
**TEACHING ORGANIZATIONAL STRUCTURE THROUGH
THE CASE METHOD**

*LA ENSEÑANZA DE LA ESTRUCTURA ORGANIZATIVA A
TRAVÉS DEL MÉTODO DEL CASO*

Raquel Gómez López*

<https://orcid.org/0000-0002-2423-9011> (ORCID iD)

Universidad de Cantabria, España

2022

Vol.5 Num. 3

297-318

María D. Odriozola

<https://orcid.org/0000-0002-6399-6779> (ORCID iD)

Universidad de Cantabria, España

Ignacio Llorente

<https://orcid.org/0000-0001-9426-0601> (ORCID iD)

Universidad de Cantabria, España

Elisa Baraibar-Diez

<https://orcid.org/0000-0003-4677-3255> (ORCID iD)

Universidad de Cantabria, España

Language: English

Received: 16 June 2022 / Accepted: 12 August 2022

ABSTRACT

Teaching at university level has evolved in recent years towards teaching methodologies in which the student has an increasingly active role in their learning, being the protagonist together with the teaching staff. The use of techniques in which students put into practice and reflect on the theoretical contents has benefits both for the acquisition of knowledge and for the development of competences. In the field of business administration, business

Gómez López, R.; Odriozola, M.D.; Llorente, I. & Baraibar-Diez, E. (2022). Teaching organizational structure through the case method. *Journal of Management and Business Education*, 5(3), 297-318 <https://doi.org/10.35564/jmbe.2022.0018>

*Corresponding author: gomezlr@unican.es

<http://www.nitoku.com/@journal.mbe/issues> ISSN: 2605-1044

Published by Academia Europea de Dirección y Economía de la Empresa. This is an open access article under the CC BY-NC license.

reality is a continuous source of information for putting this type of methodology into practice. Therefore, the objective of this paper is to achieve, through the case method, that the students of the subject "Organizational Structure and Behavior" of the degree in Business Administration and Management assimilate, understand and put into practice the concepts acquired in the theoretical classes, favoring autonomous learning, cooperative learning, dialogue and peer learning. Specifically, lectures have been replaced by a set of individual and group activities around a business case study designed by the teaching staff. The use of the case method has been adequate to achieve the objectives set at the beginning of the activity. Students have expressed a high satisfaction with the learning process, a higher perceived quality of learning, and increase of digital competences and an improvement of the evaluation processes. In addition, this methodology has increased their interest in the subject and its contents and has improved their autonomy in the learning process.

KEYWORDS

Case method, active learning, organizational structure and behavior, business administration

RESUMEN

La docencia en el ámbito universitario ha evolucionado en los últimos años hacia metodologías de enseñanza en las que el estudiante tiene un rol cada vez más activo en su aprendizaje y es protagonista del mismo junto con el profesorado. El uso de técnicas en las que los estudiantes ponen en práctica y reflexionan sobre los contenidos teóricos tiene beneficios tanto para la adquisición de conocimientos, como para el desarrollo de competencias. En el ámbito de la administración de empresas, la realidad empresarial es una fuente continua de información para poner en práctica este tipo de metodologías. Por ello, el objetivo del presente trabajo es conseguir, a través de la metodología del caso, que el alumnado de la asignatura de "Estructura y Comportamiento Organizativo" del grado en Administración y Dirección de Empresas asimile, comprenda y ponga en práctica los conceptos adquiridos en las clases teóricas, favoreciendo el aprendizaje autónomo, el trabajo cooperativo, el diálogo y el aprendizaje entre iguales. En concreto, se han sustituido las lecciones magistrales por un conjunto de actividades individuales y grupales en torno a un caso de estudio empresarial diseñado por el profesorado. La metodología del caso ha resultado adecuada para alcanzar los objetivos planteados al inicio de la actividad. Los estudiantes han expresado una alta satisfacción con el proceso de aprendizaje, una mayor calidad del aprendizaje percibida, un incremento de las competencias digitales y una mejora de los procesos de evaluación. Además, esta metodología ha aumentado su interés por la asignatura y sus contenidos y ha mejorado su autonomía en el proceso de aprendizaje.

PALABRAS CLAVE

Método del caso, aprendizaje activo, estructura y comportamiento organizativo, administración de empresas

INTRODUCTION

In the university education system, there are two main groups that play a fundamental role in achieving the main objectives of the institution: lecturers and students. One of the main objectives of the University in which these two groups are involved is the training of citizens who contribute to the development of society. Training of students is carried out through a teaching-learning process, understood as “a constant consideration of what are the processes and strategies through which students reach learning” (Zabalza, 1991: p. 191). Although the ultimate goal is learning, lecturers and students play a different role depending on the design of the teaching methodology applied. Different teaching methodologies establish different patterns of information exchange in a series of interactions defined in a given educational context (Contreras, 1990). Therefore, according to this author, not only should the intervening agents, the content and the methodology be taken into account, but the context will also be a determining factor. In this sense, it is fundamental that the lecturer adapts the methodologies according to the established teaching objectives, since they must face a diversity of situations according to the social subjects, socio-psychological realities and learning and development spaces. Thus, the group of Students is constituted as subject, object and way of motivational stimulation.

When considering motivational aspects, it is convenient to think about the degree of participation requested from the student and the diversity that, in general terms, we find in a group of students, which implies the need to adapt the teaching. According to authors such as Mayer (1992) and Ramsdem (2003), when choosing a teaching methodology, the following aspects should be considered: the type of learning sought (from the transmission of tacit knowledge – contents and behaviors -, through learning by using competencies, to cognitive learning typical of reflective teaching); the role of the student and the lecturer (depending on whether each one develops a more active or more passive role, and may also be based on a collaborative participation between the two of them); the purpose (transmission of contents, applied knowledge, or the construction of critical thinking); the methodology (from the use of more traditional methods, to methods based on the resolution of cases, justification of solutions and debates); and the evaluation, according to a more quantitative or more qualitative method.

In learning processes in which the student or the lecturer leads the activity, without the necessary collaboration of other party, the result of this process is of lower quality and the acquired level of knowledge is lower. Moreover, a series of contents can be internalized, but the reduced application of those does not give the possibility of establishing an adequate critical thinking.

