

Participative methodologies to teach applied economics*

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Abstract: The incorporation of Spanish universities to the European Higher Education Area has required changing the teaching methodologies. This change is quite more important in those subjects that were based on lectures, as it traditionally happens with some economic-related programs. In this paper we present and discuss the use of participative methodologies in teaching Spanish Economy for two years at Universidad de Murcia in the framework of an experimental program. This experience is valuable for subjects in a similar situation that are demanded to adapt their methodologies to the EHEA.

Keywords: learning methodologies, participative learning, teaching economics

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1. Introduction

Spanish universities are involved in applying new study programs (at degree and post-degree levels) in accordance with the European Higher Education Area (EHEA) scheme. As it is well known, the EHEA supposes two main changes over the situation of Spanish university programs. On the one hand, the definition and structure of the programs require important changes to fit in the guidelines of the Bologna plan. On the other hand, the academic activity turns its focus from the teaching activities and the professor as the centre of the learning activities to the student as responsible of his or her own formation. This second aspect requires deep changes in the methodologies.

Traditionally, learning is based on repetition and memorization. That is, it is a learning process whose aim is the ability to repeat what has been exposed. This scheme implies that a wide knowledge needs to be achieved by the student in the learning period in order to get profit of it in his or her professional career. However, EHEA focuses on the development of skills and competences that can be further developed or increased along the life. It supposes to move towards a deeper learning style, which is based not only in knowledge, but also in understanding, participation, work in groups as well as the development of attitudes and competences. In this framework, the need of incorporating participative techniques arises. Through them, it will be the student who manages the learning process under the monitoring of the teacher.

Being conscious of the dramatic change that EHEA supposes in teaching, some Spanish universities promoted experimental programs and activities in some of the subjects or academic years before broadly offering the new programs. Universidad de Murcia (UM henceforth) developed some of these experimental programs from 2005-06 till 2009-10 in order to reinforce its strategy for adaptation to EHEA. The School of Economics and Business (Facultad de Economía y Empresa) participated in these programs, and since 2006-07 with the participation of some complete courses of the Degree in Business Administration (Sanchez, 2010). The aim of this paper is to present the characteristics as well as an evaluation and some personal considerations about some of the participative activities that can be used for teaching an applied subject on economics. It must be noted that the authors of this paper have jointly participated in this experimental program for two years, teaching the subject 'Spanish Economy' in the third (out of five) academic year of the degree at the same time that have taught the same subject in non-experimental programs. This double experience facilitates the comparison and the evaluation of the experimental program.

It must be noted that the study of an applied subject in Economics is not limited to the Economics and Business Administration programs, but Law and Sociology studies as well as many Engineering programs include similar subjects in their curricula. Besides, we find that some of the methodologies can be applied to other subjects in its same area as well as other Social Sciences disciplines such as Economic History or Sociology. It suggests that the successful results obtained from our experience have a large field to be exported.

Specifically, our methodology reconciles the traditional teaching approach based on lectures and exercises to skill-oriented and participative activities including the elaboration of short economic analyses, the presentation of seminars and the participation in public debates. Also, traditional methodologies are reformulated according to the specific objectives we proposed to achieve.

In our opinion, such a diversity of techniques is a positive element of the methodology, since:

- None of the teaching techniques on its own is able to guarantee the success of the learning process due to the complexity of such process (Bar-Yam et al., 2005). In this sense, the application of different techniques contributes to the development of diverse facets of the students.
- The subject allows for this diversity of techniques. On the one hand, economic reality can be studied from different perspectives (quantitatively or qualitatively, objectively or subjectively, etc). On the other hand, students in the mid of their degree program have a background large enough to deal effectively with advanced tasks.
- The methodology combines individual work with work in groups. Traditional methods usually rely on the individual work, but nowadays it is widely recognized that this approach is insufficient (Exley and Dennick, 2004). In professional activities, working in teams has become the norm, and the university must help the student to develop the needed skills for an effective participation in groups, facing him/her to the dynamics and difficulties which arise in cooperative and collaborative environments.

Along the rest of the paper we discuss each of the techniques we have applied in our courses and summarise our conclusions about its validity. Section 2 contextualizes the subject 'Spanish Economy' within the degree, section 3 deals with the traditional pedagogical techniques, section 4 with the innovative ones, section 5 shows the views of students of the different techniques and section 6 concludes.

