



RESEARCH

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**CHALLENGE BASED LEARNING AS A PROFESIONAL LEARNING
MODEL. UNIVERSIDAD EUROPEA AND COMUNICA +A PROGRAM
CASE STUDY**

*Challenge Based Learning como modelo de aprendizaje profesionalizante.
Caso del programa Universidad Europea con Comunica +A*

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ABSTRACT

The traditional paradigm where the professor is the base of the learning and the only source of knowledge, it has been moved by new models that place the students in the center of the process through an experiential learning where they have to face real-world challenges where the teacher is just a provider during the process. This is the Challenge Based Learning (CBL) new framework, and the key point of this research is to prove if this model improves the academic results, skills and employability of our graduates in Advertising Communication Degree. Following this updating educational approach, Social Science and Communication School at European University of Madrid launched a program based on CBL in partnership with a prestigious advertising agency: Comunica +A. It is about finding out if this educational model is positively valued and accepted by the students. To achieve this goal, a research was developed consisting in a bibliography review and a descriptive analysis of the questionnaires fulfilled by the participants in the program. The objective was to collect the student's perception about the usefulness and effectiveness of the program regarding academic results, skills and employability. In conclusion, the hypothesis is confirmed and consequently the

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foundation for a new learning model (CBL) has been set. This model is aligning student's competences with the new market's needs.

KEY WORDS: challenge based learning - coeducation - professional competence - active learning - Universidad Europea - advertising - employability - skills.

RESUMEN

El tradicional paradigma educativo, donde el profesor es centro del aprendizaje y proveedor de conocimiento, ha sido desplazado por nuevos métodos que ponen al alumno en el centro del proceso a través del aprendizaje experiencial, situándole ante casos y desafíos reales para que genere soluciones, donde el profesor pasa a ser un facilitador del proceso. Dentro de esta nueva visión se enmarca el *Challenge Based Learning* (CBL), centro de esta investigación que indaga acerca de si su utilización ayuda a mejorar los aspectos académicos, competenciales y de empleabilidad de los egresados en Publicidad. En esta línea de modernización de los procesos educativos, la facultad de CC. Sociales y de la Comunicación de la Universidad Europea de Madrid puso en marcha un programa basado en CBL en colaboración con la prestigiosa agencia de publicidad Comunica +A. Se trata de averiguar si esta metodología educativa es valorada e incorporada positivamente por los estudiantes. Para conseguirlo, se lleva a cabo una investigación consistente en una revisión bibliográfica y en un análisis descriptivo de los cuestionarios cumplimentados por los estudiantes participantes, para recabar su percepción sobre la utilidad y eficacia del programa en los aspectos académicos, competenciales y de empleabilidad. Como conclusión, la hipótesis queda confirmada, con lo que se sientan las bases para un nuevo paradigma educativo (CBL) que permitirá adecuar las habilidades de los estudiantes a las nuevas necesidades del mercado.

PALABRAS CLAVE: aprendizaje basado en retos - coeducación - competencia profesional - aprendizaje activo - Universidad Europea - publicidad - empleabilidad - competencias.

CHALLENGE BASED LEARNING COMO MODELO DE APRENDIZAGEM PROFISSIONALIZANTE. CASO DO PROGRAMA UNIVERSIDADE EUROPEIA COM COMUNICA + A

RESUME

O tradicional paradigma educativo, onde o professor é o centro da aprendizagem e provedor de conhecimento, foi deslocado por novos métodos que põem ao aluno no centro do processo através do aprendizado experimental, situando-os ante casos e desafios reais para que gere soluções, onde o professor passa a ser um facilitador do

processo. Dentro desta nova visão enquadra o Challenge Based Learning (CBL), centro desta investigação que indaga sobre se sua utilização ajuda a melhorar os aspectos académicos, habilidade dos graduados na Publicidade. Nesta linha de modernização dos processos educativos, a faculdade de CC Sociais e da Comunicação da Universidade Europeia de Madri colocou em andamento um programa baseado em CBL em colaboração com a prestigiosa agencia de publicidade Comunica + A. Se trata de averiguar se esta metodologia educativa é valorizada e incorporada positivamente pelos estudantes. Para consegui-lo, se utiliza uma investigação consistente em uma revisão bibliográfica e em uma análises descritiva dos questionários concluídos pelos estudantes participantes, para coletar sua percepção sobre a utilidade e eficácia do programa nos aspectos académicos, competências e de empregabilidade. Como conclusão, a hipóteses fica confirmada, com as bases assentadas, para um novo paradigma educativo (CBL) que permitirá adequar as habilidades dos estudantes as novas necessidades do mercado.

