

## Active methodologies in the university classroom: Motivation towards learning in accounting disciplines

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### **Abstract**

*Currently, the student is the centre of the teaching-learning process, focusing studies on the competences that the recent graduate should possess and enhancing the student's know-how.*

*Thanks to the evolution of Information and Communication Technologies (ICT), active learning methodologies have been developed, since, through virtual scenarios and mobile digital devices, teacher-directed activities are reduced in favour of independent or collective activities.*

*Although the concept of motivation is broad, most authors who study the learning process differentiate between intrinsic and extrinsic motivation. Intrinsic motivation allows a strong involvement with the content, from which new ideas can be connected to previous content, data can be related to conclusions and the logic of arguments can be examined. Extrinsic, on the other hand, is related to getting good grades, gaining recognition from others, avoiding failure, etc.*

*The use of active learning as a teaching methodology in accounting subjects is very useful, because its use improves student attention and motivation, in addition to experiencing cognitive gains, specifically in topics related to critical thinking, problem solving and decision-making.*

*The aim of this study is to empirically validate student motivation towards learning through the implementation of active methodologies. For this purpose, a descriptive quantitative research has been carried out in a group of students of the Faculty of Economics of the University of Valencia, during the academic year 2020-2021. In order to objectively quantify the assessments of this group, the Learning Strategies and Motivation Questionnaire (LSMQ) was used, which was completed anonymously in a digital format.*

**Keywords:** *ICT, motivation, active methodologies, university education.*

## **Introduction**

The educational consequences of the COVID-19 pandemic are well known and have affected the entire world. More than 100 countries have closed their educational institutions for months, leading to the massive use of online technology to enhance distance learning (Wang et al., 2020).

Moreover, the current pedagogical approach of universities places the student at the centre of the teaching-learning process, focusing studies on the competences that the recent graduate should possess, promoting the student's know-how, initiative and autonomous learning, as set out in the Dublin descriptors (Joint Quality Initiative, 2004). As Borghesi (2005) states, to educate is to turn knowledge into experience and information into life.

The set of methods, techniques and strategies that place the student at the centre of learning, promote teamwork and encourage a critical spirit, leaving aside the rote processes of repetition of the contents taught in class; this is what is called Active Methodology (Sher et al., 2020).

The techniques that can be used in the classroom following the principles of active methodologies are diverse and can be used in both face-to-face and non-face classes, examples of which are: co-assessment or peer assessment, screencasts and videos, Serious Games (SG), problem solving through problem-based learning, creating projects with project-based learning, and encouraging critical thinking through Thinking-Based Learning (BTL).

The use of active learning as a teaching methodology in accounting subjects is very useful, mainly because its use improves student attention and motivation, and allows the student to experience cognitive gains, specifically in topics related to critical thinking, problem solving and decision making (De Lange et al., 2010; Ruhanen, 2020).

Therefore, the aim of this study is to empirically validate student motivation towards learning through the implementation of active methodologies. To this end, this methodology has been implemented in an undergraduate course at the Faculty of Economics of the University of Valencia, during the 2020-2021 academic year.

## **Motivational aspects in the learning process**

Although the concept of motivation is broad, most authors who study the learning process differentiate between intrinsic and extrinsic motivation, stating that different motivational orientations will have different consequences on learning (Donolo et al., 2004).

Intrinsic motivation is defined as the interest generated by the activity itself, which is seen as an end in itself and not as a means to other goals (Deci and Ryan, 1985; Ryan and Deci, 2000). It allows for a strong engagement with content, from which new ideas can be

connected to previous content, data can be related to conclusions and the logic of arguments can be examined. It is therefore related to constructive and deep learning (Chiang, 2021; Vos et al., 2011).