2. The role of the subject in the program

'Spanish Economy' is one of core subjects in the Business Administration academic program. During the period of the experience, this subject was taught in the third (out of five) academic years of the degree's program of Universidad de Murcia. It had 9 ECTS (corresponding to 222.5 hours of workload for the student) and it was taught along the two semesters of the year. Each of the two teachers in charge of the subject in the innovative program was assigned to one of the semesters, giving all the corresponding lectures and practical activities. The weekly session of classes of the subject in the experimental program covered both theory and practice, with 70 minutes scheduled for lectures and 35 for practical activities, although some flexibility was given to the professors to organize the time within and across sessions. Also, the experimental program benefited from a low number of students in order to facilitate the implementation of new teaching experiences. This number was limited to 25 students, since it was understood to be the reference for size of the groups to be formed under the programs adapted to the EHEA in practical activities (where the whole group is split in two groups).

The relevance of the subject in the Economics and Business Administration programs is justified by two main reasons. On the one hand, when the first official programs on Economics and Business Administration were implemented in Spanish universities (generally inside Law Schools), at the mid of the 20th century, the political and economic situation of the country demanded professionals with a deep knowledge of the specificities of Spain and the instruments of economic policy (Fuentes-Quintana, 1999). In this way, applied economic subjects emerged with not less strength than other core subjects such as Microeconomics, and Macroeconomics or Business Administration. This next-to-reality and applied-oriented approach was extended to other areas such as sectorial and international economics too. Consequently, the field of Applied Economics is the second largest among the university knowledge fields in Spain according to the number of teachers (it is only surpassed by Nursery). On the other hand, for several decades official programs in Economics and Business Administration were deeply interlinked: some universities have their two programs with common years, other ones considered them as just a single program with Economics and Business Administration as two itineraries of it.

But beyond these historical and institutional reasons for the role of the subject in the degree, the importance of the study of the Spanish economy is funded in the necessity that every student of an economics-related area has of knowing and understanding the reality where his or her professional skills will have to be applied. In their professional activities, students need to have a comprehensive knowledge of topics such as the ways that lead to economic growth or distress or the relationships between the European economy and the Spanish one. Such elements are essential to understand the environment where firms develop their activities and to be able to forecast future trends and design firms' strategies.

However, the valuable professional skills are not limited to a stock of knowledge or data, but also to other capabilities such as the ability to use data sources, write reports and to communicate using properly the economic reasoning and terminology.

Both knowledge and competences must be incorporated in the academic background of students. Then, the chosen methodologies must be focused on achieving both goals. Instead of trying to get those goals with just a unique methodology, there is a trend to combine traditional methodologies (based on knowledge assimilation) with participative activities (Imbernon, 2009) whose aim is to get a deeper understanding based on assimilation and discussion on working groups under the teacher supervision. The problem becomes to determine which activities can be more adequate to help the student to achieve each of the goals of the subject, making possible, at the same time, a proper assessment of their work.

3. The traditional methodologies

The main, and most traditional, methodology to teach Economics is the *lecture*. This method is widely used in Spanish universities (Ministerio de Educación y Ciencia, 2006) in the 'theoretical class'. Some advantages of this method are the following:

- It allows presenting to the student the information in an organized and clear way, making easier its comprehension.
- It allows remarking the key and basic points.
- It allows synthesising different information sources.
- It may increase students' motivation for the field.
- It allows teaching the contents to a large number of students in a shorter period of time.
- It can be easily coordinated with other methodologies that complement students learning.

In our framework, the aim of lectures is not to explain every aspect of the subject (as it was traditionally done), but to provide the student with a global perspective of the contents of the subject. Lectures allow highlighting the concepts and basic ideas in each lesson, and paying special attention to those aspects where the student may find special difficulties.

In this way, lectures continue being the departing point of the learning process for the student but are not the element that develops every aspect of the course. From them, the student must develop his or her autonomous learning study of all the topics that the subject covers. With the same purpose, the teacher can use the lectures to guide students on how to deal with the subject.

On its part, solving *exercises* are the traditional 'practical' activities of a subject of applied economics like Spanish Economy. They can have a quantitative nature or be focused in terms of reasoning and explanation. That is, the student faces a situation where he or she must deal with some economic data and must answer to some specific questions. Sometimes, it is required to put these answers in relation with some facts or trends that have been studied as part of the theoretical contents of the subject.