Therefore, the cooperation between the lecturers and the students seem to be the way in which the teaching-learning process is most effective. The methodologies applied under this formula dedicate much more time to solving problems or issuing justifications, which implies a greater cognitive development. The student will have an active role, asking for his/her collaboration and proactivity, but he/she will never learn in a very independent way, but the lecturer will act as a guide. In this way, the lecturer maintains control over the learning process.

This cooperative approach responds to the objectives of the European Higher Education Area (EHEA). Riesgo (2008) points out that the European

Commission's White Paper "Teaching and learning. Towards the knowledge society" determines that it will be fundamental to guarantee the employability of university graduates that they create competences based on constant learning. Lifelong learning and the ability to "learn to learn" will prevent the obsolescence of acquired knowledge.

With the aim of contributing to a more active learning style, the objective of this paper is to achieve, through the case method, that the students of the subject "Organizational Structure and Behavior" of the degree in Business Administration and Management assimilate, understand and put into practice the concepts acquired in the theoretical classes, favoring autonomous learning, cooperative learning, dialogue and peer learning. Therefore, this paper presents the results of the project "Promoting active learning through the case method applied to the teaching of organizational structure and behavior" developed in the framework of the V Call for Teaching Innovation Projects of the University of Cantabria. The project was carried out in the academic year 2021-2022 and consisted of the proposal, design, implementation and evaluation of teaching-learning activities based on the case methodology in the context of the compulsory course "Organizational Structure and Behavior" of the fourth year of the Degree in Business Administration in that University.

The objective of the course is twofold. On the one hand, that students know the main design parameters that give rise to organizational structures and, therefore, to strategic decision making. On the other hand, that students perceive the diversity of the behavior of the individuals that make up an organization and how their interactions at the individual and group level influence the functioning of the organization.

To date, teaching methodology used in the course consists of modalities such as the master class, combined with exercises, practices and cases, through which the student has to reflect and apply the concepts seen theoretically and explained by the lecturer. The specific use of case studies showed an improvement in learning outcomes, both through the grades and through comments made by the students.

In this context, lecturers of the course, together with other lecturers from the Department of Business Administration, considered the possibility of giving greater prominence to active learning in the teaching methodologies of the course. In particular, it was especially appropriate to teach the contents corresponding to the first thematic unit, based on the analysis of all the aspects that give rise to the different structural organizations. It was necessary to use a teaching method that implied a certain novelty for the students, as well as being related and permeable with respect to the objectives of the course. Specifically, and after a review of literature and teaching methodologies, it was considered that the case methodology could be suitable to work the practical sessions that comprise the course.

A working team was thus formed with the aim of incorporating the case method as a teaching methodology to teach the first of the units of the course. Two lecturers from the team attended the seminar "Case method in lecturing" organized by the Fundación Camilo Prado at the University Rey Juan Carlos in December 2019. After this first stage, the project was designed and the team began to work on the case study. The main objective of the project is for students to learn how to design an organizational structure through the discussion of real company cases, and in a context in which they are the protagonists of their

learning. The students adopt a role in which they themselves analyze, propose diagnoses, discuss and validate them, in different stages that include individual, team and group work. For their part, the lecturers design the materials, the context, and moderate the activities, without guiding or conditioning their reflections. Moreover, the methodology serves not only to improve learning, but also to develop fundamental skills such as critical thinking, organization, cooperation, negotiation, decision-making, teamwork, argumentation, debate and assertive communication.

The paper is structured as follows. After this introduction, the project is placed in its academic context. It explains the basic characteristics of the course, the teaching method used to date, the roles that the lecturers and students had in it, the evaluation system, as well as the aspects in which the design could be improved. The next section sets out the objectives of the project. The methodology section briefly explains the mechanics of the case method, its benefits and the roles of lecturers and students. Subsequently, the design of the project, the different stages, the materials used, and the organization of the activities in the classroom, their objectives and their evaluation are detailed. The following section presents the results of the project, with special emphasis on the development of the sessions, the learning of the contents and the learning of competences. Finally, the main conclusions of the project are presented.

ACADEMIC CONTEXT

The first step of the research has been to conduct an analysis of the situation of the teaching-learning process and its results in the course. This was not a one-off action such as a student survey or a quantitative analysis of academic results. Instead, the research team has relied on the experience accumulated by the lecturers in the course under study, as well as in other courses. This process of joint review and analysis has made it possible to identify limitations of the current teaching organization, modalities and methodologies, as well as aspects that could be improved through active learning. This section contextualizes the course in the degree and describes its academic aspects, detailing the objectives and content structure. The teaching methods and methodologies used before the project, the roles of lecturers and students and the evaluation system are described. Finally, the section concludes with the presentation of the main limitations and possible improvements obtained from this first analysis.

The course in the context of the Bachelor's Degree in Business Administration

The subject "Organizational Structure and Behavior" is taught in the fourth year of the Bachelor's Degree in Business Administration (GADE, in Spanish), in the fifth year of the Double Degree in Business Administration and Economics and in the third year of the Double Degree in Law and Business Administration at the University of Cantabria. It is a compulsory course with a load of 6 ECTS credits and is taught in the first semester for 145 students divided into four groups (A, B, C and D) in a face-to-face manner and in Spanish. Its responsibility, planning and teaching is carried out within the Business Organization Area of the Department of Business Administration of the Faculty of Economics and Business Administration. It is one of the courses within the subject "General Management" and of the Training in Business Organization Module.

The course pursues a double objective. On the one hand, that students are able to analyze the internal and external characteristics of an organization and design its most optimal structural configuration and, on the other hand, that students acquire sufficient knowledge to analyze the behavior of individuals and the consequences that their interactions with other individuals or groups have on the performance of the organization.

The course is divided into two blocks. A first block focused on organizational structure, consisting of four units and taught in eight weeks of class (with two two-hour sessions per week in each group). And a second block focused on organizational behavior, consisting of another four units and taught in seven weeks of class also in two two-hour sessions per week in each group.

