Entrepreneurial Exercises

# Chapter 2

Source: Neck, Greene, & Brush. 2014. Teaching Entrepreneurship: A Practice-Based Approach. Northampton, MA: Elgar, pp. 105-109

**Exercise: Puzzles and Quilts**

**Authors: Heidi Neck and Patricia Greene**

**Description**

This exercise is an interactive challenge designed to help raise student awareness of the difference between predictive and creative thinking. It also is a strong illustration of how to gain a better understanding of the impact of increasing degrees of uncertainty on the entrepreneurial process. Given the unprecedented level of uncertainty in business and entrepreneurship, students must learn how to navigate effectively in an increasingly uncertain world.

The exercise consists of students starting in one room with the task of completing a jigsaw puzzle. Students are systematically moved to another room, where they are asked to create a quilt from a selection of fabric pieces. The debrief explores jigsaw puzzles as predictive, managerial thinking and quilt making as entrepreneurial, creative thinking. There is an optional debrief that includes leadership.

**Usage Suggestions**

Ideally the exercise should be done on day one of a general entrepreneurship course as a way to set up how entrepreneurs think and the difference between entrepreneurial and managerial thinking. This exercise is ideal to illustrate the differences between the prediction and creation approaches illustrated in Chapter 2.

**Learning Objectives**

Experience the difference between prediction and creation.

Engage with conditions of uncertainty and ambiguity.

Illustrate how entrepreneurs think.

**Materials List**

Jigsaw puzzles (one per group, 300 pieces).

Fabric remnants (approximately six pieces per person).

Two rooms (one with tables equal to number of groups and one empty).

**Pre-Work Required by Students**

None.

**Theoretical Foundations**

Neck, H. M. 2011. Cognitive ambidexterity: The underlying mental model of the entrepreneurial leader. In D. Greenberg, K. McKone-Sweet, and H. J. Wilson (eds. ), *The New Entrepreneurial Leader: Developing Leaders Who Will Shape Social and Economic Opportunities* (pp. <ts>24–42). San Francisco: Berrett-Koehler.

Sarasvathy, S. 2008. *Effectuation: Elements of Entrepreneurial Expertise*. Cheltenham, UK and Northampton, MA, USA: Edward Elgar Publishing.

Schlesinger, L. , and Kieffer, C. 2012. *Just Start*. Cambridge, MA: Harvard Business School Press.

**Time Plan (60–80 Minutes)**

The exercise begins in a room with tables for each team. Students are asked to clear their table in preparation. The second room required is a large empty space. A table (fairly long) is placed in front of this room or space, and fabric pieces are piled on the table. The piles should be messy, with all the fabrics mixed up (not sorted by size, color, or any other dimension).

**Puzzle time** 0:00–0:05 (5 minutes)

Divide students into groups of five to seven and give them the following directions: “Your task is quite easy but you don’t have a lot of time. Your goal is to put together the puzzle that is sitting on the table as fast as you possibly can. It’s only 300 pieces! You can do it. Get started. You are being timed. Don’t worry; there are no cameras in the room!”

**Random pull-out to quilting room** 0:05–0:30 (25 minutes)

Pull students at random from the puzzle room, one at a time, asking for one volunteer from each group. The individual volunteered or selected from each group is taken to the empty room with the table of fabric.

At the fabric table the first group is told: “Your new task is quite easy but you don’t have a lot of time. You are now designated quilt leaders. Your goal is to construct a design for a quilt. Choose six pieces of fabric from the table – no more and no less. Select an area in the room and begin to construct a quilt. You may not come back to the table for more or different fabric. No sewing is required. Simply place your fabric on the ground as if you were going to sew patches of fabric together to create the quilt. The goal is to build the best quilt you possibly can. Others will join you a bit later. Have fun!”

*Note:* Each quilt leader should choose six pieces of fabric, and each will begin his or her own quilt in different areas of the room.

Subsequent “volunteers” are taken out of the puzzle rooms at two- to three-minute intervals and instructed to take six pieces of fabric and join any quilt in progress that interests them. “Your new task is quite easy but you don’t have a lot of time. Join one of the groups in the room. You do *not* have to stay with the team members from your puzzle group. Your goal is to construct a design for a quilt. Choose six pieces of fabric from the table – no more and no less. Next, join a group to help them build the best quilt you can. You may not exchange fabric once you choose. No sewing is required. Simply place your fabric on the ground as if you were going to sew patches of fabric together to create the quilt. Have fun!”

When all individuals are out of the puzzle room and in the quilt room, allow two more minutes to complete the quilts.

**Debrief**  0:30–1:00 (30 minutes)

The debrief may take place inside the quilt room or back in the classroom depending on group size. If debriefing inside the quilt room, have each quilt leader describe how the design of the quilt emerged. If debriefing outside the quilt room, give students time to walk through the quilt room to study all of the quilt designs before leaving the room.

Begin with questions:

How many preferred the puzzle? Why?

How many preferred the quilt? Why?

**Focus on quilts:**

Ask the leaders about how the design came to be.

Ask team members why they joined one team versus another.

How did it feel moving from puzzle to quilts?

What type of thinking was required for each part of the exercise?

*Summary* At this time, it’s important to introduce the concepts of puzzle as managerial thinking and quilts as entrepreneurial thinking.

**Puzzle as managerial thinking:**

The goal is well defined (the puzzle picture is typically on the outside of the box).

Determine resources to achieve the goal (puzzle pieces).

Create a plan (put pieces in piles by color, and start with the edges).

Execute the plan (edges first).

Measure progress along the way.

Goal achieved – the puzzle looks just like the picture on the front of the box! Well done!

**Quilt as entrepreneurial thinking:**

Entrepreneurs start with what they have rather than what they need (fabric pieces).

When entrepreneurs are not sure what to do their only choice is to act (pick a group and get to work).

The design of the quilt emerges over time because it’s difficult to plan (the quilt keeps changing every time a new person enters the group and the environment changes).

You never really know when it’s quite finished.

Creating something new requires iteration rather than linear problem solving.

**Optional leadership debrief** 1:00–1:20 (20 minutes)

What is leadership? (Ask them to write down their definition. )

How did you “see” leadership around you? (Call on several different quilt groups. )

How did you “see” followership?

Who were the assigned leaders?

Did the rest of you know there were assigned leaders?

Pick an assigned leader and ask that person to describe his or her experience.

When and how do you decide whether to lead or follow?

What is the difference between leadership, management, and entrepreneurship?

What is entrepreneurial leadership?

**Key Takeaways**

Under conditions of extreme uncertainty the only choice is action.

One form of thinking (entrepreneurial or managerial) is not necessarily better than the other, yet it is important to understand the environmental context. If the skills for completing a jigsaw puzzle (managerial thinking) are used to solve a complicated problem in an uncertain environment, students are likely to run into one roadblock after another. However, if students can get more comfortable with quilt making (entrepreneurial thinking), then they may be able to navigate the terrain of entrepreneurship with greater aptitude.

Action trumps planning in uncertain environments.

**Teaching Tips**

It is preferable *not* to refer to the exercise as the “quilt exercise” prior to conducting the exercise, as it rather gives away the punch line. Pacing is very important. As soon as the quilt leaders have placed their fabric on the ground, volunteers should be pulled out of the puzzle room approximately every three minutes. Fast pace is much better than a slow pace.

**Attribution**

The exercise is adapted from Saras Sarasvathy’s crazy quilt principle within her work on effectual entrepreneurship.