In our framework, solving exercises were also included in order to keep the practical and applied perspective of the subject. This use of exercises presents a double interest. On the one hand, they exemplify the theoretical contents and help to learn them; on the other hand, they help to develop the analysis skills of the students as well as their capacity to face situations by the use of the available tools, techniques and reasoning.

In the framework of exercise-solving, three different activities have been applied in our case:

- Collective activities. In this case, the teacher presents the exercise, remarks the information available and sets out the questions to be answered. After that, some time is given to the students to think about the exercise and to propose lines to solve it. Proposals are evaluated by the whole class and the teacher till the right procedure is agreed. The teacher then solves the exercise on the blackboard in order to guarantee that all students keep proper reference on how it must be solved.

- Activities that require the student, individually and voluntarily, to solve some exercises not solved in class. In this case, the student faces the exercise and tries to solve on his or her own. The final solution is later provided to the students to check their conclusions and results. The teacher is available at office hours in order to help the student with any doubt or difficulty.

- Activities where students, in groups of two or three people, solve exercises under the monitoring of the teacher. These exercises are later evaluated by the teacher and presented back to students in order to let them know their mistakes and deficiencies. Additionally, the evaluation is part of the final grade obtained by the student. It must be indicated that we evaluate this element highly positively. The evaluation supposes an incentive to solve the exercises adequately with the resources of the whole group. In the working group, students share doubts and questions that they present to their colleagues and learn from others. Finally, the teacher gets valuable feedback of the learning process that allows reconsidering some aspects of the class.

4. Participative activities and its implementation

With the aim that the students develop skills on analysis, handling of statistical databases and oral expression using the economic reasoning, three different activities were implemented along the experimental program.

- Write two economic reports on specific aspects of the Spanish economy, using data and documentary sources.

- Present, in a seminar setting, texts or articles that the teacher has previously selected about non-core aspects of the subject.

- Take part in a debate where the whole class participates. The debate focuses in current events of the Spanish economy which allow an analysis and discussion from different points of view.

It must be noted that in these three activities, students become the protagonists of their learning process, so they can be considered as student-centred methodologies. Additionally, they are group-activities, which can improve such learning (Bonals, 2000; Volet and Mansfield, 2006). Specifically, among the advantages of working in groups we find a deeper motivation of

students, higher levels of creativity, the development of their communication skills and their ability to dialogue and cooperate as well as to find agreement points even holding disparities on the personal points of view.

For these activities, we used the students groups created by the coordinator of the experimental program to be used in every subject of the course, in the understanding that the stability of the groups would improve the cohesion among students. There were six groups, five of them with four students and a last group with five students. This teams' size is quite common and effective for complex activities (Imbernón, 2009). From our point of view, and for the activities we carried out, the optimal size fits in the 3-5 range and the number of groups would range from 4 to 7, meaning that the activities are suitable for classes of 12 to 35 students (or 24 to 70 students if the whole group is split in two for practice learning, as it is common in Economics and Business Administration studies with a large number of students in each group).

The *economic report* writing requires that students do, in groups, short economic analyses where specific topics of the Spanish economy are studied in detail. Along each academic year, two reports were requested, one in each semester. Both of them have the same characteristics and requirements, but they were about different topics of the Spanish economy.

The aims of this activity were:

- To make familiar to the student with statistical and documentary data sources.
- To provide skills to write economic reports that comprehend dealing with information, describing it and explaining.
- To stimulate group-working.

The departing point was the election, by each group, of the economic aspect to work with. The teacher provided a list of alternatives (table 1 presents those offered the last academic year) in order to avoid cases where data were hardly available or had few interest in the framework of the subject.

<ul style="list-style-type: none"> • GDP • Gross value added structure • Labour productivity • Consumption • Saving • Investment • R&D expenditures • ITC expenditures 	<ul style="list-style-type: none"> • Public expenditure in education • Inflation • Interest rates • Trade imbalances • Financial account imbalances • Foreign direct investments • External openness • Real effective exchange rates 	<ul style="list-style-type: none"> • Immigration • Unemployment rate • Public expenditure • Social expenditure • Tax pressure • Public deficit • Public debt • Unitary labour cost • Wages • Poverty
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Table 1. Topics for the economic analysis

Once the topic was chosen, the group had to look for official databases with the Spanish, European or Regional information for the longer period of time

available. From these data, each group wrote a paper (10 pages maximum) containing:

- Data description: origin, definition, measurement units and explanations on how the data were collected.
- Data handling: how the series were treated (growth rates, indexes, etc) and design of those tables and figures that better help for the further discussion.
- Discussion: analysis and explanation of the economic reality that has been measured, how it has evolved and a comparison between two geographical areas (i.e. Spain in comparison to Europe or to a Spanish region). It was indicated that the discussion should be founded on the theoretical aspects of the subject, the references the teacher provided as well as some additional resources.

