How to Learn Costs of Transaction through Experience

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Abstract

Learning costs of transaction is complex for first-year students of the course Introduction to Business Economics, since they are theoretical concepts that in most cases are raised from an abstract perspective. These costs are more evident in a business context, which is still far away from the perspective of students.

Our objective is that our students can learn in a practical way, so that they do not only read and memorize the theory of costs of transaction, but we want them to experience those costs through artificially created situations in which they play different roles. Once they have experienced them, they can identify those costs theoretically and finally, understand them.

To achieve this objective, the following teaching experiment was designed. First, each student is given a card and is converted into a collector (art, cars, vinyl records, etc.). The card contains all the information about the object they collect (object they have, object they want, how much money they are willing to pay and how much money they are willing to receive, additional information on payment method, requirements, etc.). Once they have read the card, they have to find in the classroom another agent/student willing to make a transaction with them. They are advised that the transaction must be as detailed as possible in terms of payment methods, quantities, resolution of possible post-sale problems, etc. Finally, they present the transactions they have performed and their terms. When all (most of) the students have achieved the transactions, they detail the problems or inconveniences they have encountered and together with the teacher they are classified as costs of transactions. Thus, students analyse the problems they have had to get a transaction and they generate a large number of examples that facilitate its understanding.

This teaching experiment, in addition to increasing the communicative and negotiation skills and the proactivity of students in their learning, demonstrates that it has served to facilitate the explanation (by the teacher) and the understanding (by the student) of a classically theoretical and abstract concept.

Keywords: Experiment, cost of transaction, business economics,

1. Introduction

"The teaching experiment builds a reflection of what an experiment is for a researcher" [1]. Although the concept of experiment is obviously more related to experimental sciences, the fact is that more and more, experiments are used to teach social sciences, for example, game theory [2]. This teaching experiment is also embedded in social sciences, as it has been carried out in the course "Introduction to Business Economics" of the Economics Degree and Labor Relations Degree in the University of Cantabria. This course is the first contact of the students with the firm, which affects the objectives of the course. There are two general skills: 1) capacity for organization, planning and management of information and 2) teamwork in the current context and capacity of adaptation and decision-making. This teaching experiment is included in the first lesson of the course, called "Economic nature of the firm". The objectives of this first lesson are disclosed to the students as follows:

- You will learn the different forms of organizing economic activity: the market and the firm
- You will learn that costs of transaction are the key to assess whether the economic activity is organized in the market or in the firm
- Which is the origin of the costs of transaction?
- Which is the purpose of the firm? You will learn that there are different approaches to the firm, learning something new depending on the approach.
- Can the company grow indefinitely?

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One of the core concepts in this lesson are costs of transaction. We have noticed that learning costs of transaction is complex for first-year students, since they are theoretical concepts that in most cases are raised from an abstract perspective. These costs are more evident in a business context, which is still far away from the perspective of students.

Our objective is that our students can learn in a practical way, so that they do not only read and memorize the theory of costs of transaction, but we want them to experience those costs through artificially created situations in which they play different roles.

2. Teaching experiment applied to the understanding of costs of transaction

In this section, the theoretical contents related to costs of transaction are summarized very briefly. The steps of the teaching experiment carried out in the classroom are later explained later.

2.1 Overview of costs of transaction

Costs of transaction can be divided into three categories: search and information costs, bargaining costs, and policing and enforcement costs [3].

- Search and information costs are related to the fact of finding other agent who is interested in what you have (is the good available on the market? Which agent has the best quality? What about the lower price? Where can I find the item I want?).
- Bargaining costs or negotiating costs are the costs required to reach an agreement with the other agent (can I negotiate the price? What about the payment method? May I have any discount? What about the transportation?).
- Finally, policing and enforcement costs are those costs of making sure that the other agent sticks to the terms of the contracts (what happens if there is a problem with the item? Who is in charge of the cost of maintenance?), taking appropriate action it this turns out not to be the case.

2.2 Teaching experiment step by step

There are mainly three steps in this teaching experiment. First, the students become collectors and they receive a card with the information about the object they collect. Second, they have to find in the classroom another agent/student willing to make a transaction with them. Third, they present the transactions they have performed and their terms. Finally, the teacher and the students identify the costs of transaction.

Students become collectors

Students are not students anymore. In our teaching experiment, they become collectors and they can collect art, antique cars, football cards, books, vinyl and superheroes. Individually, they are given a card which contains all the information about the object they have or the object they want (price they are willing to pay, price they are willing to receive, payment methods, information about the preservation of the object, additional information...). Once they have read the card, they are advised to complete a transaction, as detailed as possible, with other agent/student.

Students try to complete a transaction

Students have 15-20 minutes (depending on the number of students) to complete a transaction with other agent/student. When they complete a transaction, they have to explain it to the teacher: items they have exchanged, price, payment method, transportation, how they solve any problem, etc. Our experience is that most of students are not specific about the transactions, so that the teacher always has to ask them questions to get information, forcing them to think more about the transactions and its implications.

Identification of costs of transaction

When all (or at least, most of) students have explained their completed transactions, the teacher asks which are the problems or inconveniences they have faced during the experiment. Now it is the time to identify costs of transaction.

Table 1 represents a conversation between the teacher and the student to identify costs of transaction out of the problems they have had in the experiment. Through dialectic, the teacher enhances the students to go beyond the experiment and identify more examples related to costs of transaction.



Table 1. Extracts of the conversation to identify costs of transaction. Source: Authors

Teacher	Student	Cost of transaction
"Which is the first problem you have had?"	"It was hard to find anyone collecting what I collect" "I couldn't find anyone collecting what I collected"	Search and information costs
"Then, which is the second problem you have had?"	"She wanted to pay less" "I wanted a transfer and he wanted cash" "I required a certificate of authenticity and she didn't have it" "The superhero was not in the original package, se he wanted a discount"	Bargaining costs
"Have you had more problems?"	"I asked him what happened if the vinyl was scratched but he didn't say anything"	Policing and enforcement costs

3. Conclusions

Learning by discovery occurs "when the student perceives that the theories that he or she discovers when carrying out the study are better that the previous concepts" [4]. This teaching experiment, in addition to increasing the communicative and negotiation skills and the proactivity of students in their learning, demonstrates that it has served to facilitate the explanation (by the teacher) and the understanding (by the student) of a classically theoretical and abstract concept.

References

- [1] Ariza de la Hoz, G.E. "Metodologías utilizadas para el desarrollo de la habilidad experimental mediante prácticas de laboratorio en el programa de ingeniería electrónica de la universidad autónoma del caribe", *Prospect* 8(1), 2010, 29-34.
- [2] Matus, M. and Rodríguez, P. "Pensamiento económico y valores: un experimento docente de teoría de juegos". Revista de Investigación en Educación 10(2), 2012, 119-128.
- [3] Dahlman, C.J. "The Problem of Externality", The Journal of Law and Economics 22(1), 1979, 141-162
- [4] Rebeilo Matín, J.D. "Método de enseñanza aprendizaje para la enseñanza por descubrimiento", Aula Abierta 71, 1998, 123-147.