The subject before the project

For the development of the course "Organizational and Structural Behavior", several methodologies are proposed: master lecture, cooperative learning and case resolution. The master lecture is the main training method since following the syllabus of the course, it allows transmitting to the student a large amount of knowledge, encouraging their participation and critical opinion. The master lectures are given in the classroom with several resources available (computer, projector and Internet). The audiovisual presentations used as support in these classes, with the main contents of each topic, are accessible to the student in the virtual platform Moodle. In addition, a basic and complementary bibliography, readings and cases are recommended.

The student's autonomous learning is encouraged through methods based on cooperative learning and case resolution. On the one hand, group works are proposed as a method of cooperative learning. Students who voluntarily access this training are distributed in groups of five people in order to work together and coordinated those practices proposed by the lecturers. In particular, the students have to solve a series of questions about a practical case and related to the theory explained in class. Each group presents its work to the other students on several occasions, which facilitates subsequent discussion. On the other hand, the resolution of cases is used as an effective method for students to apply the different theoretical contents seen in class and develop the most appropriate solutions to different situations in real companies. More specifically, at the end of each unit, a practical case study is presented in class in which a specific current topic and company/sector is addressed in order to stimulate reflection among students.

Regarding the evaluation, the course is designed to follow a continuous evaluation criterion throughout the whole four-month period, so continued attendance to class is necessary for an optimal use of the course. All partial grades, if passed satisfactorily, will form the final grade of the course, being necessary to obtain a grade equal to or higher than 5 points out of 10.

Individual midterm exams (60%): 60% of the final grade will be obtained from two midterm exams (30% each). Each midterm consists of 20 multiple-choice questions. Students will be examined on units 1 to 4 (Block I) in the first midterm and units 5 to 8 (Block II) in the second midterm. It is necessary to obtain a minimum of 5 points out of a possible 10 in each of the individual midterm exams. Students who pass the minimum grade in the first midterm will only have to take the second midterm of Block II. Students who do not pass the minimum grade in

the first midterm may recover it in the second midterm by taking an exam on the complete syllabus (Blocks I and II).

Practical group work (30%): 30% of the final grade is obtained with practical group work. It is necessary to hand in all the proposed group work. Students will have a pre-set time to finish and submit the practical work through the Moodle platform. A minimum grade of 5 points out of 10 must be obtained in the group work to pass this part. The recovery of this part can only be done in the February exam (ordinary call), by means of an exam on a practical case that allows the student to apply the theoretical knowledge learned to real company cases.

Individual activities carried out in class (10%): 10% of the final grade is obtained with individual activities carried out in class. It is necessary to do at least 75% of the activities to be done in class in order to get a grade in this section. Otherwise, the grade for this part will be zero. It is a non-recoverable activity since it is based on the reflection and elaboration of answers/proposals to a question launched by the teacher, which the student will have to expose in class and debate or argue the validity of the same in front of his classmates.

Limitations and proposal for improvement

The experience in teaching the course with the design presented above has allowed the lecturers to obtain relevant information on certain aspects that could be improved. Specifically, in the practical part of the course, a growing lack of student motivation has been observed throughout the term. According to the students themselves, there are too many group practices (one for each unit) and of a wide extension, so that even reading them was costly for them. In addition, the functioning of the groups and the effort of its members was very unequal. We concluded that once the group has a certain confidence, each student has a role and it is usually the same students who make the greatest effort and vice versa.

For all of this, we decided to include the case study methodology in the first stage of the course. Three sessions that consisted of a combination of master lectures and practical sessions were replaced by the case method. The evaluation of those practices that are no longer done is replaced by the evaluation of the case method. The final test exam at the end of Block I is maintained. In this way, we ensure that: 1. the number of practices would be reduced; 2. students would work on this first block individually and would be evaluated; 3. they would work in a group that is not the usual one and, therefore, there would be less confidence not to make an effort and the roles would not be assigned; 4. they would be moved to a different classroom to create a more relaxed and motivating environment; and 5. all this would have a positive impact on the results of the students in this first block.

OBJECTIVES

The detailed analysis of the current structure and organization of the course, as well as the participation and performance of students to date in the course, allowed us to identify that the introduction of active teaching methodologies, and specifically, the case method, would make it possible to achieve improvements in dimensions as diverse as the quality of learning, student satisfaction, acquisition and development of competencies and evaluation. The objectives established with the project are detailed in Table 1.

Table 1. Objectives of the project.

INCREASE STUDENT SATISFACTION WITH LEARNING
- Implement personalized learning strategies adapted to the profile and characteristics of the students
- Innovate teaching methodologies for theoretical and practical sessions. Design and improve laboratory or workshop practices (more dynamic, more playful component).
INCREASE THE QUALITY OF LEARNING
- Design and develop innovative teaching material through the use of the case method with real business cases in courses in the last year of the degree (in this case, the Degree in Business Administration)
- Encourage active and autonomous learning of Students and use innovative methods that encourage their participation through active methodologies
- Improve the learning of contents and improve the development of student competencies
- Develop collaborative strategies among the lecturers that enrich the teaching activity in the classroom and favor the acquisition of knowledge and transversal competencies
INCREASE DIGITAL COMPETENCIES
- Promote and analyze the innovative use of ICT and Virtual Classrooms in teaching.
IMPROVE STUDENT EVALUATION AND GRADING PROCESSES
- Develop systems that establish new evaluation models
- Adequately face the continuous evaluation, especially when facing the challenge of large groups, adequately weighting the daily work against a single exam
- Develop formative evaluation and self-evaluation instruments that favor students' knowledge of their learning process

METHODOLOGY

The case method

A case is the description of a real situation, usually complex, in which there are problems related to the subject under study. This real situation is subjected to study and discussion in class under the supervision of a lecturer. There is no single solution, but all of them are imperfect (Caro and Castellanos, 2019).

The case is developed on a company and real experiences or situations, based on the collaboration between lecturers and professionals. Once the case has been developed by the working group, it is analyzed in the classroom. In this sense, from a combination of reading, access to complementary materials, reflection and group and collective discussion; the latent business practices and problems in the case emerge, so that students identify these practices in relation to the knowledge of the course and propose measures and decisions to address the problems and improve the situation of the company. This is an active method that requires constant student participation and in which success depends to a large extent on the role of the lecturer, both in the design of the case and in the organization and moderation of its development in the classroom.

