

DEVELOPMENT AND ASSESSMENT OF COMPETENCES THROUGH PARTICIPATIVE LEARNING METHODOLOGIES FOR CORPORATE ACCOUNTING (OPERACIONES SOCIETARIAS)

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Abstract. This paper explains the use of a participative learning methodology, in order to highly improve the development of the specific and general competences of the Corporate Accounting subject. Creating high quality multiple choice questions require expertise of the contents. The ulterior quiz triggers the aim of the students to get a better result than their classmates. Specific competences are developed as the students need to learn widely the contents of the subject to formulate the multiple choice questions. Besides, these specific competences are assessed when formulating the questions and answering later multiple choice questions in a quiz. In addition, general competences as responsibility and time management are improved and assessed through the work delivered by the students.

Keywords: Corporate accounting, assessment, participative learning, competences.

1. INTRODUCTION

The Declaration of Bologna has introduced important changes with the aim of consolidating the European Higher Education Area (EHEA)¹. As pointed out by Camacho “in the current educational and social context, new strategies are needed to improve teaching quality in order to **increase student motivation and learning**. Also, there is a need to fill the gap between real practice and academic theory, which is a concern of the universities in relation to attempting to adapt to the EHEA” (Bachiller & Bachiller, 2015).

Corporate accounting analyses and studies in depth the Spanish Royal Legislative Decree 1/2010, of July 2nd, approving the consolidated text of the corporate enterprises act, and the corresponding accounting practices. This subject is included in the compulsory itinerary for the Marketing and Commercial Management and Business Management and Entrepreneurship Degrees, within the Business area of the Faculty of Social Sciences at the European University of Madrid. The subject awards 6 European Credit Transfer and Accumulation System (ECTS) for the student and is taught on a 6 hours per week basis.

This paper is organised as follows: an objective section explaining the objective of the

¹ <http://www.ehea.info/members.aspx>

learning activity, followed by the methodology section where it is explained all the steps of the methodology used for the activity. Next, the results section where the results obtained throughout the activity are explained. Finally, conclusions obtained from the activity carried out.

2. OBJECTIVE

This paper's main objective is **to develop and assess** the main **specific competences** of the subject, providing new ways of making students achieve a more in depth understand of the subject by using a participative learning methodology. The activity is also designed to develop and evaluate the **general competences** of the subject such as responsibility, time management and results orientation. It is necessary to consider the competences "in their broadest sense, allowing for gradation of abilities or skills. It is not used in the narrower sense identified solely on the basis of a 'yes/no' assessment"².

Also developed is the competency of argumentation, reasoning out the answers, which "is essential in education as it is a competence that students need to develop to get on in their daily life and transmit their thoughts, defend their ideas, maintain open and understanding dialogs with others, etc."(García-Barrera, 2015)

Finally, the purpose of the present article is to provide a **practical experience** where the competency model responds to the need to articulate the student's education with job training. It is not meant addressing mechanically the labour market requirements, but the students, whose will act as society servers, transcending the individuals. This requires providing knowledge, helping in the development of the skills, skills, habits, procedures and favourable social attitudes and behaviours to responsibility, the mystique of work, self-confidence and ethics to be observed. (Perdomo, 2015).

3. METHODOLOGY

3.1. Presentation session

In order to correctly perform the activity, the group received a **fully detailed explanation** of the whole activity in a session where the main purpose was clearly stated: development and assessment of the specific and general competencies, using a participative learning methodology.

A total of nine groups of a maximum of three students where set by the students themselves, and no student were allocated to any of their former "friendly" groups.

In the explanation session, groups were instructed to organize themselves in order to have ready in 15 days, counting from the day after the explanation session, **10 test questions** for two specific units from the syllabus of the subject. All groups had to do the test questions over the same units of the syllabus: increase of stock and reductions in stock.

² <http://www.ehea.info/article-details.aspx?ArticleId=110>

3.2. Questions definition

3.2.1. Multiple choice questions

Students could decide whether the questions are purely theoretical, mixture of theory and practice or fully practical. But they were told to produce multiple choice questions only, with 4 possible answers and only one correct answer among them. True or false questions were not permitted.

