

Walking in Another's Shoes: Enhancing Experiential Learning Through Design Thinking

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Abstract

There exists an “innovation gap” where students are not prepared to meet the demands of an increasingly complex world. Skills such as creative confidence help close this gap and also foster innovation. To better prepare students, two concepts, design thinking and experiential learning, are integrated through the use of a modified writing exercise. This exercise is intended to be used following a learning experience such as hearing a guest speaker, touring a business, or engaging with professionals on a project as a means of fostering deeper learning and building skills needed to work creatively.

Keywords

experiential learning, design thinking, innovation, creativity, team-based learning

The changing nature of work and the long-term health of the economy depend on innovation (Friedman, 2013). However, students are leaving school without necessary innovation skills of critical thinking and problem solving. Instead of teaching our students to be critical and creative thinkers, we are asking them to memorize facts by focusing on test scores and assessment improvements (Wagner, 2008). This problem is exemplified by the fact that studies have shown that after two years of college, nearly half of the students are no more skillful than when they began, and one third showed no gains after four years (Arum & Roksa, 2011).

Business today is becoming less hierarchical and more collaborative. As we become more interconnected as a society, access to information and the ability to take on multiple roles and work with others is a way of life. In addition to developing different skill sets, education must create cultures of innovation that embrace collaboration and interdisciplinary approaches to solving problems (Wagner, 2012). In particular, developing

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creative confidence, which is defined as “trust in one’s own creative capability within an uncertain setting” (Jobst, Köppen, Lindberg, Moritz, Rhinow, & Meinel, 2012, p. 36) is a skill that is needed in order to further innovation (Kelley & Kelley, 2012).

Business schools too often emphasize convergent thinking through the use of analytical tools and frameworks that focus on a single goal or a single solution to complex organizational and economic problems without consideration of other stakeholders in the society. The use of prescribed methods in typical business curricula leads to uniform outcomes and does not develop the ability to think creatively among students (Baker & Baker, 2012).

This article addresses the integration of two concepts, design thinking and experiential learning, and includes an experiential exercise that may help professors develop creative thinking among students in order to address the problems mentioned above. Design thinking combines divergent and convergent iterative processes through which participants create choices and then make choices to develop novel solutions or products (IDEO, 2011). Our focus is based on being able to use the exercise in many different contexts and among different disciplines within an academic setting because “exposure to different viewpoints can improve problem solving and increase the likelihood of creative activity” (Baker & Baker, 2012, p. 712). After the completion of this exercise, students should be able to achieve the following learning outcomes:

- Increased awareness of creative problem solving by taking multiple perspectives
- Deeper understanding of contextual surroundings through application of design thinking principles
- Increased ability to collaborate by working with members of a team and appreciating the value of different opinions

Theoretical Foundation

Design Thinking

Design thinking was first conceptualized in the 1960s and over time has been described as a cognitive style, a general theory of design, and as an organizational resource (see Kimbell, 2011, for an in-depth review of the concept). We build on the view of design thinking as an organizational resource and define it as “a methodology that imbues the full spectrum of innovation activities with a human-centered design ethos” (Brown, 2009, p. 86). A designer’s approach to innovation is powered by a deep understanding of peoples’ wants and needs through observation (Brown, 2009). When applied to management education, design thinking could address many of the criticisms higher education faces today, specifically, its lack of relevance to practitioners, the values it imparts to students, and its teaching methods (Dunne & Martin, 2006).

Design thinking utilizes a deep understanding of problems through empathy, collaboration, and integration of knowledge. These qualities lead to a different skill set and a more creative way of solving problems, which are beneficial attributes to integrate into higher education. Empathy allows designers to “recognize that their seemingly inexplicable behaviors represent different strategies for coping with the confusing,

complex, and contradictory world in which they live” (Brown, 2009, p. 49). By fully seeing the world through the eyes of another person and feeling their emotions, the designer gains insight that can lead to innovation. Typically, designers of new products use this approach to determine product requirement specifications; the same process can be used by managers or design thinking practitioners to develop creative solutions to existing problems. Observation and empathy with the end user is only the first step of the design process. Collaboration with others allows one to “build on the ideas of others,” which often results in better ideas (Brown, 2009, p. 78). In addition to collaboration, design thinking involves being an integrative thinker. Integrative thinkers not only know how to widen the scope when approaching problems, but they actually exploit opposing ideas to construct new solutions (Martin, 2009). See Appendix A for additional sources and tools on design thinking in education and management.