The case study is one of the techniques that favors discovery learning (Bruner 1960), since it encourages the student to ask questions and formulate his or her own answers, as well as to deduce principles from practical examples or experiences. Discovery learning requires the active participation of the student in deciding what, how and when something should be studied, instead of waiting for the lecturer to dictate each action in the learning process (Andreu et al. 2004).

The use of the case method is also justified because students, both individually and in groups, learn better because they accept more responsibility in the development of the discussion and get closer to the reality of their professional future. Considering the particular context of the present project, the case method is an ideal technique for senior students. On the one hand, the student has the necessary maturity to face autonomously the actions and processes that this technique requires, so that they can take advantage of the process as a whole. On the other hand, it brings students closer to the business reality, by introducing in the classroom the teaching of contents based on real cases and situations. Moreover, in the case of business administration students, it is even more relevant, since it is a teaching methodology that is not exclusive to the academic environment, but has been used for a long time in the field of business training.

Put simply and briefly, a project to use the case method in training or higher education could be summarized in five main stages:

- The first is the selection of the subject to be worked on through the case and the evaluation of the suitability of the methodology to achieve the objectives of the course.
- The second stage consists of the constitution of a work team, normally made up of the lecturing staff and professionals from the company being studied. This is a vital aspect that requires a slow and detailed elaboration, in which lecturers and professionals validate the content of the written case.
- The third stage consists of designing the activities to be developed, defining dates, locations, tasks, learning objectives, learning outcomes and evaluation. It is also necessary to prepare the supporting materials for these sessions, including the presentation of the activity. The presentation should explain to the students what the case methodology is, its advantages, the roles of lecturers and students, the objectives to be achieved, the expected learning outcomes and the evaluation system. Likewise, the organization and dynamics of each of the sessions should be defined, as well as their objectives. The information contained in these materials can be provided before or at the beginning of the first session.
- The fourth stage consists of the execution of the activities, which are normally the following: presentation of the activity, individual reading of the case, group discussion of the case, discussion of the case with the large group (class as a whole) and final reflections and conclusions. It is advisable to work previously on the configuration of the working groups, which should be developed between the third and fourth stages, since it is preparatory work, but sometimes it involves a first activity to get to know the students better.
- The fifth stage takes place once the activities have been completed and consists of the evaluation of the development and results of the learning process and conclusions about it.

The lecturers must design the project, write the case, generate the materials and organize the activities, and must take special care not to provide the student with his or her personal point of view when moderating the different sessions. Furthermore, according to Andreu et al. (2004), it is also the lecturers' task to select the most appropriate case; to study at what point in the course syllabus it

should be incorporated when it is not the only method of teaching and evaluation; depending on the complexity of the case, to decide whether it is convenient to deliver the case in advance or not; to perform various functions: conductor, facilitator, controller, guide, etc.; to control that students use a rich and specific vocabulary; and to evaluate.

Similarly, the roles adopted by the students differ from the more classical methods. The main roles to be played by each group of students are the following; examine the documents provided to them; identify the additional information they need (sources); analyze all the information and reflect and discuss in their group the problem presented; provide justified solutions or proposals defending the possible results or their consequences; formally present the group's work to the large group.

Finally, it is necessary to emphasize that, although there are some common characteristics and a set of elementary stages or steps, the case methodology allows the design of the case and the activities to be adapted to the particular situation in which the teaching is to be organized. Lecturers should be aware of this aspect, adapting their proposal so that it can be applied in the most effective way and obtain a higher degree of learning and development of competencies.

Case study design and development of project activities

In this project, we decided to apply the case study methodology to Block I of the course, which deals with contents related to structural configurations. This methodology is appropriate to work on these contents because this block begins by analyzing the nature of the organization with special emphasis on the parts of the organization and the coordination mechanisms. Subsequently, units 2 and 3 focus on design parameters and contingency factors, respectively. That is, the analysis of the internal and external characteristics of the company that influence the most appropriate type of structure, to finally show the structural configurations that are the result of the analysis presented in the three previous units.

The full-time research team is made up of two civil servant associate professors and two associate professors, who are in turn the lecturer in charge of the subject, the two lecturers who attended the seminar on the case method and a fourth lecturer with experience in teaching innovation. All of them are part of the business organization area of the Business Administration Department of the University of Cantabria.

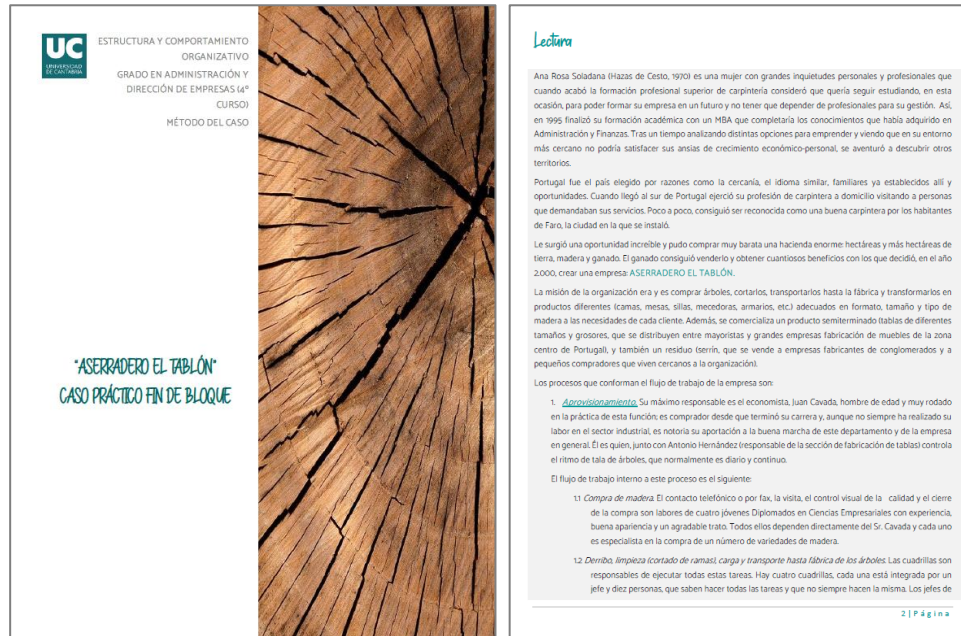
The different phases of design and development of the project are defined below.