PALAVRAS CHAVE: aprendizagem baseado em retos - coeducação - habilidade profissional - aprendizagem ativo - Universidade Europeia - publicidade empregabilidade - competências - reto.

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1. INTRODUCTION

Access to huge amounts of information, the application of new technologies or the rise of collaborative dynamics make it necessary to continuously adapt the learning techniques and activities that allow this adaptation to this changing scenario and its consequences in the labor market, combining academic knowledge and real application (Escamilla, 2008; Perrenoud, 2004 and 2012; Zabala and Arnau, 2007). Working with real projects improves motivation and that results in a better student learning (Terron, Blanco and Velasco, 2017), at the same time, they lead them to develop themselves in a professional environment by bringing them closer to their future professions (Gallego, Terrón, Lagioia, and Valleni, 2015).

These new educational paradigms shift the center of the traditional teacher-based system to new student-centered systems, thus creating more participatory, committed

students and a more personalized training (Zavirov, 2013), feeling their work more important and with more sense of responsibility (Velasco, Gómez de Merodio and Terrón, 2017).

In this line, a new learning method based on challenges: the *Challenge Based Learning* (CBL), based on the use of problems as the focus of the educational activity (Boud and Feletti, 2013), is a scalable and applicable method with few change needs and based on an idea: To make learning relevant (Johnson and Brown, 2011).

CBL is a new educational framework based on experiential learning created by the American company Apple in 2008 and which seeks to generate solutions to real problems of a local or global nature, while building a learning dynamic where they blur the boundaries between student and teacher, empowering everyone in a process of acquiring skills and knowledge, encouraging peer training to develop real actions that solve real problems (Cheung, Cohen, Lo and Elia, 2011). The teacher acts as a facilitator of the process instead of as a knowledge provider (Hmelo-Silver, 2004).

This process of active participation in training is a very effective tool to involve and motivate students born in the digital age and help them manage a method of solving real current problems through critical thinking (Przybysz-Zaremba, Rimkūnienė, Vasilienė -Vasiliauskiene and Butvilas, 2017). On the other hand, it improves the integration and relationship of concepts (O'Mahony, 2011).

CBL advocates a discussion about the traditional division between academic training and vocational training while aiming at a stable collaboration between the two (Schmidt & Gibbs, 2009) and in the same sense it forces a reorientation of relations among all actors (educational organizations, employers, students and legislators) involved in higher education of the future (McWilliam & Taylor, 2001).

1.1. CBL basic structure

CBL is based on several key elements that define and identify it:

There is no difference between student and teacher: all participants are, at the same time, trainers and students; everyone learns and everyone shares responsibility and work in training; the teacher is a collaborator in learning and the students have the participation of experts that help them improve their professional capacity.

Training is not limited to classrooms: they are integrated with other actors such as employers, associations or other sectors of society.

It is the students who choose and inspire the contents of the training, thus making the process much more inclusive and motivating. To do this, they select a challenge or dare (*challenge*) they consider relevant and exciting for them at that time.

Students acquire the necessary skills demanded by employers. They are given a space of critical and creative thinking. The objective is not limited only to the final product but to the entire training and work process until reaching that result.

The use of technology throughout the process is critical and allows a new learning experience to be generated.

1.2. Phases of the CBL process

The learning process, in summary, includes: giving the “*big ideas*”, developing the essential questions, the challenges, activities and guiding questions, solutions and publication of the process (Johnson & Adams, 2011). The detailed process is listed below:

Phase 1: Involvement

General Idea or “*Big Idea*”: a broad and relevant concept for students and for society in general.

