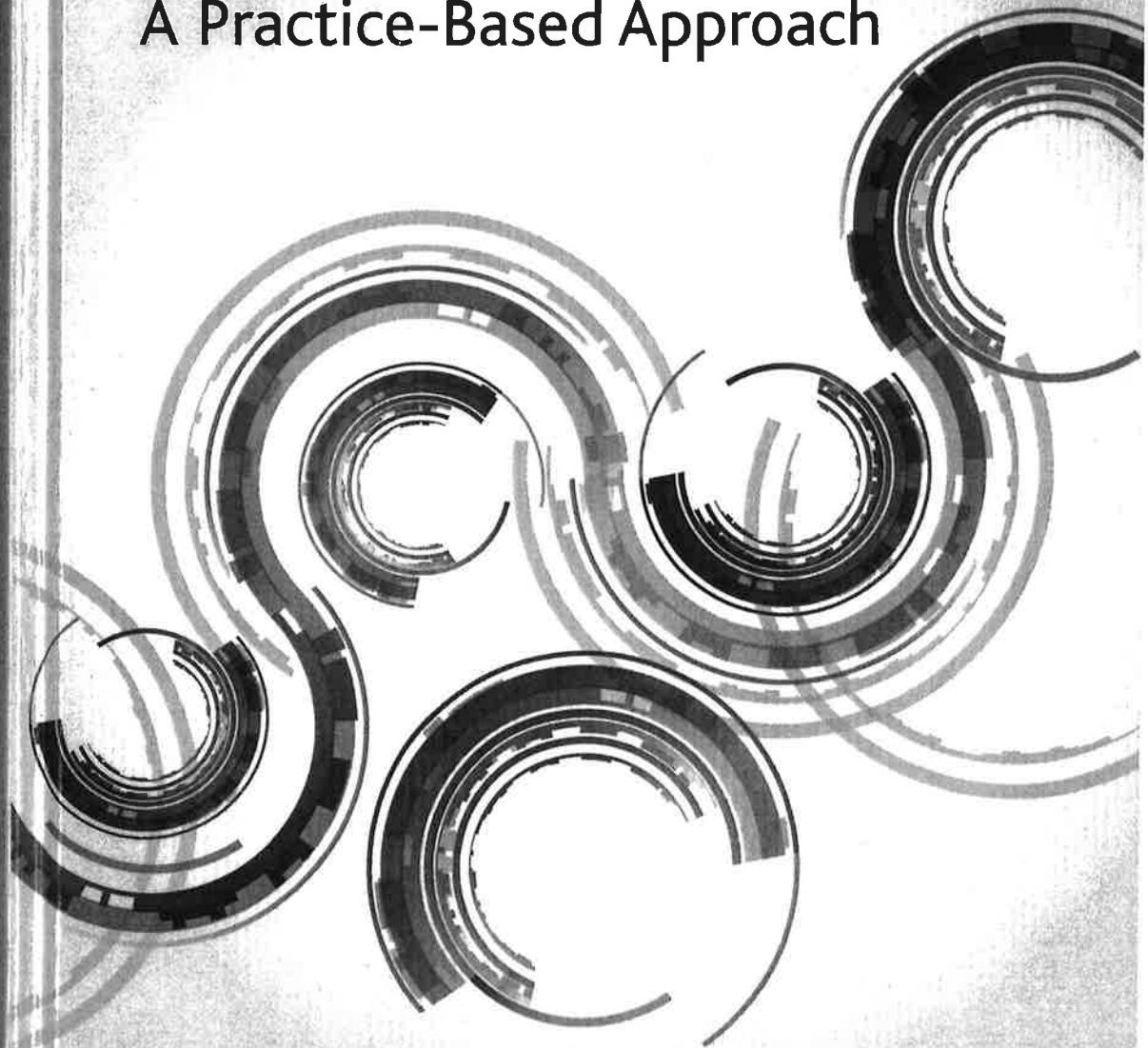




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# TEACHING ENTREPRENEURSHIP

A Practice-Based Approach



## 8. Exercises to practice empathy

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### EXERCISE: THE POWER OF OBSERVATION

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#### Description

This exercise is a powerful mechanism to have students experience the challenges and benefits of direct observation. The exercise includes two types of observations: observing an inanimate object, and observing several people conducting a specific task. Both exercises are best assigned as individual homework assignments, and are subsequently discussed in class. The handout at the end of this exercise provides detailed instructions for the students, and the time plan section provides some discussion questions for the instructor.

For the first exercise, the students are asked to reserve an hour of their time and spend this hour observing a known inanimate object, for example a fruit. The students are asked to write down two types of observations during the exercise. One type of observation the students are asked to record is about the observed object itself. The second type of observation the students should note is about themselves in the observation process.