In order to guide students in this activity, along the year two sessions were dedicated to present the main official data sources in the classroom. In these classes, the characteristics and the use of the interface of the main Internet data sources with a national ([INE](#), the Spanish Statistical Office, and [Bank of Spain](#)), regional ([Centro Regional de Estadística de Murcia](#)), and European ([Eurostat](#), [Ameco](#), and the statistical annex of [European Economy](#)) coverage were shown to the students in the computers' room. In these special sessions some aspects on data handling were also explained. Specifically, we taught the students how to copy tables, images and text from PDF-format files, how to handle with data separated in columns in MS-Excel or how to manage decimal points (usual in international databases) and commas (the Spanish way of doing it). Besides, we explained them some easy procedures to detect and cancel outliers in the information and how to link series with different base-periods. Finally, an economic report in the style of the one required was made available to students as a reference of the requested task.

In order to guide the progress of the activity, deadlines were established to choose the topic and to present the report. Between these deadlines, two group-meetings with the teacher were scheduled. In the first meeting, the group had to present its working plan (focus, topics to deal with, information sources, etc) and discuss with the teacher the difficulties they have already found. In the second meeting, the group had to present a draft of the paper and discuss it with the teacher. Finally, once the report is delivered and evaluated, the teacher explains the grades in a third meeting where the aspects that need to be improved are remarked in order to promote a better job in the second report whose standards and requirement were higher.

The assessment criteria were made explicit to the students as a way to place them in a better situation to deliver work likely to fulfill the criteria (Brown and Gibbs, 1994). For the evaluation of the reports these criteria were:

- a) Presentation
- b) Inclusion of the requested aspects
- c) Internal coherence
- d) Proper application of concepts and procedures
- e) Expositive clarity
- f) Adequacy of data sources

From our perspective as teachers, the overall assessment of this experience is positive. It contributed effectively to get the aims we had. Besides, it is a realistic activity, since it covers all the stages that an economic report requires (data obtaining, handling information, discussion, conclusions). As an additional advantage over other type of papers, the fact that a long time series is required for a very specific topic makes improbable each report to be no more than a copy-and-paste of other people papers. Lastly, the workload for the teacher is limited, given that the reports are short and the scheduled meetings with the students avoid continuous visits to the teacher's office for too specific questions that in many cases could be solved by the students on their own with some additional work or discussion among themselves.

In the *seminars*, students presented and discussed texts in relation with the contents of the subject. The aims of this activity were:

- Promote the skill of analysis and summarizing, since the time available for presentation is limited.
- Develop communication abilities.
- Provide further knowledge of some topic to the students involved in each seminar, as well as to the rest of class as they were the audience of the seminar.

The students had available a list of texts to choose for this activity. If the number of students were large, these texts could be extracted from academic journals linked to the subject such as [Papeles de Economía Española](#), [Cuadernos de Información Económica](#), [Información Comercial Española](#), the [Economic Bulletin of the Bank of Spain](#) or the [Monthly Report of La Caixa](#). This would enlarge the variety of topics.

However, in the experimental project, since the number of students was low, we chose to select some chapters from the handbook of the subject (García-Delgado and Myro, 2009) not covered in the ordinary sessions. Specifically, the selected chapters were those about the individual productive sectors (agriculture, manufacturing industry, construction, energy, services, and financial services). Since the structure of all those chapters was similar, an advantage of this choice was that students agreed that there were not large differences in complexity among the different texts.

Once the texts were available, the date of the seminar was chosen on the basis of the program (to ensure that students' knowledge was enough to deal with the texts) and the workload required by other subjects. The duration of each seminar was 30 minutes plus some extra time for questions and answers, both from other students and from the teacher.