Extrinsic motivation, on the other hand, is defined as that which leads the individual to perform a certain action to satisfy other reasons that are not related to the activity itself, but rather to the achievement of other goals. In the teaching-learning process, they are usually related to obtaining good grades, achieving recognition from others, avoiding failure, etc. This type of motivation is often associated with the behaviourist concept of learning and is related to the perceived usefulness of the task, expectations in the achievement of the reward and/or the attractiveness of the incentive (McClelland et al., 1976; Rockich-Winston, 2017).

Another variable linked to motivation is task appraisal, since a positive appraisal of tasks leads students to become more involved in their educational process (Pintrich, 2004; Wolters et al., 2017). Thus, when academic tasks are perceived as interesting, important and useful by students, they will be more willing to make efforts towards their goal, and will be able to self-regulate their learning (Bong, 2001).

## **Research methodology**

To achieve the objective proposed in this work, a descriptive quantitative research was carried out. To objectively quantify the students' evaluations, we used the Strategies and Motivation for Learning Questionnaire (MSLQ), which the students completed anonymously in a digital format.

This questionnaire has been chosen because it has a solid theoretical structure, which has been adapted to different populations, maintaining or reinforcing its factorial structure (Curione and Huertas, 2016; Giuliano, 2021; Jackson, 2018; Lee et al, 2010; Yilmaz, 2017).

Given that the aim of our work is to provide empirical evidence on student motivation towards learning based on the implementation of active methodologies, we have analysed three scales, as shown in Table 1.

The target population of our study is 81 undergraduate students enrolled in the Faculty of Economics of the University of Valencia, during the academic year 2020-2021.

To measure the reliability of the scale and check the internal consistency of all indicators, Cronbach's alpha coefficient was used. The items analysed in the adaptation and validation study showed good psychometric behaviour, offering reliability values between 0.69 and 0.81 in the different dimensions.

**Table 1. Motivation scale**

| SUB-SCALE            | ITEMS   |
|----------------------|---|
| Intrinsic motivation | VI1 In class I prefer to receive material that really challenges me, as I learn new things.                                     |
|                      | VI16 In class, I prefer to receive material that increases my curiosity, even if it is difficult to learn.                      |
|                      | VI22 What I find most satisfying in class is to understand the content as deeply as possible.                                   |
|                      | VI24 When I have the opportunity, I choose tasks from which I can learn, even though I am not sure if I will get a good return. |
| Extrinsic motivation | VE7 Getting good grades is what satisfies me the most at the moment.  |
|                      | VE11 At the moment, the most important thing for me is to get good grades to improve my average.                                |
|                      | VE13 I would like to get better grades than my classmates.  |
|                      | VE30 I want to do well in class because it is important to me that others recognise my abilities.                               |
| Value of the task    | VT4 I believe that what I learn in this subject (class) I will be able to use in other subjects.                                |
|                      | VT10 I consider it important to learn the content of this subject (class).  |
|                      | VT17 I am very interested in the content of this subject.   |
|                      | VT23 I find the content of this course useful because it allows me to learn.  |
|                      | VT26 I like the content of this subject.  |
|                      | VT27 Understanding the content of the subject is important to me.   |