The second exercise also requires students to individually observe a known entity, but this time it is a process executed by someone else. A good example setting is an ATM machine. Students will be asked to observe a couple of ATM customers while they arrive at the ATM, operate it, and leave. Once the students have observed several ATM users, they typically notice something that they cannot immediately explain. At this point, the students are asked to approach a subject after he or she has used the ATM and try to find out the underlying explanation of the observed but unexplained behavior through interviewing.

There is a long-standing tradition in social science fields such as anthropology of employing observation as a data-gathering technique. As background literature for the instructor we recommend classics in this field such as the works of Donald Schön (1982) and Michael Agar ([1980] 1996). More recently, the growing interest in teaching and learning

about innovation has renewed the importance of developing a deep understanding of the needs and wants of users and stakeholders (Beckman and Barry, 2007). In this context, the methods from design, sometimes packaged under the headline of *design thinking*, have proven particularly helpful. Example settings from higher education are design-related courses (Fixson, 2009; Fixson and Rao, 2011; Fixson and Read, 2012). Recent research demonstrates the power of deep user needs understanding even when novices apply these methods such as direct observation for the first time (Seidel and Fixson, 2013).

### Usage Suggestions

The exercise fits in all creative and entrepreneurial courses in which direct observation (of users, customers, clients, etc.) is of value, for example courses on product development, problem solving, or opportunity development. The exercise should be conducted early in the course to prepare students for the challenging task of primary data collection. The exercise itself consists of two parts: individual student work (best assigned as pre-class homework) and in-class discussion.

### Learning Objectives

- Recognize the power (and challenges) of direct observation.
- Assess how the self is involved while observing other humans and objects.
- Experience one's own emotions and their effect on the observation outcome.

### Materials List

See "Handout: Observation Exercise Instruction" at the end of this exercise.

### Pre-Work Required by Students

The actual exercise is the pre-work. It will require at least 2 hours' time from each student. In addition, the instructor should reserve some time in a class session preceding this exercise to discuss the basics of ethical behavior when conducting research with human subjects. Particularly for the second part of the exercise, which involves observing other human beings, it is helpful for the students to have a frame of reference and some rules for ethical behavior in conducting observational research.

### Theoretical Foundations

- Agar, M.H. [1980] 1996. *The Professional Stranger: An Informal Introduction to Ethnography*, 2nd edn. San Diego: Academic Press.
- Beckman, S., and Barry, M. 2007. Innovation as a learning process: Embedded design thinking. *California Management Review*, 50(1), 25–56.
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- Fixson, S.K., and Rao, J. 2011. Creation logic in innovation: From action learning to expertise. In D. Greenberg, K. McKone-Sweet, and H.J. Wilson (eds.), *The New Entrepreneurial Leader: Developing Leaders Who Shape Social and Economic Opportunity* (pp. 43–61). San Francisco: Berrett-Koehler.
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- Mayfield, M. 2007. *Thinking for Yourself: Developing Critical Thinking Skills through Reading and Writing*, 7th edn. Boston, MA: Wadsworth Publishing Company.
- Schön, D.A. 1982. *The Reflective Practitioner*. New York: Basic Books.
- Seidel, V.P., and Fixson, S.K. 2013. Adopting "design thinking" in novice multidisciplinary teams: The application and limits of design methods and reflexive practices. *Journal of Product Innovation Management*, 30(supplement), 19–33.

### Time Plan (2 hours outside of class, 30–60 minutes inside class)

#### In class

Introduction to ethics in human subject research 0:00–0:15 (15 minutes)

#### Outside of class (homework)

Each student can schedule this time independently.

Exercise 1

0:00–1:00 (60 minutes)

Exercise 2

0:00–1:00 (60 minutes)

#### In class

Discussion

0:00–0:30 (30 minutes)

The following debrief questions are suggested for exercise 1:

- What details did you observe at your everyday object (fruit, vegetable) that you had never noticed before? Why do you think you noticed them this time? What does this experience tell you about how to find new insights?
- How did you feel during the observation period? How do you think

- your emotions affected your observation outcome? How would you describe the link between the two?
- How could you improve the observation process? What would that do?

The following debrief questions are suggested for exercise 2:

- What details did you notice watching someone else perform a process (e.g. using an ATM) that you have performed many times yourself? How do you think your own experience colored your observation? How can you work against these biases?
- How did your observation subject react when you approached him or her with additional questions? How did that make you feel?
- How could you improve this process? What would that do?

In-class debriefing can take anywhere between 30 and 60 minutes, depending on the class size.

### Post-Work

None directly. However, you may want to consider assigning a reflection write-up.

### Key Takeaways

- Recognize the power (and challenges) of direct observation.
  - Careful observation sometimes allows the revealing of insights and understanding that subjects could not even articulate.
  - Careful observation requires paying close attention over time, and thus can feel exhausting.
- Assess how the self is involved while observing other humans and objects.
  - One of the consequences is that different people will see different things while observing the same object or process. This provides advantages for teamwork (e.g. diversity of input) and challenges (e.g. agreeing on an interpretation of the observation data).
- Experience one's own emotions and their effect on the observation outcome.
  - Going through this exercise provides a sense of accomplishment for many students. Witnessing the power of one's own emotion also helps to increase the mindfulness.