Essential Question or “*Essential Question*”: allows to contextualize and make the General Idea more personal and operational.

Challenge or “*Challenge*”: is a concrete answer to the Essential Question. It must be a real solution and applicable to the problem detected.

Phase 2: Research

Guiding Questions or *Guiding Questions*: they are generated by students and help categorize and prioritize, thus organizing the learning process.

Guiding Activities or *Guiding Activities*: methods and tools that allow to answer the guiding questions.

Analysis of what has been learned in the definition and response to the questions raised.

Phase 3: Performance

Solution: proposed solution raised in an argued, structured and reasoned manner. There may be infinite solutions for the same problem.

Implementation: implementation of the solution before a real situation and public.

Evaluation: measurement of the effectiveness of the proposed solution and the process carried out.

The whole process generates a series of evidences that are used for the evaluation of the activity, as well as for the creation of a portfolio by the student. It is important to document the entire process to allow the generation of information that allows the analysis and subsequent reflection with the students, thus making the process really rich and relevant for them.

1.3. CBL Advantages

It increases motivation and helps to achieve the educational goals of students (Baloian, Breuer, Hoeksema, Hoppe & Milrad, 2004) and, likewise, improves the overall results of students (Luis and Marrero, 2013).

It favors the integration and adaptation of students to the university world from the beginning, avoiding exclusion (Cancino, 2018).

It helps students in the acquisition of self-directed learning (Savery, 2006).

It is an open system that allows the responsibility for training and learning to be shared between the teacher and the student and in which, in addition, professional experts participate who contribute to the integral formation of the student.

It builds a true relationship between the academic world and the professional world, fostering a greater capacity for students to solve problems (Finkelstein et al., 2010), thus generating an immediate impact on society.

It generates an appropriate, correct and concrete use of new technologies as collaborative tools (Premsmith, Wannapiroon & Nilsook, 2016) throughout the process, for research, information, presentation, analysis and communication of the proposed proposals. In addition, it develops an interaction between technical skills and emotional development (Trujillo; Fennel; Marín; Romero & Campos, 2015).

1.4. Relevant cases in other educational institutions

The use of this methodology has been demonstrated as adequate in numerous research cases within the higher education educational system, such as in the area of medicine (Carrión *et al.*, 2015), engineering (de los Ríos *et al.*, 2015; Morales *et al.*, 2015), and even for the training of university teachers (Benítez *et al.*, 2013). Internationally,

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there are also cases in the United States (Rice and Shannon, 2015) or in China (Xu and Liu, 2010).

For example, we can cite the case of MIT, with its program called *Ideas Global Challenge*. This provides a space to find solutions to global problems. Its structure allows the development of prototypes and concrete proposals and the implementation of these solutions during the time span of one year. Students receive training in innovation, management of engineering projects, entrepreneurship and business incubators. The winning team of this annual competition receives a prize of \$15,000 (MIT, 2015).

Another case is found at Aalborg University. This institution offers an international program called *Problem Based Learning Model*. In this program the student has the opportunity to work for four semesters in external companies, facing real problems during this time, which allows them to develop skills to give creative solutions to everyday professional situations (Aalborg University, n.d.).

Continuing with relevant reference cases, at Montana State University they have a program whose objective is to evaluate the effect of the *challenge based learning* system on the motivation and results of the first year students of Physical Sciences, who during the development of the program must design and implement an environmental project that benefits society. The proposals are presented in audiovisual format. The implementation lasts six weeks during which the questions raised are answered and solutions to the challenge are proposed. The results indicate that this strategy increases the motivation of the students and maintains the levels of achievement of objectives even with workloads exceeding 50% to students who did not follow the program. 53% of students believe that the knowledge acquired with this challenge is important for their professional future (Swiden, 2013).