The writing of the case. This is a key step in this method. The case should be prepared prior to the course and should be based as far as possible on a real situation or company. It should and can also be enriched with complementary information from secondary sources. The design and writing process requires the contribution of the lecturers involved in the activity, in addition to the project researchers and people from the organization under analysis.

In the present project, the writing of the case has been conditioned, to a certain extent, by the contents to be discussed through it, as well as by limitations in the access to companies. The research team realized that it was not possible to deal with all the aspects to be discussed through only one of the companies on which the case was to be prepared. This is why, finally, an ad hoc case was created based on the situation, development and experiences of several companies. On the other hand, this project only addresses one dimension of the company's

activity, such as the company's organization (parts, departmentalization strategies, communication, environment, technologies), without considering aspects such as finance, marketing or accounting.

Figure 1. Documentation of the case. Source: Authors



In terms of the subject matter of the case, we chose a company whose mission is to buy trees, cut them, transport them to the factory and transform them into different products (beds, tables, chairs, rocking chairs, closets, etc.) suitable in format, size and type of wood to the needs of each client (Figure 1). In addition, it is a company that markets a semi-finished product (boards of different sizes and thicknesses, which are distributed to wholesalers and large furniture manufacturing companies in central Portugal), and also a waste product (sawdust, which is sold to conglomerate manufacturing companies and small buyers living close to the organization). All the information necessary to analyze the case was presented in a single 5-page document that ended by considering the possibility of a merger with another distribution company in the same sector.

Student organization. In order to use a case, the lecturer must know it perfectly well and it is highly recommended that he/she has a minimum experience in group dynamics. When deciding to use the case methodology, the lecturer must take into account various aspects, including: the theoretical content of the course; the time required for the application of a method; the educational context and available resources; and the diversity of students.

The diversity of the student body and the different learning styles have been analyzed prior to carrying out the case study in the classroom by means of the Felder Test. This test consist of 44-question that allowed us to know if the students stand out in any learning style by comparing them in pairs (reflective vs. active, sensory vs. intuitive, visual vs. verbal, sequential vs. global). Each of these styles will get a score based on the answers given by the students. If the score is between 1-3 points, that learning style is balanced, for scores between 5 and 7, it denotes a moderate preference for one of the two styles compared, and if the score is between 9 and 11, it denotes a high preference for one of the two styles.

Table 2. Comparison of learning styles.

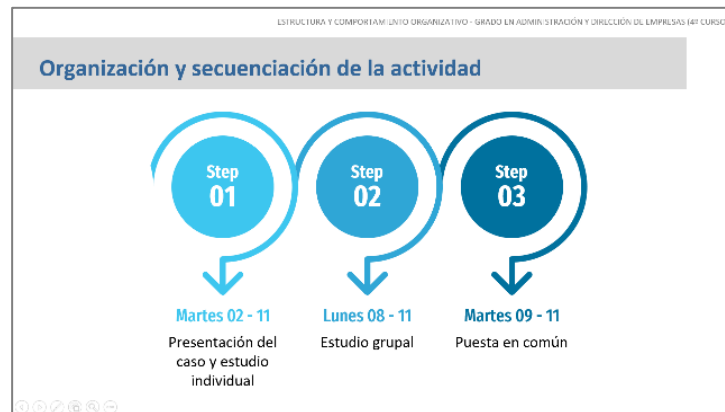
	11	9	7	5	3	1	1	3	5	7	9	11	
Active													Reflective
Sensory													Intuitive
Visual													Verbal
Sequential													Global

Source: Felder Test

We elaborated the distribution of Students according to the results of this test, encouraging the creation of work teams with different learning styles. The case should be developed in small groups, between 15 and 50 students (Reynolds 1990), and the work groups should be formed by between 4 and 6 people (Andreu et al. 2004). A group of around 30 students (around 6 groups) allows the lecturer to attend to the different groups, to guide collective sessions in which all groups can participate, and for a diversity of proposals, opinions, and debate to arise. In our case, a total of 129 students participated, and 23 groups were formed (between 5 and 6 students), distributed as follows: Group A (6 groups, 34 students), Group B (6 groups, 33 students), Group C (4 groups, 21 students) and Group D (7 groups, 41 students).

Organization of the work in the classroom. The study carried out in the course was developed simultaneously in the four groups, over several sessions. The organization of the sessions, the materials, the tasks to be performed, the role of the students and lecturers, as well as the evaluation systems to be used were defined before the beginning of the activity and it was decided to inform the students at the beginning of the first session. It was also decided not to hand out the case study until the moment of starting to work with it in the classroom. To carry out the activity, the first of the sessions for the presentation and individual reading of the case took place in the traditional classroom, with part of the students attending in person and part of them attending by videoconference through the Teams platform, all due to the hybrid model imposed by the capacity restrictions caused by Covid-19. However, the remaining sessions, where student interaction is required, were held in a multipurpose, open space at the University of Cantabria, where all students could attend in person without exceeding the capacity limitations.

Activities. The work was divided into three two-hour sessions (Figure 3). In the morning groups the sessions were coordinated by two lecturers, while in the afternoon groups the work was carried out by one lecturer. The main reasons for this distribution is that the morning groups have several Erasmus students whom it was considered appropriate to support with a second lecturer.

Figure 2. Sequential organization of the sessions.

Activity 1. Presentation of the case and group study. The first session was divided into two parts. First, the project was presented to all students in each of the four groups, with the support of a power point presentation that was later made available in the virtual classroom of the course. The presentation consisted of letting them know what the case method is, what advantages it brings to both teachers and students in terms of teaching and learning, how the methodology basically works, and finally the origin and motivation of the teaching innovation project in which they were going to participate. Then, the case was introduced, the stages and activities to be carried out, the dates, the organization and functioning of the dynamics, the roles of lecturers and students, the objectives of each of the sessions, as well as their evaluation were explained. The presentation ended with a round of questions and clarification of doubts, and lasted about an hour in all groups, as planned. In the second part of the first session, work began on the first of the activities, the individual reading of the case. The main objective of this individual reading was the analysis by the student of all the content explained in class on the four units of Block I, which would require reviewing all the theory of the organizational structure block in order to be able to apply it to the case. After the reading, the students, either in the classroom or as part of their autonomous work, had to answer a set of questions and submit the answers through the virtual classroom as the first part of their evaluation. In posing and evaluating these question, we tried on the one hand, to make sure that all students had worked on the case individually, and on the other hand, to try as much as possible that, by knowing the case, their participation and contributions in the following activities would be more and more useful for their group and for the class.