### Teaching Tips

Both exercises are quite challenging for most students. Consequently, how they experienced, dealt with, and overcame this challenge becomes most often the core of the debriefing discussion, in addition to the actual (often very diverse) observation results. These emotional experiences and how the students reacted to them represent a good vehicle to discuss the power, and limitations, of observations as a data-gathering technique, as well as how to interpret the results. The instructor should provide sufficient time for students to share, and compare, their experiences.

Both exercises are great lead-ins to present tips and advice for data gathering via observation or interviews. Many of the experiences can be used to introduce more structured frameworks to record observations such as AEIOU (actions, environment, interactions, objects, users) or to conduct interviews (interview etiquette, subject selection, preparation of interview guides, including probing prompts and scenario questions, data-recording methods, data analysis techniques, etc.).

### Attribution

The first exercise, the observation of a fruit or vegetable, was published by Marlys Mayfield (2007) in her book *Thinking for Yourself*. The second exercise, the observation of ATM users, has been developed by Sara Beckman of UC Berkeley, and Michael Barry of the d.school at Stanford.

### Handout: Observation Exercise Instruction

The two exercises described below are meant to be conducted individually, that is, by each student alone. Each exercise requires one hour of uninterrupted time. Please schedule accordingly.

#### 1. Observation of a familiar inanimate object (Mayfield, 2007)

- Before you begin: This will be a difficult assignment for some of you. The exercise aims to provide you an initiation experience to the process of observation. If you commit to the task as laid out in the instructions, it can provide some surprising rewards. But it may test your ability to "hang in there" despite cycles of discomfort. The only necessary prerequisite is a willingness to stretch your limits by spending at least one hour in the process of observing and recording. So start by setting up a place (and time) when you will not be distracted or interrupted.

- Prepare note-taking sheets as follows: Separate the space on your sheets into two halves by drawing a vertical line down the center to create two columns, using the following headlines:
  - Physical details: Use this column to note what you observe and discover about the object.
  - Inner process details: Use this column to note what you observe and discover is happening with you as you work: your moods, reactions, associations, and thoughts.
- Select as your object a vegetable or fruit. Choose one that you have seen and handled many times before. Whatever you can find in your neighborhood grocery store or your refrigerator will do. Your selection will be your specimen for this observation study.
- Set up your workplace for the observation. You may want to have a knife and cutting board handy, as well as some drawing paper for sketching.
- Begin by really taking your time to explore this object. Let yourself become absorbed in the task like either a curious child or a dedicated scientist. As your mind slows down, your sensations will tell you more, and you will make more and more discoveries.
  - Remember to notice not only parts but also wholes, not only see, but also touch, hear, smell, and taste.
  - Whenever you become aware of a characteristic that you can articulate, write that down in the left column under "Physical details."
- Use the right column for noting your personal reactions as you work.
  - At what points did you become bored? Excited? Angry? Impatient? Lost in daydreams? Acknowledge these distractions by writing them down as you bring your attention back to the task of observing your object.
  - See how many times you need to renew your commitment to keep observing. Note all the stages of interest and concentration that you pass through: the plateaus, valleys, and peaks.
  - When you know for certain that you have finished, assemble your notes and prepare to write up a complete description of your fruit or vegetable. Your final description may take one of two forms:
    - a report that describes the object completely, with the addition of a final paragraph describing your own inner personal process;
    - a narrative – or story of your observing process – that describes your object, the stages you went through, and the progression of your discoveries, insights, and reactions.

- Type up your final draft as a double-spaced paper. Suggested length is at least two pages. Bring this to class to share and then turn in. If you created additional sketches, bring those to class too.
- 2. Observation of a human being conducting a specific task (Beckman and Barry, 2007)**
- Spend one hour doing the following observation and interview exercise; include about 30 minutes of observation and about 30 minutes capturing the results.
    - Find a local ATM machine.
      - Start by observing what's happening as customers approach and use the machine.
      - As you observe, look for interesting behaviors that you don't entirely understand. Use the skills you learned in the fruit or vegetable observation exercise. You may find yourself moving through the same cycles of interest in what you are seeing.
        - Once you've seen an interesting behavior, formulate a question around your observation – a question to which you don't know the answer. The question in your mind could take the form of a hypothesis you create to explain that behavior. (Be careful not to assume that the people you are watching are thinking the way that you do about ATM transactions!)
    - Approach a user of the ATM and ask your question – learn what you can to help you better understand your observation or resolve your curiosity as to why you observed the behaviors you did. In short, test your hypothesis.
      - *Note:* Make sure that you do not misrepresent your intentions. Once you have completed your 30-minute observation, write a short (one-page) summary of both what you learned about ATM use and what you learned about observation and interviewing.
    - Bring your work to class with you to share and then turn in.