At the University of Connecticut, its *Experiential Learning Collaborative* offers students the opportunity to acquire leadership and team management skills while developing projects for companies, institutions and non-profit organizations. Students assimilate and apply managerial skills to real business situations and *network* with the leaders of the industry and the sector in which they work. The projects involve a close collaboration between the client and the student teams that are guided by teachers and / or mentors with experience in the casuistry of the related professional sector. One of the *partners* related to the program was the company Henkel, whose manager Brad Wade indicated at the end of the final presentations that he was surprised by the level of preparation and professionalism reflected by the students who participated in the project and who had received the training *experiential based on learning*. On the other hand, one of the participating students said that “the program really creates trust knowing that you can analyze a business, discover problems, provide solutions and present all this to a client” (Hall, 2018).

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Another reference case is that of Harvard University and its *President's Challenge*. This program is developed through the *Harvard Innovation Lab*, and its purpose is to help students formulate solutions to complex problems through the confrontation and examination of important issues of today. The program is divided into two phases: the first one, consisting of the presentation of proposals by the teams; in a second phase, the jury issues a verdict on the projects that will continue, resulting in each team receiving funding to develop their proposal. The winning team receives a final prize of \$410,000. The project is focused on specific areas such as educational innovation, solutions for health, energy and environmental issues, economic development, sustainable employment and connected cities (Harvard Innovation Lab, 2015).

To finalize this review for some cases of successful implementation of CBL, we can cite the implementation they do at the Monterrey technological University. In this university they carry out several projects based on CBL with surprising participation figures: a total of 50,000 students, more than 3,000 professors and with more than 1,800 involved projects developed with CBL. Each *challenge* was carried out by groups composed of 15 students. Students participating in the challenges positively assessed the following items of the satisfaction survey they completed at the end of them: interaction, ability to face real-life challenges, professional contact, innovation and application of concepts. One of the most relevant is the so-called "Redesign of the distribution network of Holland ice cream in Mexico". The challenge is to diagnose the present situation of the company and propose ways to improve the distribution system. After solving the challenge, the most developed competences and that became, therefore, clear benefits of the program, perceived by the students, were: a deeper knowledge on the subject, the development of critical thinking, leadership capacity, tolerance to frustration and oral as well as written communication (Membrillo-Hernández *et al.*, 2018).

1.5. CBL as an applied educational methodology

For all the aforementioned, the Faculty of Social Sciences and Communication of the European University of Madrid (UEM), in the 2016/2017 academic year, chooses this model because it is an active paradigm that meets the learning needs of the students of the four areas of the faculty (company, education, the legal issues and communication) since it is a methodology that brings the company to the classroom and that brings the classroom to the company. In addition, it is the methodology that best responds to the requirements of accrediting agencies in Spain.

In turn, the Spanish advertising agency Comunica + A (C + A) immersed in a process of cultural transformation and with the aim of gaining notoriety and attracting talent, signs a collaboration agreement with the European University to launch a novel project in the Spanish university education. The project consists in the creation of a dual

training program, linking the company and the university as centers of experiential training and approach to the professional reality based on CBL. For all the aforementioned, the Faculty of Social Sciences and Communication of the European University of Madrid (UEM), in the 2016/2017 academic year, chooses this model because it is an active paradigm that meets the learning needs of the students of the four areas of the faculty (company, education, the legal issues and communication) since it is a methodology that brings the company to the classroom and that brings the classroom to the company. In addition, it is the methodology that best responds to the requirements of accrediting agencies in Spain.

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2. OBJECTIVES

The fundamental purpose of the project is to achieve greater integration with the professional world of students in the advertising area, which is linked to the strategic objective of the faculty (the classroom in the company and the company in the classroom) and with that of the agency itself (talent acquisition), so that students can meet the real needs of the labor market, thus reducing the distance between teaching activities and professional challenges in the same learning environment. The premises on which the program is built are: to receive training from the agency department heads in their own offices according to a training program previously established by the EMU, work with real *briefings* of the agency's clients and obtain a double evaluation (*feedback*) by teachers of the area of knowledge and professionals of the agency.

Given this learning environment, the present study investigates the following hypothesis: the use of the CBL methodology helps to improve the academic, competence and employability aspects of future graduates in Advertising. From it, the following objectives follow:

Objective 1: To verify that the program brings students closer to professional reality.