## Results

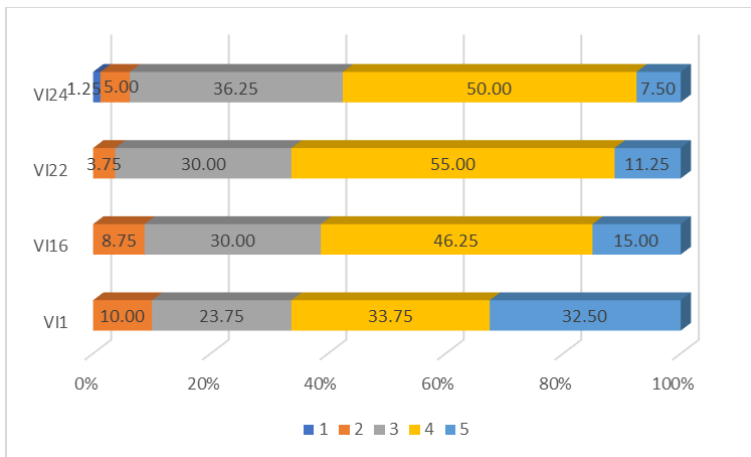
### Intrinsic motivation

The results obtained show the interest generated by the activities themselves, which are seen as an end in themselves and not to achieve other goals. As can be seen in Fig. 1, the highest value (66.25%) refers both to the materials that students prefer when studying, agreeing (33.75%) or strongly agreeing (32.50%) that they prefer materials with which they can learn new things (VI1), and that the most satisfying thing in the course is to try to understand the content as thoroughly as possible (VI22) (55% agree and 11.25% strongly agree). Furthermore, it is worth noting the high degree of agreement among participants that they prefer materials that arouse their curiosity, even if it is difficult to learn (VI16) which reaches 61.25% (46.25% agree and 15% strongly agree).

As for the lowest rated aspect by students, VI24 When I have the opportunity in this class, I choose the course assignments I can learn, even though I am not sure if I will perform well;

while more than half of the students (57.5%) said they agreed or strongly agreed with this statement, about 36% of the respondents remained neutral and only one respondent said he strongly disagreed with the statement, which was not the case for any other variable.

It is observed that all the variables related to intrinsic motivation are highly valued by the students and in a homogeneous way in all of them, the arithmetic mean of the valuations is close to 4 in all the variables.

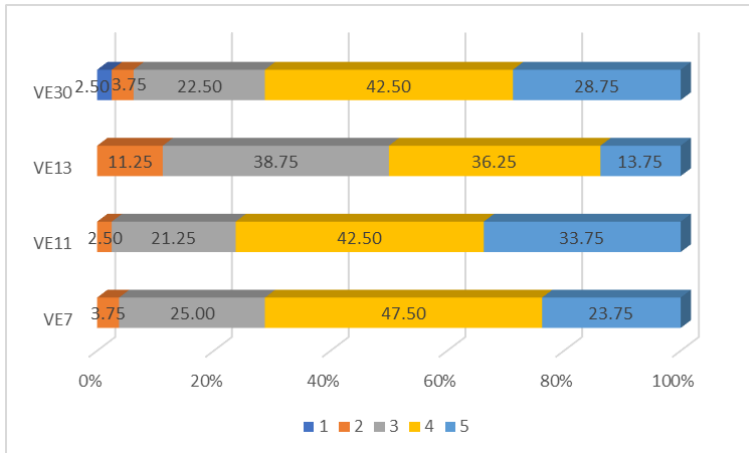


1: do not agree at all, 2: slightly agree; 3: neutral; 4: agree; 5: strongly agree

Fig. 1 Intrinsic Motivation

### Extrinsic motivation

When analysing the motivation that leads the individual to perform a certain action to satisfy other reasons that are not related to the activity itself, but rather to the achievement of other goals, we obtain, as can be seen in Fig. 2, in general a broad agreement of the respondents with all the related variables. 76.25% of students consider it most important to achieve a good grade point average (VE11). 71.25% agree (47.50%) or strongly agree (23.75%) that the most satisfying thing is to get a good grade in the subject (VE7). In equal weight (71.25%) they value social recognition (VE30), agreeing (42.50%) or strongly agreeing (28.75%) that it is important for them to show their skills to family, friends, employer or others.