Experiential Learning

Experiential learning is defined as “the process whereby knowledge is created through the transformation of experience. Knowledge results from the combination of grasping and transforming experience” (Kolb, 2015, p. 51). Emphasis is placed on the process of learning rather than on the outcomes. The model proposes that learning occurs through a four-stage cycle that begins with a concrete experience that leads to reflective observation about the experience. Abstract conceptualization follows in which models, paradigms, strategies, and metaphors are applied to the results of the experience. Active experimentation concludes the cycle as the concepts are then put into practice, thus generating new concrete experiences (Kolb, 2015). Experiential learning theory has been applied in several studies as a means of enhancing deeper learning, which is described as learning that fully integrated the four modes of the learning cycle (Kayes, 2002; Kolb & Kolb, 2005). Concepts of design thinking and the experiential learning cycle are combined in order to address the interrelations and contrasts between the two concepts and are represented pictorially in Appendix B.

Conducting the Exercise

We typically conduct the exercise in undergraduate classes ranging in size from 20 to 30 students. It can also be done with a team of students. In either scenario, it is important that the students have recently engaged in a shared learning experience, such as hearing a guest speaker, touring a business, or engaging with professionals on a project. Following such an experience, we distribute copies of the Personal Application Assignment (PAA) worksheet (Appendix B). The questions on the worksheet follow the questions in the learning cycle (Osland, Kolb, Rubin, & Turner, 2007) with additional questions that incorporate design thinking. We review the four sections of the PAA with the students as described below:

Concrete Experience

The first step of the PAA covers the Concrete Experience, where students provide factual knowledge of the event or topic that they have experienced, as well as their

own thoughts and feelings of others. An additional question ties in with the role of empathy in design thinking by asking students to describe the concrete experience as if they were “walking in another’s shoes.” This characteristic of design thinking in the context of real-life brings about a more human-centered approach and also raises questions that enhance student’s ability to think critically (Long, 2012). Students are able to establish an emotional connection, which results in deeper understanding of the context. Two processes, introspection (more common in experiential learning) and empathy (more typical in design thinking), work together at this stage to create deeper knowledge of a particular situation.

Reflective Observation

The second step of the PAA covers Reflective Observation, where students reflect on the experience and comment on their observations of others and themselves with regard to behaviors. A design thinking–related question adds an element of collaboration to this section by requiring that students speak to others regarding their reflections and discuss what stood out to them. This collaboration has the potential to offer a wider range of ideas, as evidenced previously with regard to design thinking, but collaboration also fosters a learning space where students welcome critical commentary and embrace others’ opinions (Welsh & Dehler, 2013). In a similar way, the collaboration allows students to understand multiple perspectives. We facilitate this process by allocating class time to group discussions, or in more recent iterations of the course, by creating online discussion groups in which students are required to participate.

Abstract Conceptualization

The third step of the PAA covers Abstract Conceptualization. At this stage of the learning cycle, students make connections from the experience to prior knowledge that is covered in class through readings or lectures. We add the concept of integration from design thinking in order to broaden the range of possibilities from which the learning can relate. Students are encouraged to think of concepts from other courses and apply them to the experience so that learning is holistic in nature and broad in scope. Specifically, we ask students to apply concepts and frameworks that are outside of their majors and business education; in other words, they should apply what they learned in biology, philosophy, political, or social science, or any other courses that they choose. This multidisciplinary perspective and thinking “outside the box” supports a more holistic approach to learning (Rauth, Köppen, Jobst, & Meinel, 2010).

Active Experimentation

The fourth step of the PAA covers Active Experimentation and completes the learning cycle. At this step, students describe what they learned about themselves and how they might use new information and insights in the future. Based on a design thinking approach, we add a question that asks students to comment on what new skills they are

able to demonstrate. As a result, integrative learners demonstrate skills that are tangible and implementable (Welsh & Dehler, 2013). The process orientation of design thinking (additional instruction, team work, better recognition, and constant reevaluation of the desired outcomes) leads to faster development of new skills.

After students are introduced to the various questions on the PAA worksheet, we ask that they take 10 minutes to note their individual responses. Then, groups are formed based on previously determined teams or by counting off to form groups of three to five students. We ask that each group engages in discussion, collectively review all the questions on the PAA, and share individual responses. Each group member takes notes on the group members' responses. One member of each group reports out their findings. Time permitting, each group is given three to five minutes to report.

Following the sharing out, the instructor debriefs the exercise by calling out similarities and differences based on the information discussed. Then the instructor assigns each individual to complete an individual reflective writing assignment based on their personal reflection and group responses during the exercise. The instructor also points out that the individual assignment should follow the outline of the PAA worksheet. The steps for running the exercise are presented in Appendix C.