Objective 2: To verify that students can meet the professional requirements of a real client.

Objective 3: To verify that the program facilitates the integration of theoretical and practical training within a professional environment.

3. METHODOLOGY

The methodology that has been developed to implement this program has been framed in the CBL academic model, implemented in the Faculty of Social and Communication Sciences of the UEM, since it is the methodology that prepares students to face real challenges and that reflects the work environment of the 21st century (digitalpromise.org, 2017). The CBL project carried out by the Communication department of the European University of Madrid and the advertising agency Comunica+A has been carried out so far in two editions: a first edition in the 16/17 school term and a second in the 17/18 school term. The program, in both editions, has the same premises (as it has been exposed in section 1): to receive training from the agency department heads in their own offices according to a content program that has previously been established by those responsible for the communication department of the university, to work with real *briefings* of the agency's clients and obtain a double evaluation by teachers in the area of knowledge and professionals of the agency. Therefore, and following the CBL methodology, the *big idea* or general idea would be the professionalization of the students, the *essential question* would be: How do students solve a communication problem of an advertiser?, the *challenge* or dare would be for students to give a campaign response to this communicative problem posed by the agency by the hand of an advertiser, and the *assessment* or evaluation (fundamental step in the CBL methodology) that would be double since the students receive the evaluation of the teachers and also of the professionals of the agency, the latter being the one that culminates the program with a tangible reward in the form of paid university practices in the agency for the best qualified students. From the analysis of the results of the first phase, a series of improvements are made that were incorporated in the second phase, in a process of continuous improvement whose objective is to maximize the development of professional skills.

First edition (16/17 school term): in October 2016, the EU communication department and the advertising agency C+A design the program, which will respond to the objectives set out in section 1, and is set out in the following phases:

Phase 1. Information and selection of candidates.

1. Presentation and motivation talk to students in the advertising area of the university.
2. Selection of candidates according to criteria agreed with the agency (proposal to make the program itself viral). A selection of 14 participants is made, out of a total of 25 applications. The 14 participants are organized in pairs according to their relationships and/or affinities.

Phase 2. Program development.

1. The program consists of six training talks (one Tuesday every 15 days, from 1:00 p.m. to 4:30 p.m.) with a central theme (*retail marketing, branded content* , BTL

actions, customer services, digital advertising, budgets and ROI) led by the directors of the agency's departments, plus a real *briefing* of a client.

2. The students prepare for a week a strategic and creative solution that responds to the *briefing* raised by the client agency (it is at this stage where the students generate their *guiding questions* that organize their learning process).
3. The students have a *debrief* session with three professors of the department (specialized in the content that the students have received in the agency session). The teachers advise, give correction and presentation guidelines so that the students incorporate it into the presentation they will carry out in the agency (this phase would be, in the CBL methodology, *the guiding activities*).
4. The students attend the subsequent session, which is divided into three parts (next content session, more presentation by students of the solution to the *briefing* raised in the previous training and, finally, *feedback* of the work done).

Phase 3. Completion of the program. After the last session of content and resolution of *briefing*, there is a meeting between those responsible for the program in the agency and those responsible for the program in the university and choose the four best students, who will perform a paid internship in the agency (this phase corresponds to the action phase of the CBL methodology).

After the first edition, a questionnaire is passed to the participating students, with a total of 12 questions with closed answers, and a rating from 1 to 5, with 1 being the lowest value and 5 the highest. The questions are designed according to the following areas: academic area (integration with the training content of the degree), competence area (transversal competences), employability area (proximity of the program to the professional-profession competitiveness in the market); In addition, a space is left for students to detail 3 strengths and 3 areas for improvement and, finally, an additional item is opened so that the student can assess their overall satisfaction with the program from 1 to 10.