Activity 2. Group case study. The second session, already in the multidisciplinary and diaphanous space, had as protagonists the groups created according to the results of the Felder test. The questionnaires were carried out through the Moodle platform, and after evaluating the results and creating the groups according to them, they were communicated to the students prior to the beginning of the group case study, through the Moodle platform. The session began with a brief presentation and reminder of the organization, development and expected results, as well as the roles of teachers and students. This second activity consisted of an intra-group discussion of the case study with the objective of exposing to the rest of the group the individual analysis and the conclusions reached by each one in order to try to enrich the answers with the comments of

the group members. Each member of the group had to present his or her vision of the case and then the group had to respond jointly and consensually to a set of questions posed by the teachers, and send a group report through the virtual classroom for evaluation. The expected result was that there would not be a total consensus, i.e., that each group would reach consensus conclusions different from the previous individual ones. In this session, the lecturer's role was only as an observer of the debates generated within the group when trying to reach a consensus on a single answer to each question posed.

Figure 3. Second group study session.



Sharing with the large group: Once the answers were agreed upon in each of the groups, we continued with the third session in which each group had to share with the rest of the class or also called "large group" each of the answers to the questions posed in the previous session. The expected result in this session was the participation of the largest number of students, if possible, all those present in the classroom, and that all of them reasoned the answers that were appearing to reach a consensus on the most complete or most convincing answer to the questions posed by the lecturer. In this session, the lecturer's role was to moderate the interventions and the answers in the search for the most optimal conclusions, without qualifying or evaluating the answers. To this end, the lecturer used questions related to the concepts explained in class to pave the way towards the end of the session. It should be noted that, after the first interventions, the lecturers made a series of remarks on effective and assertive communication, as well as on active listening, which facilitated the redirection of the presentation of ideas and the discussion became much more intense, creative and productive. At the end of the course, students were asked to answer an individual and anonymous satisfaction survey through the Limesurvey platform in order to obtain their assessment and impressions on the experience of the case method.

Figure 4. Third session, large group discussion.



Evaluation. Since the case method requires students to analyze, judge and make decisions, most of the actions taken by the groups will be considered neither good nor bad. In addition, direct criticism by the lecturer of any judgment or decision of a group will never be made in front of the rest of the groups as it is harmful and may affect the dynamics of all (Andreu et al. 2004). The evaluation will have a double purpose: on the one hand, to know the learning level of the students, and on the other hand, to validate if the teaching methodology has been adequate to the teaching context in which it is carried out. For this last purpose, the evaluation made by the students on the lecturers and the subject will also be available as part of the quality system of the university degrees. The evaluation system is as follows: evaluation of individual (4 points) and group (3 points) reports required throughout the development of the case study (figure 6); evaluation of student participation in discussions (3 points) (the lecturer, while the different groups carry out their task, will take notes on the performance of the different groups, and the participation of their members). There is also the possibility of including the student in the evaluative part, making it easier for them to evaluate the performance of their peers and their own inside and outside the working group, based on criteria provided by the lecturer. However, this option was not used in our project.

Figure 6. Individual and group reports to be requested from the student.

ANEXO 1. INFORME INDIVIDUAL

1. *Portada*

- *Título del caso*
- *Nombre alumno/a*

2. *Tipo y tamaño de letra*

- *Calibri 11*

3. *Cuestiones a resolver*

A) *Realiza un análisis completo de la empresa ASERRADERO EL TABLÓN que te permita concluir a qué forma estructural se asemeja más esta empresa. (máximo 3 caras)*

B) *Realiza un análisis completo de la empresa TANASA que te permita concluir a qué forma estructural se asemeja más esta empresa. (máximo 3 caras)*

ANEXO 2. INFORME GRUPAL (incluir las anotaciones del reporteur)1. *Portada*

- *Título del caso*
- *Nombres miembros del grupo*

2. *Tipo y Tamaño de letra*

- *Calibri 11*

3. *Cuestiones a resolver y extensión*

- A. *Forma estructural ASERRADERO EL TABLÓN (3 LÍNEAS)*
- B. *Forma estructural TANASA (3 LÍNEAS)*
- C. *¿Es adecuada esta estructura ASERRADERO EL TABLÓN? Justifica tu respuesta (6 LÍNEAS)*
- D. *¿Es adecuada esta estructura TANASA? Justifica tu respuesta (6 LÍNEAS)*
- E. *¿Existen diferencias estructurales entre ambas? (3 líneas)*
- F. *¿Generarán estas diferencias estructurales algún problema en la nueva empresa? Justificar la respuesta. (10 líneas)*
- G. *Diseñar la superestructura derivada de la futura fusión (ORGANIGRAMA)*

RESULTS

The results related to the lecturers' perception can be grouped into three blocks: 1. on the development of the sessions; 2. on the learning of contents; and 3. on the learning of competencies.

Beginning with the first block, it should be noted that the lecturer were able to perceive a certain interest and curiosity in the students prior to the development of the activity, as well as during the work sessions. This could be due to the novelty of the activity, on the one hand, and to the change of location for the group sessions, on the other. In this sense, we can say that we perceive a good predisposition to the realization of the case method to finalize the first block of the course "Organizational Structure and Behavior".

Regarding the learning of contents and competencies, results related to learning styles and academic results obtained in the first partial exam (Block I) are presented first. This exam deals with the contents addressed in the sessions in which we used the case method and takes place after the sessions. Secondly, we present the evaluations collected in the individual student satisfaction survey carried out at the end of the activity.

For an active student profile, cooperative and collaborative work that encourages experimentation and discussion is preferable. However, for a reflective learner, individual assignments in which a topic is worked on thoroughly before reaching a conclusion are preferable. The marks around the average (6.7) respond to students with an active/not very active profile which responds to the objectives of the case methodology (see Table 3). In spite of the fact that the highest average score is presented by reflective students (which was to be expected since the test responds to an individual activity that requires previous effort and concentration), the active and not very active students obtain scores

close to a B-. In fact, the less active students obtained better marks than the less reflective ones, despite the test being more favorable in principle for the latter.