3.2.2. Assessing questions: accuracy and complexity

Furthermore, students were warned about how the questions were going to be assessed. After having reviewed the correctness of the questions, the professor sent back incorrect questions for reviewing by their own authors. This step may be repeated as many times as necessary, but every repetition will mean a lower final mark for the group. Every mistake committed will be reflected in the final mark of the activity.

Additionally, the complexity of the questions was factored into the grading system. If the question included complex concept relations, numbers, or a condensed statement, it was highly assessed. Meanwhile, “copy and paste” questions, simple or linear questions, questions with clear correct answers, was negatively marked.

3.3. Contest session

After having produced the 10 questions, groups sent their work in electronic format, through the Virtual Campus. No paper-copy was required, ensuring the sustainable approach of the activity.

Once the questions were reviewed and corrected by the professor and the authors, the groups were ready for the contest session where, after delivering the questions, groups asked to one another the questions prepared. Correct answers scored 1 point and wrong answers deducted 0.25 points.

3.4. Scoring

The group obtained their final mark from the following tasks:

- **Formulating the questions** after having studied and analysed the theory and the practices of the corresponding units, thus, achieving the specific competences. When assessing the question correctness and complexity the group can score up to 4 points of the total final mark (10 points). Furthermore, the group had to manage their time in order to study, produce and deliver the questions within the set period. So responsibility and planning are also required (general competences).
- Up to 4 points can be achieved in the contest session, when the groups **answer correctly** to all the questions made by other groups.
- The remaining 2 points can be allocated to the **group receiving the highest score**. Thus, result orientation is guaranteed.

3.5. Ending satisfaction test

Finally, in order to obtain feedback from students and make them part of the whole process, students have been asked to rate the following items on a scale of 1 to 5 where 1 is strongly disagree and 5 totally agree.

1. You have been involved throughout the whole activity.

2. An easy and deeper learning has been achieved thanks to this activity, comparing with traditional master classes.
3. The specific competencies of the units included, i.e. content analysis and its practical application has been satisfactory.
4. Besides, general competencies as responsibility, time management, and result orientation have been also satisfactorily developed.
5. In general, the activity is positive.

4. RESULTS

4.1. Formulating the multiple choice questions

Surprisingly, almost all the students delivered on time the 10 questions required through the Virtual Campus. Only two of the groups did not deliver the questions.

Considering the attending groups the questions were quiet diverse. Some questions required wording clarification and/or information provided completion, in the wording. Some other questions needed adjustments, as the figures provided were mistaken or missed. Finally, other types of questions needed a reformulation of the wording due to possible misinterpretation after reading them.

Students were asked about how they organised themselves in order to elaborate the questions. Some answered that they divided the questions among the members of the group, working independently when formulating and together in a final review meeting with all members of the group. Some others worked together throughout the whole process, from the formulation to the final review (general competences). But all students answered that the process of formulating good quality multiple choice questions was not easy and required a deep analysis and learning of the theory and practices (specific competences).

4.2. Quiz session

The quiz session was exciting and very intense. Students were excited with the idea of being asked by their classmates and asking them in return. Additionally, the idea of getting the 2 extra final points pushed them to commit as little errors as possible.

After the quiz session, the students were asked if they had enjoyed the quiz, and their answer was a categorical 'aye'. They congratulated themselves of being capable of answering the correct answers. And they outlined the deeper learning reached, using this participative learning methodology.

5. CONCLUSIONS

The results of the survey are depicted in the chart below.