Once analyzed the students' questionnaires, the comments of the speakers-directors of the agency's departments and the comments of the professors, those responsible for the program, both by the agency and the university, set out to design the next edition (17/18) and the following changes are included: a professional tutor of the agency will be appointed by each of the participating groups to improve the *feedback* and follow-up, participation is opened to students of the marketing degree for the project to gain in the transversal of knowledge, the selection of groups will be directed (students from the branch of creativity, strategy, marketing and from different courses will be mixed), a single real *brief* will be launched at the beginning of the program and work will be done on it in all sessions, the talks will consist of the training session plus a tutoring meeting. At the end of the program, all the groups will present their final proposal in front of an examining board composed of the representative of the brand on which the students

and C+A professionals and two university professors work. Therefore, the program is as follows:

Phase 1. Information and selection of candidates.

1. Presentation and motivation talk to students in the advertising and marketing area of the university.
2. Selection of candidates according to criteria agreed with C+A (proposal to make the program itself viral). A selection of 16 participants is made, out of a total of 30 applications. The organization of the groups (4 components each) is done under the criteria specified in the previous paragraph.

Phase 2. Program development.

1. The program consists of six training talks (one Tuesday every 15 days, from 1:00 p.m. to 4:30 p.m.) with a central theme (accounts & *planning*, digital creation, *retail* marketing, BTL, budgets and ROI) led by the directors of the agency's departments. During the first session in C+A, the *briefing* on which students will work throughout the program is launched and each group contacts its professional tutor.
2. Students, during the fifteen days among sessions, work on the objectives and solutions proposed by the *briefing* and are in contact with their professional tutors (it is at this stage where students generate their *guiding questions* that organize their process Learning). Two days before the next session, students should send their presentations to the tutors so that they can review them together in person.
3. Students attend the subsequent session, which is divided into two parts: a. next content session, b. meeting with the tutors to correct ideas and approaches (at this time and according to the CBL methodology, *the guiding activities would be carried out*).

Phase 3. Completion of the program or phase of action in the CBL methodology. Fifteen days after the last content session, a final session takes place in which the four groups present their proposal to the following examining boards: representative of the client, representatives of the agency and representatives of the university professors. Students have 20 minutes to raise and develop their idea/strategic communication plan. At the end of the presentations there is a meeting among the members of the examining board and, depending on a previously agreed rubric, *feedback* is given to each of the groups and the group that best responds to the *briefing* and has contributed the idea that the customer likes the most is chosen. As in the previous edition, and as a result of the program, each member of the winning group receives paid internships at the agency.

4. RESULTS

The questionnaire that was passed to the twenty-nine students who were an active part of the project (one student from the second edition left the program for personal reasons), is composed of three distinct areas: the academic area, the area of skills and

the area of employability. For each of these areas, 4 specific questions were formulated, whose statistical results are detailed below.

With regard to the academic area, in figure 1 we can observe a clear tendency towards the rating “quite”, which is equivalent to a score of 4 out of 5, that is, a high evaluation grade by the students. It should be noted that 31% of them indicate that the program has helped them “a lot” and 51.7% “enough” to improve their oral and written presentations for the subjects of the degree. It should also be noted that the item related to the improvement of knowledge and understanding of concepts related to the degree has obtained a rating of “quite” in 72.4% of cases. As aspect of improvement, an item stands out where said program has not had the desired impact. Specifically, 48.3% of the students point out that the program has helped them to improve only “something” their grades in the subjects of the degree.

Finally, to say that the academic area obtains a global average of 3.9, a rating that places it in a very positive assessment. This allows us to conclude that academic development acquires very important support with the implementation of programs, such as the one analyzed in this research, where students complement academic content with the implementation of real cases, which increase the level of knowledge and other academic objectives of the advertising profession.

Table 1. Analysis of the academic area of the questionnaire.

ACADEMIC AREA	HOW THE COMMUNICA +A PROGRAM HAS HELPED YOU TO IMPROVE YOUR/ YOUR:	ANY	VERY LITTLE	SOMETHING	QUITE	MUCH
	Knowledge and understanding of related concepts of the Degree	0%	0%	10.3%	72.4%	17.2%
Grades in the subjects of the Degree	3.4%	13.8%	48.3%	34.5%	0%	
Oral and written presentations for the subjects of the Degree	0%	3.4%	13.8%	51.7%	31.0%	
Knowledge acquired in class	0%	0%	17.2%	58.6%	24.1%	
Half	3.9					

Source: Own elaboration based on research data.

