Introduction

Purpose and Design of This Book

We begin this book with an exercise in creative thinking. Ponder this: What do Bob Dylan and James Dyson have in common? To be fair, to answer this question, you must first be familiar with these two individuals. Most will easily recognize the name Bob Dylan, but in case not, he is an American singer, songwriter, artist, writer, and Nobel Prize winner. Dylan's recording career has spanned more than 50 years, during which time he has sold more than 100 million records. As for James Dyson, have you ever dried your hands in a public bathroom that had the Dyson Blade mounted on the wall? James Dyson is a British inventor, innovator, and entrepreneur.

So, what do a famous musician and an entrepreneur have in common? The answer is creativity. Both have been successful professionally because of their creativity, but more than that, both are ardent creativity advocates as well.

Dylan and Dyson recognize the power of a creative idea and encourage others to address significant issues in their lives through the deliberate application of creative thinking. Bob Dylan, for example, was recently named founding patron of the University of Auckland's Creative Thinking Research Fund and is the inaugural creative laureate of that university's Creative Thinking Project. This project promotes a deeper understanding of the creative process, to encourage wider participation in creative thinking and to promote creativity as being crucial to individual and community success, well-being, and development. As Jenny Dixon, chair of the Creative Thinking Project and deputy vice chancellor of the University of Auckland, stated,

Creative thinking drives success. Creativity is a proven force for cognitive development, academic achievement and social and economic innovation. Being creative strengthens neural pathways and generates connections. It opens up worlds of possibilities and change.²

James Dyson is quick to attribute his success as an entrepreneur and innovator to his prowess as a creative thinker. In fact, Dyson is a passionate spokesperson for the importance of organizational creativity and creativity in education. Indeed, he has put his money where his mouth is by establishing a foundation to support the next generation of innovative engineers. Dyson makes a close connection between creativity and the invention process, and in the following excerpt from a *Wall Street Journal* interview, it is easy to detect how important he believes creative thinking is for organizational success.

I think if you have a general atmosphere of creativity, of wanting people to come up with ideas and not rejecting them when they do—but trying them out and seeing how they work—and of generally employing engineers who are creative and scientists who are creative, and if you have the reputation of following good ideas through, however unusual and however strange they look, then I think you attract people who are creative and who want to do their best creatively. So I don't think there is any magic potion. I think it is simply having the right attitude internally—that you are there to create things.³

Creativity, and to be more specific creative thinking, has always been important. In fact, you could say creativity is a basic human need. In Franken's popular book on human motivation, he argues that humans are driven to create for at least three fundamental reasons:

- Need for novel, varied, and complex situations;
- Need to communicate ideas and values; and
- Need to solve problems.⁴

Given the pace of change in the 21st century, it could be argued—and we do so in this book—that creativity and creative thinking are necessary for success now more than ever. Indeed, the World Economic Forum recently published a report on workplace trends in which they forecast that in 2020 creativity will become the third most important job skill (complex problem solving will be number one). Bob Dylan's own words capture well life in our times: "There is nothing so stable as change." What Dylan's quote does not capture is the pace of change. For instance, the case has been made that a student pursuing a 4-year technical degree will discover that nearly 50% of the knowledge acquired in the first year of study will be out of date before graduation. In the early 21st century, creative thinking has become a survival skill.

In 2008, Harvard Business School, perhaps the preeminent business school program in the United States, celebrated its 100th birthday. Three Harvard Business School professors, Datar, Garvin, and Cullen, used this milestone to reflect on how current and future business education might better meet students' needs. Their book, *Rethinking the MBA: Business Education at a Crossroads*, highlights what they see as the unmet needs associated with business programs. Included in their list of unmet student needs is "acting creatively and innovatively," which they describe in the following way: "finding and framing problems; collecting, synthesizing, and distilling large volumes of ambiguous data; engaging in generative and lateral thinking; and constantly experimenting and learning." Perhaps influenced by this work, or in recognition of the innovation economy that defines modern-day life, the Association to Advance Collegiate Schools of Business (AACSB) updated its accreditation standards around the three themes of innovation, impact, and

engagement.⁸ To that end, as of 2013 the AACSB standards for general business programs at the master's degree level now include thinking creatively. And, we would strongly suggest, creativity and creative thinking are basic skills for undergraduate students to master as well.

Whereas the field of creativity studies has enjoyed more than 6 decades of research and practice, relatively few business programs, let alone colleges and universities, have incorporated the key insights and best practices from this field into their curricula. This book shares knowledge and practices drawn from the field of creativity so that business school students, as well as any program that prepares students to join or create their own organizations, might reignite and further develop their capacity to think creatively and to produce innovative outcomes. Indeed, a model of entrepreneurial competencies and cognitive skills reads like the classic description of a creative person: energetic, open to risks, unafraid of failure, and intuitive; demonstrating a need for achievement, an internal locus of control and the ability to work with change; capable of fluent idea generation; and ultimately, flexible and original thinking. What the field of creativity education and studies has shown us is that these attitudes and skills are highly teachable. The goal of this book is to expose the reader to knowledge and tools aimed at improving these and other creativity-related skills and traits.