The monitoring tasks carried out by the teacher were done in two 30-minute meetings with each group. The first meeting had a preliminary character, setting out the basis of the seminar: how it should be done, what is expected from the students and what additional references can be useful. The second meeting took place a few days before the seminar in order to monitor the work done till that moment; in this meeting the students had to present a summary of the seminar and receive from the teacher the approval of the contents they had planned to present.

Every academic year, a seminar was scheduled and its evaluation was done in terms of:

- a) Expositive clarity
- b) Analytic and summarizing capabilities
- c) Structure and organization of the ideas presented

We find different reasons to consider favourable the experience with this activity. Firstly, it is surprising how students involve themselves in the assigned topic, asking for additional texts and information (this hardly happens with other topics and lessons, or even when the same topics are taught in a conventional way). Secondly, the seminar is a very good opportunity not only to develop their oral expression skills, but also to learn from their colleagues' mistakes and lines of improvement. Finally, guidance through the scheduled meetings provides some certainty to the teacher (and to the students involved) that the seminar will fulfil expectations even for the audience. To evaluate this activity, some feedback from the audience was collected, since it was thought that it could be a valuable reference on whether the objectives had been achieved.

By *debate* we label the confrontation of arguments, about current topics that allow easily different points of view. These were defended by the students organized in groups. The aim of this activity was to promote the student's ability on:

- Searching relevant information
- Working and thinking about any question from a critical point of view
- Defending publicly his or her ideas using economic reasoning

Every academic year one debate was organized where the whole class had to participate. In the two years of our experience, the subject of the debate was the state of the Spanish economy, highly conditioned by the economic crisis under way. Each group adopted (on random draft) the roles of:

- Journalists
- Bankers
- Firms
- Families
- Government
- Opposition

Students had to be informed to defend their position (common for each of the groups) in each moment using news media or any other reliable sources.

To carry out the debate the students moved to a classroom with movable furniture where the tables were placed according a U-shape configuration. Each group was identified with an indicative signal.

In the first round, each group had five minutes to defend the assigned role from any point of view (worries, responsibilities, policies needed to be adopted, etc.). Later, each group could address to any other group to criticize or support their arguments. As the class size allowed it, it was established that every member of the group must participate at least once. The teacher acted as moderator, establishing the order of panellists, avoiding the debate to fade out and/or refocusing questions that had appeared previously. The total length of the debate was scheduled in one and a half hours.

As in other activities, two meetings were scheduled with each of the groups in order to organize the debate. The purpose of the first meeting was to allow the students to present their research, problems and doubts. In the second meeting, the different groups had to present a summary of the arguments they were going to use. These arguments were passed to the rest of the groups in order to allow a better focusing on the dialectic confrontation.

Concerning the evaluation of the activity, it must be remarked that, from our point of view, it has been a nice and enriching activity both for students as for teachers. It must be noted that, although in the beginning some students were reluctant to participate because they did not share the assigned role, finally they were able to defend firmly the position of their group. Besides, among students the debate usually becomes hot when it is an interesting topic close to their interests. It usually emerges some collaboration among the members of the group and rivalry with other teams. Then, they assume as something personal the desire to get the best knowledge of the topic in order to 'compete' with other groups. Such motivation becomes highly useful to achieve the purpose of a deep learning of the subject. The main disadvantage is the difficulty to evaluate the students' work in this activity. Although it is possible to establish criteria linked to the aims of this activity (expositive clarity, organization of ideas, originality, critical capacities, etc), we found difficult to separately evaluate every single student even using the different criteria. This fact, joint with the collective character of the activity and the feeling that the differences were not large, moved us to provide a general evaluation of this activity for the whole class, although a personal evaluation can be done.

Table 2 shows how the different activities contributed to the students' workload. This table was delivered to the students at the beginning of the course, together with a detailed timetable of the activities planned in order to guide their work. The meetings and exams were the only activities with required attendance made outside class hours. As can be seen, in the traditional activities students' attendance to classes is a relevant part of the workload (around 40%); however, in the new participative activities dominate out-of-class work (more than 85%). The table also shows the time of preparation estimated for each of these latter activities. Specifically, each student should spend, on average, eight hours for the preparation of the seminar or the debate, and ten hours for each of the two economic reports. The seminars and the debate are presented in class hours (and hence require attendance to classes; the debate, with a duration of 1:30 hours, was scheduled in a session of 1:45 hours, and the seminars, with a duration of 35 minutes including questions, were scheduled in two sessions of 1:45 hours) while the economic reports were not publicly presented. The workload for the participative activities is completed with attendance to the meetings scheduled with the teachers (two meetings for the seminar, also two for the debate, and three for each of the two economic reports), with a duration of a half of an hour each of them; the preparation of such meetings by the student is also reflected in the table with a quarter of an hour for each meeting.