With regard to the area of competences, we can confirm (figure 2) that the valuation “enough” has been the most punctuated for all the items included, followed closely by the one “a lot”. Note that 41.4% score with a 4 out of 5 aspects such as the improvement that the program has meant for them in their ability to receive criticism, make arguments, meet tasks and deadlines, and improve the work environment, as well as in the organization and distribution of tasks.

The area of competences obtains a final overall grade of 3.8, therefore, being at the top of the respondents' valuations, which reflects that students have incorporated the invaluable importance of the development of skills related to the profession into their experiential background, without which, job placement would be difficult to achieve.

Table 2. Analysis of the area of competence of the questionnaire.

AREA OF COMPETENCES	HOW THE COMMUNICA +A PROGRAM HAS HELPED YOU TO IMPROVE YOUR CAPACITY:	ANY	VERY LITTLE	SOMETHING	QUITE	MUCH
	To make and receive criticism and your ability to argue	0%	13.8%	34.5%	41.4%	10.3%
	Objective planning, set deadlines, specify and sort priorities and organize by objectives and evaluate your evolution	0%	17.2%	13.8%	34.5%	34.5%
	If you meet deadlines and tasks, your involvement in the work and your orientation towards the quality of the works presented	0%	13.8%	17.2%	37.9%	31.0%
	In fulfilling tasks and deadlines, improve the work environment, organization and distribution of tasks	3.4%	13.8%	13.8%	41.4%	27.6%
	Half	3.8				

Source: Own elaboration based on research data.

Regarding the area of employability (figure 3), also the score mostly obtained in all items has been that of 4 (“quite”). We highlight as a highly relevant point that the respondents have scored “a lot”, in 55.2% of the cases, the item that measured the usefulness of the knowledge obtained through the program at the time to put them into professional practice, as demanded by the market. As an improvement point, the item linked to the usefulness of the networking (network of contacts) achieved in the program in the future professional career of the students that although it obtains 44.8% of “enough”, is also valued only with a “something” in 31% of the occasions.

The employability area is the one that obtains a better overall assessment of the three areas analyzed, with a final global score of 4 out of 5. Taking into account that the employability factor is, perhaps, the most relevant when it comes to the fact the students get a palpable utility of the program in their professional future, it is very valuable that their final qualification has produced such a high result.

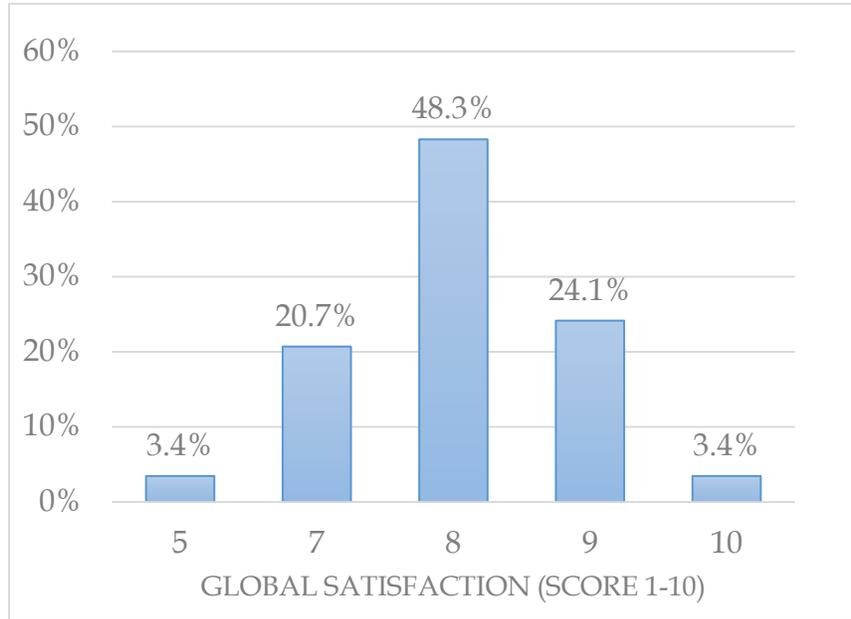
Table 3. Analysis of the employability area of the questionnaire.