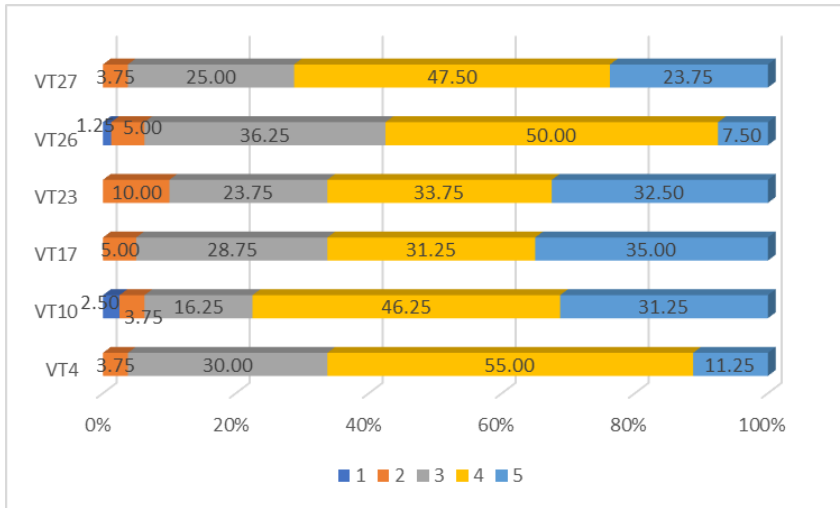
1: do not agree at all, 2: slightly agree; 3: neutral; 4: agree; 5: strongly agree

Fig. 2 Extrinsic Motivation

Significantly, 38.75% of the respondents remain neutral to the statement I want to get better grades in this class than most other students (VE13), with 11.25% disagreeing to this statement. This indicates that 50.00% of the respondents would agree (36.25%) or strongly agree (13.75%) with the statement, while for the other 50.00% it is not a priority in their learning.

### Value of the task

Task value relates to students' interpretations of the difficulty of the task and their ability to perform it (Eccles et al, 1983), so the task value variable analyses beliefs about the intrinsic importance of a task and its interest and usefulness to the subject. Fig. 3 suggests that students consider the tasks performed in the course to be important.



1: do not agree at all, 2: slightly agree; 3: neutral; 4: agree; 5: strongly agree

Fig. 3 Value of the task

Regarding the perceived usefulness of the task, 77.5% agree or strongly agree that it is important to learn the content of the subject (VT10) and 71.25% consider it important to understand the content of the subject (VT27). 66.25% agree or strongly agree that they are very interested in the content of the subject (VT17), that the content of the subject is useful because it allows them to learn (VT23) and that they could use what they have learnt in other courses (VT4). Finally, 57.50% agree or strongly agree that they like the content of the subject (VT26), and it is noteworthy that this item is the lowest rated aspect, with more than 36% of students being neutral.

## Conclusions

Given the situation experienced in the last academic year, it is important to provide empirical evidence on the results obtained from the use of active methodologies in the area of accounting. To this end, active teaching tools have been validated using the Strategies and Motivation for Learning Questionnaire (MSLQ) based on the perceptions of undergraduate students.

Active learning has been found to be widely applicable in higher education and significantly motivating and therefore enhances learning. Students perceive that the use of these methodologies captures their attention and awakens their interest in the topics presented. By having to generate their own models, they ask questions and seek answers, rather than waiting for the teacher to solve them.

The students surveyed significantly agree with the statements that the activities carried out increase their motivation (intrinsic and extrinsic) for the subject, their understanding of the

content, and that they attach a high value to the tasks. Motivation is the engine that drives them to engage in an activity and is an indispensable element to activate, initially, the factors involved in the acquisition of competences.

They also point out that these activities, taken as a whole, favour the relationship between different concepts, help to understand business reality and the importance and need for correct economic-financial information in companies. In addition, they improve group work skills, encourage a positive attitude towards the subject, awaken curiosity and interest in accounting, and boost interest in continuing to study subjects related to accounting.

The increase in the information available to the students through the sharing of information, explaining the tactics used, leads to the generation of new ideas and positions analysed from different angles. Trying to decide solely based on true premises is no longer an option for them, as they are now able to formulate questions and solve problems more clearly and precisely, collect and evaluate information effectively and, on the basis of this, propose reasoned solutions.

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