A sensory student profile requires small group presentations, workshops and practical classes and an intuitive student will ask for open problems to develop their innovative character, so both profiles are covered with the case methodology. In fact, the distribution of grades is homogeneous, but a higher grade (average of three students) with a very intuitive profile stands out.

Concept maps, demonstrations and interactive activities are suitable for a visual learner profile. On the other hand, a verbal learner will require lectures accompanied by texts and written documentation. Low verbal student grades are followed by highly visual students, although not much variability is observed. It makes sense since the documentation provided to students (for the method) combines textual and visual elements.

Students with a sequential profile require review and recapitulation tools to be able to "relive" what has been discussed during the session. On the other hand, students with a global profile prefer general information in which to approach problems or cases from a holistic perspective. In this case, most students presented sequential (7.25) or not very sequential (6.38) profiles.

Table 3. Average results obtained by the Students in the first partial test (Block I) according to the results of Felder's test.

Highly active	Active	Slightly active	Slightly reflexive	Reflexive	Highly reflexive
4,58 (3)	6,96 (42)	6,79 (59)	6,31 (17)	7,50 (3)	
Highly sensorial	Sensorial	Slightly sensorial	Slightly intuitive	Intuitive	Highly intuitive
5,38 (1)	6,64 (30)	6,45 (55)	7,33 (27)	6,28 (5)	9,38 (3)
Highly visual	Visual	Slightly visual	Slightly verbal	Verbal	Highly verbal
7,22 (8)	6,45 (59)	6,90 (44)	7,88 (9)	6,96 (3)	
Highly sequential	Sequential	Slightly sequential	Slightly global	Global	Highly global
6,44 (2)	7,25 (39)	6,38 (63)	7,12 (18)	6,17 (3)	

*Average grades and number of Students in parenthesis

The results of the 115 satisfaction surveys carried out by students provide us with information on their perception of the learning achieved and the development of competencies. In general terms, the results are very positive, with average evaluations above five in all the learning objectives. The evaluations related to the learning objectives, expressed in a range from 1 to 7, reflect that students have established relationships between theory and practice (5.83) and have understood the contents of the block (5.71), obtaining an integrated vision of them (5.5). The mean of the evaluations is 5.43, being the male student profile with work experience the one that systematically gives better evaluations (mean value

of 5.58 for men compared to the mean of 5.33 for women and mean value of 5.53 for students with work experience compared to the mean value of 5.32 for students without such experience).

Table 4. Ratings related to learning objectives, disaggregated by gender and work experience (Mean of ratings, range 1 = totally uncertain, 7 = totally certain).

Item	Total	Female	Male	No working experience	Working experience
To understand the contents of the first block of the course	5.71	5.65	5.80	5.62	5.80
To establish relationships between theory and practice	5.83	5.76	5.93	5.70	5.94
To learn about real-life situations related to the course	5.49	5.48	5.51	5.22	5.74
To increase interest and motivation for the course	5.36	5.32	5.41	5.10	5.59
To obtain an integrated vision of the contents	5.54	5.51	5.59	5.46	5.61
To increase interest in group work	5.37	5.25	5.54	5.30	5.43
To learn strategies to analyze situations that occur in professional practice	5.48	5.33	5.71	5.42	5.54
To make decisions about a real decision-making context	5.38	5.13	5.76	5.26	5.48
To investigate on your own about the case topic	5.01	4.90	5.17	4.94	5.07
To feel like a professional analyzing, giving opinions and making decisions.	5.14	4.98	5.39	5.22	5.07

The students' perception in relation to their acquired competencies presents a lower average but also above five (5.13 out of 7), valuing the integration and active collaboration with the working group (5.32), and highlighting the process of presenting arguments and negotiating with the group members to influence the final decision (5.20). It is very positive that students about to enter the labor market express that the case methodology has helped them to improve their teamwork, communication, problem solving and organizational management skills. Once again, men (5.28) compared to women (5.04) and students with work experience (5.24) compared to students without work experience (5.02) are the ones who give higher ratings.

Table 5. Ratings related to the competencies acquired by students, disaggregated by gender and work experience (Mean of rating, range 1 = totally uncertain, 7 = totally certain).

Item. "I feel capable of..."	Total	Female	Male	No working experience	Working experience
... establishing organizational guidelines and to plan future actions according to pre-established criteria	5.15	4.95	5.46	5.04	5.26
... making judgments that include reflection on relevant social, scientific or ethical issues in organizations	5.17	5.08	5.32	5.04	5.30
... developing and defending arguments and solving structural problems within an organization	5.14	5.08	5.23	5.06	5.21
... managing work groups	5.13	5.06	5.24	4.90	5.35
... advising on technical-organizational aspects related to the structure of the organization	4.96	4.76	5.27	5.00	4.93
... leading an organization in the search for its most appropriate structure.	4.96	4.95	4.98	4.86	5.06
... presenting my points of view, negotiating solutions and having an impact on the group's final decisions.	5.20	5.11	5.34	5.04	5.35
... integrating and collaborating actively in the achievement of common objectives with other people, beyond individual achievements.	5.35	5.32	5.39	5.24	5.44

Regarding the realization of a teaching activity in a different context and with materials created in relation to the real problems of a family business, the students indicated that 91% of them were quite or very satisfied with how the learning process had been guided by lecturers (95.1% of the men versus 88.9% of the women and 94.4% of the students with work experience versus 88% of the students without work experience). In addition, 82% indicated that they were quite satisfied or very satisfied with the approach and development of the experience (90.5% of men versus 77.3% of women and 94.4% of students, there being no difference in terms of work experience). For this reason, 83% of the students stated that they would use the same methodology again for successive blocks of the subject, although the percentage that considers the application of this system in other course to be adequate drops to 75%.

Finally, it is important to emphasize that, despite the non-intervention of the lecturer in the discussion, it was found to be beneficial for the debate and the improvement of communication skills to give indications on active listening and assertive communication.