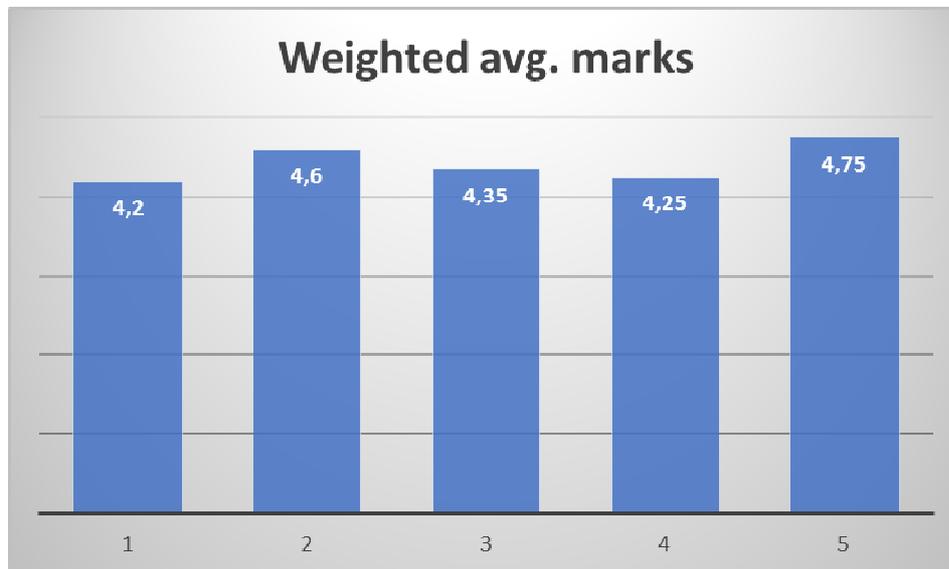


Figure 1. Survey's weighted average marks.

As shown in figure 1, all students attending the activity, evaluated very positively the participative learning methodology used.

In accordance with the marks obtained by the groups, an in depth learning, analysis and understanding of the topics covered had been reached by the students. It is of importance to note that two of most difficult units of the syllabus were chosen for this activity.

Despite of the previous results, some improvements to the whole process can be carried out for the future. For example, a clear punctuation scale in the formulation and quiz steps or the use of a digital learning platform.

REFERENCES

- Alcalá, D. H., García, V. A., & Pueyo, Á. P. (2015). ¿Trabajamos para evaluar las competencias básicas? estudio de la percepción del profesorado sobre la implantación en los centros educativos. *Revalue*, 3(1)
- Bachiller, P., & Bachiller, A. (2015). A teaching experience in business management and administration: An empirical analysis with finance students. *Innovar*, 25(55), 185-194.
- Castro, C. M., & Balcázar, A. T. (2015). Aprendizaje basado en proyectos para el desarrollo de competencias. *Revista Iberoamericana de producción académica y gestión educativa*.
- Cebrián, F. J., & García, R. L. (2015). Actividades de evaluación continua-correlación con la calificación de la prueba final y efecto sobre la calificación final evidencia en administración y dirección de empresas. *Revista Complutense De Educación*, 26(2), 241-254.
- DECLARACIÓN, D. B. (1999). Declaración conjunta de los ministros europeos de educación.
- El Espacio Europeo De La Enseñanza Superior, EDUCATIVA, F. E. I. (2015). Manual de procedimientos de la coordinación general de formación e innovación educativa.
- García-Barrera, A. (2015). Importancia de la competencia argumentativa en el ámbito educativo: Una propuesta para su enseñanza a través del role playing online. *RED. Revista De Educación a Distancia*, 15(45)
- García-Ruiz, M. R., & Fernández, N. G. (2015). El aprendizaje cooperativo en la universidad. Valoración de los estudiantes respecto a su potencialidad para desarrollar competencias. *Revista Iberoamericana Para La Investigación y El Desarrollo Docente*, 4(7)
- Hamodi, C., Pastor, V. M. L., & Pastor, A. T. L. (2015). Medios, técnicas e instrumentos de evaluación formativa y compartida del aprendizaje en educación superior. *Héctor Monarca 14 Políticas, Prácticas y Trayectorias Escolares*, 146.
- López, M. C., Pérez-García, P., & Rodríguez, M. J. (2015). Concepciones del profesorado universitario sobre la formación en el marco del espacio europeo de educación superior.
- Miñano, María del Mar Camacho, Grande, E. U., Ezama, D. P., & Menéndez, M. J. R. (2015). Recursos multimedia para el aprendizaje de la contabilidad financiera en los grados bilingües. *Educación XXI*
- Perdomo, M. R. S. (2015). Algunas innovaciones docentes en la formación por competencias. Tomo 19

Vivel-Bua, M., Fernández-López, S., & Lado-Sestayo, R. (2015). Innovación docente con one minute paper: ¿afecta al rendimiento académico? *Revista Electrónica De Investigación Educativa*, 17(2)