Conclusion

The innovation gap in higher education must be addressed if we want our students to successfully compete in the increasingly globalized world. The integration of experiential learning and design thinking is an approach that can bridge the gap of what is expected of students in today's business world in terms of creativity and innovation and what they actually learn in business schools. In the study by Rauth et al. (2010), students were introduced to basic design thinking tools. Their study concluded that repetition in design thinking built creative confidence through progressive movement through steps, with the steps developing competencies in areas including empathy and emotional skills.

Our enhanced Personal Application Assignment shows that when you ask students to be more creative in their responses that they, in fact, are "more creative than the control group" (Baker & Baker, 2012, p. 712). Although the assignment is a simplification of the design thinking process, it involves the same embodied material practices through which "design becomes a set of routines that emerge in context" (Kimbell, 2011, p. 300). Exercises such as this serve to develop design thinking attitudes and skills, which are important in the processes of creativity in organizations.

Appendix A

Additional Resources for a Deeper Dive Into Design Thinking

Brown, T. (2008, June). Design thinking. *Harvard Business Review*, 86(6), 84.

IDEO. (2011). *Toolkit*. Retrieved from <http://www.designthinkingforeducators.com/toolkit/>

Martin, R. (2009). *The design of business*. Boston, MA: Harvard Business School Publishing.

Plattner, H. (2010). *Bootcamp bootleg*. Palo Alto, CA: Design School Stanford.

Appendix B

Personal Application Assignment Worksheet.

Personal Application Assignment (Incorporating Design Thinking)

Instructions: Meet with a small group (3 – 5 additional people) to answer the questions listed below. Time permitting, each group will verbally share what you have discussed. Then individually, complete a writing assignment that follows this outline, taking into account all perspectives.

1. Concrete Experience

- Objectively describe the experience (who, what, when, where, how)*
- Subjectively describe your feelings, perceptions, and thoughts that occurred during the experience. What did others seem to be feeling?*
- Describe the experience from another point of view from someone who is significant to the experience, as if you were “walking in their shoes.”**

2. Reflective Observation

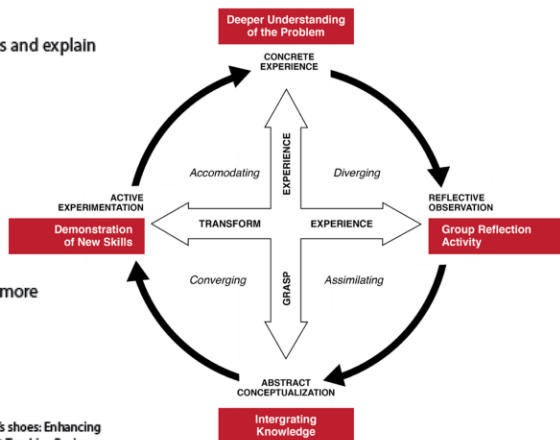
- Looking back at the experience, what were the perspectives of the key actors (including you)?*
- Why did the people involved (including you) behave as they did?*
- Speak with others who shared in the experience. What insights did they recall about the experience that you found unique or triggered additional personal insight?*

3. Abstract Conceptualization

- Relate concepts or theories from the readings or lectures to the experience and explain thoroughly how they apply to your experience.*
- Integrate concepts from other courses and explain how they apply to the experience.**

4. Active Experimentation

- What did you learn about yourself?*
- What new skills are you able to demonstrate?*
- What action steps will you take to be more effective in the future?*



*Osland, J. S., Kolb, D. A., Rubin, I. M., & Turner, M. E. (2007). *Organizational behavior: An experiential approach*. Pearson.

** Stock, K., Bucar, B., & Vokoun, J. (2017). Walking in another's shoes: Enhancing experiential learning through design thinking. *Management Teaching Review*.

Appendix C

Running the Exercise.

| Step | Description |
|--|--|
| Shared Experience (time varies) | Students participate in a field experience, tour, attend a lecture, or hear a guest speaker. |
| Explain PAA (10 minutes) | Instructor reviews questions included in each section of the Personal Application Assignment (PAA) and explains where elements of design thinking have been added to correspond with the learning cycle. |
| Individual Work (10 minutes) | Students draft initial responses to the PAA. |
| Form Groups (5 minutes) | Instructor divides the class into groups of three to five students, unless preestablished teams are in place. |
| Group Work (15-20 minutes) | Students meet in groups shortly after the experience to answer collectively the questions listed on the worksheet. |
| Group Work Sharing Out (3-5 minutes per group) | Groups report out a short summary of what they discussed, time permitting. |
| <i>Total In-Class Time (38-50 minutes)</i> | |
| Individual Work (45-60 minutes) | Students complete an individual writing assignment outside of class based on personal reflection and group responses to the experience, following the outline of the PAA worksheet. |

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Supplemental Material

Appendix B is also available as supplemental material at <http://journals.sagepub.com/doi/suppl/10.1177/2379298117736283>.

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