DISCUSSION

This paper presents the experience of design and execution, as well as the results of a teaching innovation project that introduces for the first time the case method in the course "Organizational Structure and Behavior" of the degree in Business Administration of the University of Cantabria. The project replaces several sessions that combined lectures and small practices, with a set of activities related to a more elaborate case study and developed over several sessions, with individual and group work.

The lecturers involved have found that the thorough preparation and writing of the case is key for the students to later analyze, reflect, discuss, and debate on the contents that the sessions are intended to address. The explanation to the students of the methodology, its advantages for learning, the roles of students and lecturers, and the organization of the sessions have been key preparatory aspects to motivate students and facilitate a correct development of the sessions. Due to these previous actions, students hardly expressed any doubts about what they should do during the sessions and, practically, no cases of clearly passive students were detected, who rejected the method and did not participate to a greater or lesser degree in the cooperative and group work sessions. This is important because, in the work of Cruz-Suarez et al. (2022) the authors demonstrate the importance of the degree of acceptability and desirability of the tool used in the teaching-learning process to improve student results. In this vein, Almahameed et al (2020) found that emotions have an influence on the behavioral intentions, via its proposed impact on results and effort expectancies.

As for the development of the sessions, it is very important for the success of the group sessions that the students know both the theory and the case study in depth. In our case, we have found that asking a series of questions after the individual reading of the case to be answered and submitted as part of the evaluation is an effective tool to ensure that all students arrive in a position to contribute to the discussions and debates with their peers. Another positive aspect has been the decision of the lecturers to form the groups, instead of giving this option to the students, who in many occasions prefer to work with like-minded people and there is some resistance to the contrary. In our case, the analysis of learning styles through the Felder test allowed us to create groups that subsequently worked very well in the cooperative dynamics. In fact, several students expressed their satisfaction after the activity, since being forced to work with people they did not even know or had not previously spoken to had motivated them and increased their learning. Finally, in the third session, the teachers were able to see how the students, after the individual analysis of the case and the discussion in their group, showed in their interventions a clear knowledge of both the theoretical contents and the case study, focusing the discussion on the technical analysis of the company. This fulfills one of the main objectives of the project, which is to achieve autonomous and cooperative learning around the study of a real case.

The comparison of learning styles with the results of the content exam that took place after these sessions yields an interesting result. The scores of the "active" students, who prefer cooperative and collaborative work that encourages experimentation and discussion, are close to a B and not clearly lower than those of the reflective students. It is possible, therefore, that working the contents through the case method has especially helped those "active" students whose

learning is more complex in more traditional environments based on lecture and text work. This would be able to cater for diversity and enhance the learning of all students, regardless of their characteristics and learning styles.

The surveys conducted with the students allow us to conclude that the case methodology has contributed to increase their interest and motivation for the course, has introduced them to real-life situations related to the course, has allowed them to establish relationships between theory and practice, and has improved their understanding of the contents of the course. Similarly, the general perception of the students is that through this type of learning they improve their communication, teamwork and organizational management skills. Interestingly, not all of those who expressed a desire to use this methodology again in successive blocks of the same subject find its application useful in the rest of the subjects. These results confirm once again the need for teachers, at the design stage, to work on the suitability of the method according to the subject, the contents and the students.

In general, it can be concluded that, both from the perceptions of lecturers and students, the active participation of the student makes the knowledge used in a practical way increase their interest in it, increases their level of learning and the search for information to solve different situations improves their autonomy in the learning process. As possible improvements, the involvement of students in cooperative activities is not the same in all cases. Although we have perceived that the previous explanations and the individual task have achieved a general active participation of all students, differences emerge in the cooperative tasks, especially in the last one in which all students participate at the same time. This problem is greater the larger the groups are, and this makes evaluation more difficult. In our case, the introduction of a second lecturer in the classroom, initially to support the Erasmus students, was ultimately beneficial both for the lecturers, in observation and evaluation, and for the students, who had more support.

REFERENCES

- Almahameed, A. AlShwayat, D. Arias-Oliva, M. & Pelegrín-Borondo, J. (2020). "Robots in education: a Jordanian university case study". *Journal of Management and Business Education*, 3(2), 164-180. <https://doi.org/10.35564/jmbe.2020.0011>
- Andreu, M.A., González, J.A., Labrador, M.J., Quintanilla, I., & Ruiz, T. (2004). "Método del caso. Ficha descriptiva y de necesidades". Universidad Politécnica de Valencia. Grupo metodologías activas (GIMA-UPV). Retrieved from: <http://www.upv.es/nume/descargas/fichamdc.pdf>
- Bruner, J. (1960). *The process of education*. Cambridge, MA: Harvard University Press.
- Caro, A.R., & Castellanos, G.M (2019). "Incidencia de los OVA en un entorno educativo virtual y presencial". V Congreso Internacional de Investigación y Pedagogía, Universidad Pedagógica y Tecnológica de Colombia (Uptc). Retrieved from: <http://repositorio.uptc.edu.co/handle/001/5180>
- Contreras, J. (1990). *Enseñanza, curriculum y profesorado*. Introducción crítica a la didáctica. Ed. AKAL.
- Cruz-Suarez, A.; Martínez-Navalón, J.A.; Gelashvili, V.; & Herrera-Enríquez, G. (2022). "Creativity and innovation in technology and operations management

through brainstorming". Journal of Management and Business Education, 5(1), 63-75. <https://doi.org/10.35564/jmbe.2022.0005>

Mayer, R.E. (1992). *Thinking, problem solving, cognition*. Ed. WH Freeman/Times Books/Henry Holt & Co.

Ramsden, P. (2003). *Learning to teach in Higher Education*. Ed. Routledge.

Zabalza, M. (1991). *Diseño y desarrollo curricular*. Ed. Narcea.

ACKNOWLEDGMENTS

During the completion of this article, we benefited from discussions at research seminars at the European Academy of Management and Business Economics International Congress.

DECLARATION OF CONFLICTING INTERESTS

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

FUNDING

V Call for Teaching Innovation Projects of the University of Cantabria. The authors received financial support for the research of this article.

Cite

Gómez López, R.; Odriozola, M.D.; Llorente, I. & Baraibar-Diez, E. (2022). Teaching organizational structure through the case method. Journal of Management and Business Education, 5(3), 297-318 <https://doi.org/10.35564/jmbe.2022.0018>