The reader will quickly recognize that this book has adopted a tone that is not typical for most textbooks. Because of a creativity exercise the authors self-administered, one that placed us in the user's experience—the student reader—we decided to adopt a writing style designed to speak directly to the audience. Why? Ultimately, creativity is both an act of doing and being, not simply knowing or dreaming. We wanted to engage the reader in a manner that we hope will lead to personal transformation and growth. To that end, you will find the book uses an active voice and often speaks directly to you—the reader.

Besides writing in an engaging voice, we also included "thought starters" in the text to invite the reader to interact with the ideas presented in this book. Adults learn best and retain the most information when their minds are actively involved and provoked. You will get more out of this book if you use these thought starters. The thought starters are designed so that the reader can pause to interact with some of the main concepts in the book by generating reactions, thoughts, reflections, and connections. When you see a thought bubble, we encourage you to actively engage with that particular concept by capturing your thoughts in the margins of the book or elsewhere. Effective creative thinkers find it easy to make associations. Each thought bubble provides an opportunity to practice associative thinking, thereby allowing you to further develop your creative-thinking skills.

Recognizing that some learners learn best through visual stimuli, we include original sketches by the famous surrealist artist Salvador Dalí. We selected Dalí's work for several reasons. First, as a surrealist artist Dalí attempted to communicate abstract concepts, such as emotions and the cognitive processes associated with the unconscious, human characteristics and qualities that often go unnoticed and unobserved but have a profound impact on our lives. Like surrealist artists we

endeavor to help our readers become more aware of the emotions and cognitive processes that make up creativity. For many, a heretofore-unconscious experience once grasped can transform your life—positioning you to be an innovator or entrepreneur. Second, Dalí, like all successful creatives, deliberately engaged in the creative process. Whereas he is famous for his large canvasses, he had to play with many ideas before arriving at these final products. His sketches provide insight into his creative process, and show how he tinkered with ideas, played with alternatives, made unusual connections, and refined original ideas into workable solutions—aspects of the creative process that we all can master.

Finally, the structure of the book is unique as well. Datar and his colleagues from the Harvard Business School recommend that effective business programs, and we would suggest any educational or training program, should balance three components: knowing, doing, and being. Knowing, which is the focus of most programs, is concerned with transmitting facts, frameworks, and theories. Doing relates to practices that develop skills and capabilities. Being is concerned with ongoing personal development and integration that sustain beliefs, values, and attitudes in a way that allows one to model the way for others. This book uses these components in a fractal manner, in that these components repeat themselves. Specifically, the chapters are organized into these three categories, starting with what we "Know" about creativity (Part I). We then move to the "Doing" chapters that focus on practices associated with effective creative thinking (Part II). In the spirit of integration, we close with chapters in the "Being" section aimed at helping you to sustain your creative behavior. Additionally, each chapter is structured using the same framework. All begin with what we know about the topic addressed in that chapter. This material is followed by recommendations for activities you might do to develop skills relative to the chapter's topic. Finally, each chapter concludes by exploring ongoing actions aimed at sustaining the newfound skills and behaviors (i.e., being). All chapters end with a case study designed to provide a real-world example of concepts explored in that chapter.

We believe creativity is an essential life skill. Our goal is to provide the necessary background information (knowing), along with proven creative-thinking strategies (doing) that, when internalized (being), help the reader bring about creative breakthroughs that are valuable to an organization (either an existing organization or a start-up). Through developing and improving these creative-thinking skills, the reader will be prepared to serve as a creative leader, someone who successfully facilitates organizational creativity.

With this aim in mind, our book is intended to accomplish two primary objectives: (1) to guide readers on a journey through the creativity essentials (intellectual, cognitive, affective, and behavioral) needed to position themselves as creative assets in the organizations they serve—whether they be for-profit or not-for-profit or existing or start-up ventures—and (2) to support instructors in their efforts to prepare students for successful intrapreneurship and entrepreneurship in the age of innovation.

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Lesley Dowding, Coventry University

Susan Fant, University of Alabama

Michael Littman, SUNY Buffalo State

Patrick Lee Lucas, University of Kentucky

Enrique Mu, Carlow University

Patricia K. O'Connell, Lourdes University

Jim Olver, College of William and Mary

Tudor Rickards, University of Manchester

Introduction

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Rajesh Sharma, University Centre Croydon

April J. Spivack, Coastal Carolina University

Eric M. Stark, James Madison University

Paul D. Witman, California Lutheran University

Amy Zidulka, Royal Roads University

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