he asked students to conduct observations and interviews in the real world to identify problem spaces. The next day, students were asked to go through the reiterative process of reframing the problem; visualizing and sketching potential solutions; and moving toward prototyping. The speed and agility required in this first exercise asked students to let go of control and embrace the possibility of failure, a process that is also emphasized in the d.school philosophy. According to David Kelley, "Speed and quantity are encouraged in the hope that students will fail early and often" (Geer 2012).

As faculty members team-teaching for the first time in a new MBA program, we too, were challenged to let go of control—giving up our habitual ways of teaching, sharing classroom space and time, coordinating assignments, and using different pedagogical approaches in front of colleagues and students we were only then getting to know.

The classroom setting—a studio—and the intensity of the teaching schedule further enhanced the learning environment. The class met in a studio setting, with white boards all around the room, smart boards that could be dedicated to a lecture or separated out for smaller groups and discussions, large computer monitors scattered throughout the room for group work, room for informal group meetings, and a dedicated kitchen with booth seating. These diverse spaces allowed for spontaneous conversations in small or large groups, for dedicated team work, for illustrating, sketching, and prototyping, the iterative process emphasized by the d.school at Stanford and other schools who use design-thinking in their curriculum design.

This was an "Intensive" class that ran from 9:30-1:00 four days a week, for four weeks. In addition, after-class "studio-time," from 4:00-6:00, allowed students and faculty to collaborate in

more depth on student projects and tackle questions that arose but were left unanswered during class time.

We also used this time to explore activities that would have been difficult or impossible in a traditional classroom setting, but that we felt would contribute to student learning. For example, we conducted field trips to IDEO, a leading design firm; to Walden Pond, a place of history, nature, and transcendental writers; and to an Improv Comedy Show, a showcase for creativity on the fly. We also invited several guest speakers, including an artist who taught the students the basics of sketching and the owner of another design firm. We hosted a panel of four speakers that included an entrepreneur, a photographer, an actress and a musician; the selection of speakers illustrated the range creative activities that can be found across the spectrum of the creative arts and business. These activities further enriched the course and illustrated the value of the deeply integrated, multi-disciplinary perspective.

Results

There are two final projects for the class, one individual and one group. For the individual project, students are given almost perfect freedom to create something, as long as it met the class's definition of "creative" (in this case: new and purposeful). MBA students often produce the types of projects you might expect: business-based ideas that have the potential to make money (e.g., new apps, business plans and products). Students creating these ideas are justifiably proud of what they do. But we know we have succeeded only when students step out of their comfort zone and do something truly different. For example, in this class students introduced a stand-up comedy routine, a new culinary dish and fishing lures made out of discarded household items.

The group project was a "Design Challenge" in which groups were asked to address a significant social issue facing the world and tasked with exploring the creative solution space and building a case for one possible solution. Problems were picked to be "messy," that is, they had many different facets, including a global dimension, complex social and cultural issues, ethical and human rights concerns, and environmental considerations in addition to the business challenges posed by the problem. Students were given the choice of one of many potential problems. Groups picked four to focus on: Day Laborer Equity, Potable Water Shortages, Illegal Bird Trade and Infant Mortality.

As might be expected, groups immediately started brainstorming solutions. However, having three faculty members pushing them to step back and examine each problem from different perspectives forced them away from the easy, obvious and often shallow solutions they started with. For instance, while one of us pushed students to consider the nature of human behavior, both rational and the unexpected behaviors, another would raise questions about social justice, fairness and gender equity. In response, students gathered more information, from multiple sources, and developed new solutions and examined them from the perspectives of very different stakeholders before settling in on and developing one solution in depth. Students were encouraged not only to examine the positive implications of their proposed solutions but also negative unintended consequences. During weekly team de-briefings, students picked up on the cross-disciplinary perspectives the three of us brought to class. They would challenge each other to consider environmental, ethical, psychological, and market-driven perspectives as they honed in and refined their problem spaces.

This resulted in, for example, an SMS/text based social media platform that matched day laborers with potential employers, and allowed each party to rate the performance of the other, which diminishes the potential for exploitation. The students' solutions were not perfect, which would be an unreasonable expectation in a four-week class. But they were well thought out, well developed, and, most importantly, creative. Further, their solutions to the problems from this class formed the basis for their projects in the next class in the program, Design for Business, in which they further developed their ideas into viable business plans.

The class was not, of course, perfect. The students were over-worked, as each faculty member struggled to fit his or her favorite readings and assignments into the class. At times the students felt pulled in multiple directions, as they struggled to know what all three of us wanted. As one student explained in his reflections on the course:

> - I enjoyed that the method provided multiple perspectives simultaneously; this was very enriching and valuable. However with this comes a risk of information becoming de-integrated and lacking a natural flow (this did not happen too often with you three). For the most part, I think the more that the teachers speak beforehand and align, the better this will go. Obviously, practice makes perfect in this scenario.
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> - I would also suggest that "cross talk" (when 2+ teachers attempt to teach at the same time, i.e. alternating sentences/minutes) be kept to a minimum. Ideally, it would be great if one teacher did not interrupt another teacher's flow because this makes it difficult for

> the students to follow (and I'm sure it's not easy for the teachers either). Perhaps one teacher speaks for 30 minutes (without interruption) and then hands it off to another teacher.

However, overall the class was a success, from the student and the faculty perspective. Perhaps the thoughts of one of the students puts it best:

> In short, I am being taught and made more aware of how to rapidly switch my perspective and flex my brain to look at problems in different ways. It's a little like being presented a Rubik's Cube. I could learn how to do it the usual way, but that's nothing new. I could switch the stickers, but that won't add to my learning. Or I could find a way to re-purpose it as the interface for a new kind of combination lock. That's the value in participating in a team-taught course: both students and professors are constantly being asked to open and reconfigure their knowledge in new ways. Such forums allow content experts not only provide top-notch learning, but also to acknowledge the limits of their fields and to elicit differing opinions from their faculty peers or from students based on their industry and life experience.
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> As a result, the rules in the classroom shift frequently for both professor and also students. Learning and teaching styles constantly evolve to fit the needs of the moment. And while these moments are often fun and even funny, it's not always comfortable and it's certainly not easy. But good learning rarely is.

References available upon request