Table 3 shows the additional work that the new activities represented for the two teachers of the subject. As shown, the major part of the hours is devoted to meetings scheduled with the students. This is not surprising, given that the monitoring of all these activities is done through these meetings. In fact, only the economic reports require additional work for the teacher, which is connected

with the reading and evaluation of the reports. The workload, in any case, remains low taking into account the number and diversity of activities.

Obviously, the higher the size of the class the higher the teachers' workload unless such work is distributed by a higher number of teachers (which is likely when the whole group is split in two or more groups for practice learning) and/or a lower number of activities is made (for example, a single economic report instead of two, or a choice between the seminar or the debate). In our opinion, the size of the groups should not be increased over five members because, otherwise, difficulties in participation might appear and the tasks could slow down.

Activity	Attendance	Student's work	Total
Lectures (24 sessions)	28.00	48.00	76.00
Internet sessions (1 each semester)	3.50	1.75	5.25
Exercise solving (24 sessions)	14.00	20.00	34.00
Exercise solving (computer room)	1.75	1.75	3.50
Seminar (1st semester)	3.50	8.00	11.50
Debate (2nd semester)	1.75	8.00	9.75
Economic reports (1 each semester)	-	20.00	20.00
Scheduled meetings (2+2+3+3)	5.00	2.50	7.50
Exam preparation (2 exams)	-	50.00	50.00
Exam sessions (1 each semester)	5.00	-	5.00
TOTAL	62.50	160.00	222.50

Table 2. Student's workload (hours)

Activity	Hours
Economic reports (6 groups x 2 reports)	12.0
Scheduled meetings (6 groups x 10 meetings)	30.0
TOTAL	42.0

Table 3. Teacher's workload in participative activities (hours)

5. Students' view of the participative activities

In order to gather the opinion of the students on the innovative and participative activities described above, a survey was conducted after the second year of the experimental program. The survey was aimed to complete the perspective of teacher with that of students, on the understanding that both sides complement each other in providing a whole picture of the experiment.

The last academic year of the experimental program was 2009-10, and the exams finished in June 2010. The survey was carried on later, specifically on February 2011. The spell of time since the end of the experience may introduce some biases (for example, in the perception of the workload for each of the activities) as well as the impossibility to contact with those students that were out of University of Murcia in the framework of international mobility programs. But, at the same time, allows answers to be less influenced by the immediacy of the activities and less conditioned by the received marks. A random sample of

students of the same subject which did not participated in the experimental program was also surveyed in order to provide a comparison for the results.

The survey was anonymously responded by 56% of participants in the experimental program whose final remark was slightly superior to the one of the control group (7.2 points versus 6.8 over 10). Students were questioned about the interest of each of the topics of the subject from the perspective of the whole curricula, with the result that no important differences were detected between the experimental program participants and the control group. Consequently, we believe that results of the survey can measure adequately the students' view of the teaching methodologies we used.

Two sets of items were presented in the survey in order to know the evaluation of the different activities by the students as well as the achievement of the goals of the subject and the degree. A 5-points Likert scale was presented in order to facilitate an evaluation of their conclusions.

	Experimental program	Control group
Exercises solved by the teacher at class	3.8	3.4
Exercises solved by students at class	3.4	2.7
Economic report	3.3	3.3
Seminar	3.4	n.a.
Debate	4.5	n.a.

n.a. = non applicable (the students in this group did not develop the activity)

Table 2. Interest for students' formation of each of the activities (Likert scale 1=nothing, 2=few, 3=medium, 4=quite, 5=a lot)

	Experimental program	Control group
Exercises solved by the teacher at class	4.1	3.1
Exercises solved by students at class	3.5	2.7
Economic report	3.5	3.3
Seminar	4.2	n.a.
Debate	4.5	n.a.

n.a. = non applicable (the students in this group did not develop the activity)

Table 3. Did these activities increase students' interest for the subject? (Likert scale 1=nothing, 2=few, 3=medium, 4=quite, 5=a lot)

As shown in tables 2 and 3, the most valued activity is the debate (for students' formation as well as to raise the interest for the subject), followed by the exercises solved by the professor, probably due to the connection of exercises with the practical part of the exam. However, in terms of interest on the subject, the seminar is also evidenced as a valuable resource. Students in the experimental program value more exercise-solving activities (whether by the professor or the student) than the control group. A possible explanation of this result is that students in the control group rely more in the traditional learning process where lectures are the main reference for the exam, while students in the experimental program are aware that their learning process is not only based on them, so every element becomes more valuable.

Table 4 contains the students' evaluation on how the subject has helped to achieve 14 specific competences. This list of competences is the one that the Bachelor's degree in Business Administration (under the EHEA) aims to promote in students. It can be divided in two groups. Items 1 to 5 are those specific of the subject, while 6 to 14 are general to the degree.

	Experimental program	Control group
1. Identify and value the importance of globalization and economic integration for the Spanish economy	3.7	3.5
2. Know the main characteristics of the recent evolution and the current state of the Spanish economy as well as its future challenges	4.0	3.9
3. Identify and establish relationships between production and the institutional characteristics of the Spanish economy and the firms	3.6	3.3
4. Write a basic report on the Spanish economy and interpret messages, data and information from the main documentary sources	3.9	3.7
5. Use properly data sources of the Spanish economy and ability to elaborate indexes which describe it and allow to do forecasts	4.1	3.4
6. Analytic and synthetic skills	3.4	3.4
7. Ability to search and analyse information from different sources	3.9	3.3
8. Skills for teamwork	4.2	2.9
9. Skills for personal relations	4.0	2.9
10. Critical and autocritical capacities	3.7	2.8
11. Skills for self-learning	3.9	3.5
12. Skills to adapt to new environments	3.8	3.1
13. Creativity	3.7	2.8
14. Sensitivity towards social issues	3.2	3.1

Table 4. Did the activities developed in the subject help you to develop the mentioned competences? (Likert scale 1=nothing, 2=few, 3=medium, 4=quite, 5=a lot)

A general view of these results reveals that the differences between the two groups of students in the competences connected with the subject (1 to 5) are not as large as in those which are general of the degree (6 to 14). In general, all the specific competences of the subject are well achieved (from the students' point of view) and those students that participated in the experimental program think to be quite better trained for using and handling with data sources than their counterparts. The most important differences between the two groups of students arise in those competences that the degree assumes as necessary in the formation of a student beyond the definition of any of the subjects of the program. As we can see in table 4, the skills for team-work, the developing of critical capacities and creativity are quite better achieved thanks to the set of methodologies used in the experimental program. Moreover, this was not at the cost of obtaining lower marks in the subject because, indeed, the average mark obtained by the students in the experimental program was slightly superior to

that obtained by the rest of students (as mentioned above, 7.2 points versus 6.8 over 10).

6. Conclusions

The teaching methodology matters. This broadly documented conclusion has guided our efforts in designing a new learning and teaching scheme for the subject Spanish Economy we taught during two years in the context of an education innovative program promoted by the University of Murcia for undergraduates in Business Administration.

This new scheme recognizes that future professionals in the area of Economics and Business are expected to have not only a good baggage of knowledge in their area, but also aptitudes and skills related to its capacity to elaborate reports and analysis, handle with data and documentary sources and communicative abilities using economic terms and reasoning. Knowledge, aptitudes and skills then comprise the set of competences to be developed by our students and to which the design of the subject must respond.

To deal with this objective, our methodological approach has combined a variety of techniques of different nature, some of them with a large tradition in the teaching of Economics and other social sciences, and others of a more participative nature where learning has taking place in the context of groups of students. Specifically, we have respected the tradition of lectures and exercises and combine them with three innovative activities consisting on the elaboration of economic reports, the presentation of a seminar and the participation in a debate. This paper describes in detail the implementation of these techniques, their objectives and our appraisal of them.

Our overall perception, based on our students' opinion, their grades in comparison to students outside the innovative program and our own reflections, is that these techniques have effectively contributed to a deeper learning. To this outcome, students' motivation has played a primary role. The connection of the proposed activities to reality, the focus in aspect of interest and actuality, the atmosphere of competence and collaboration among students, and teachers' tutoring and guidance have been the driving forces of our experience. Besides, other skills recognized as valuable in the professional environment, are quite better achieved thanks to the use of participative methodologies.

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