EMPLOYABILITY AREA	HOW THE COMMUNICA +A PROGRAM MEASURES:	NOTHING	VERY LITTLE	SOMETHING	QUITE	A LOT
	It has helped you improve your ability to conduct and successfully pass personal selection interviews	10.3%	6.9%	27.6%	41.4%	13.8%
	It gives you greater ease of being hired than before having done it	0%	10.3%	13.8%	41.4%	34.5%
	To what extent do you think that the knowledge obtained in the COMUNICA +A program is useful in the professional practice demanded by the market?	0%	0%	6.9%	37.9%	55.2%
	Do you think that contacts (networking) made in the program of COMMUNICA +A can help you in your future professional career	3.4%	10.3%	31.0%	44.8%	10.3%
	Half	4				

Source: Own elaboration based on research data.

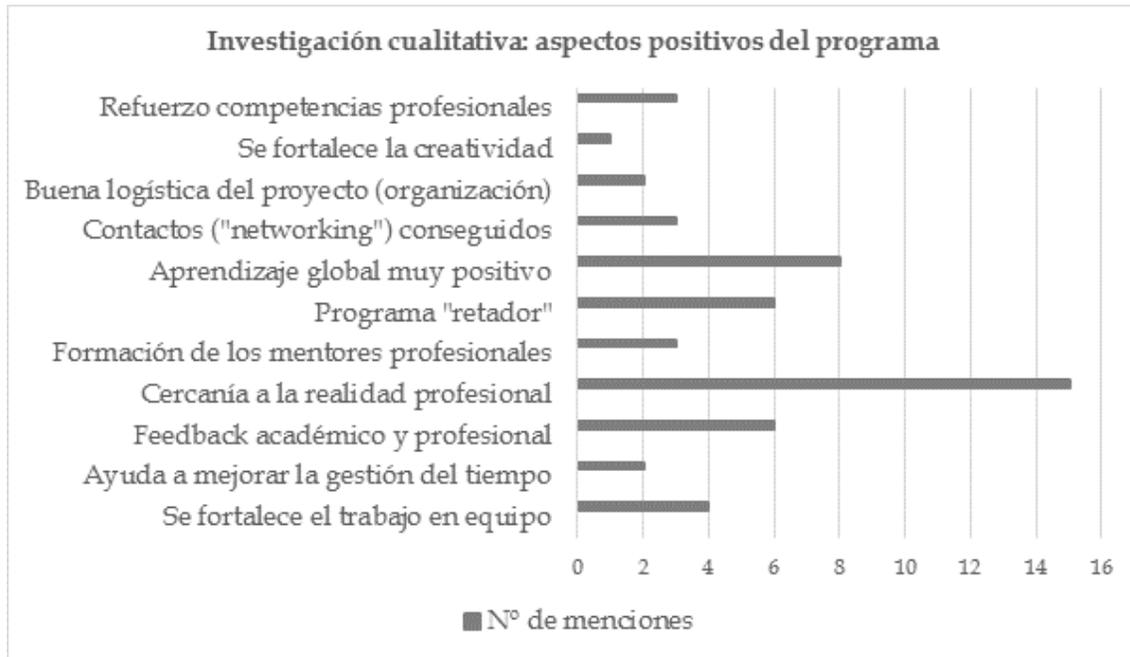
Finally, our statistical study ended with the evaluation of the overall satisfaction of the participants, who have produced an average of 8 out of 10, also taking into account that the value 8 obtained 48.3% of the answers. This data means to obtain a very positive

result of the program that, accompanied by the qualitative analysis that was carried out, has allowed us to evaluate not only the benefits of the program but also its areas of improvement.



Graph 1. Overall satisfaction with the program.
Source: Own elaboration based on research data.

Among the questionnaires completed by the participating students, they were asked to provide three positive aspects that, in their opinion, stood out from the program. Once the comments were analyzed, the following results were obtained in the “positive aspects” section of the survey:



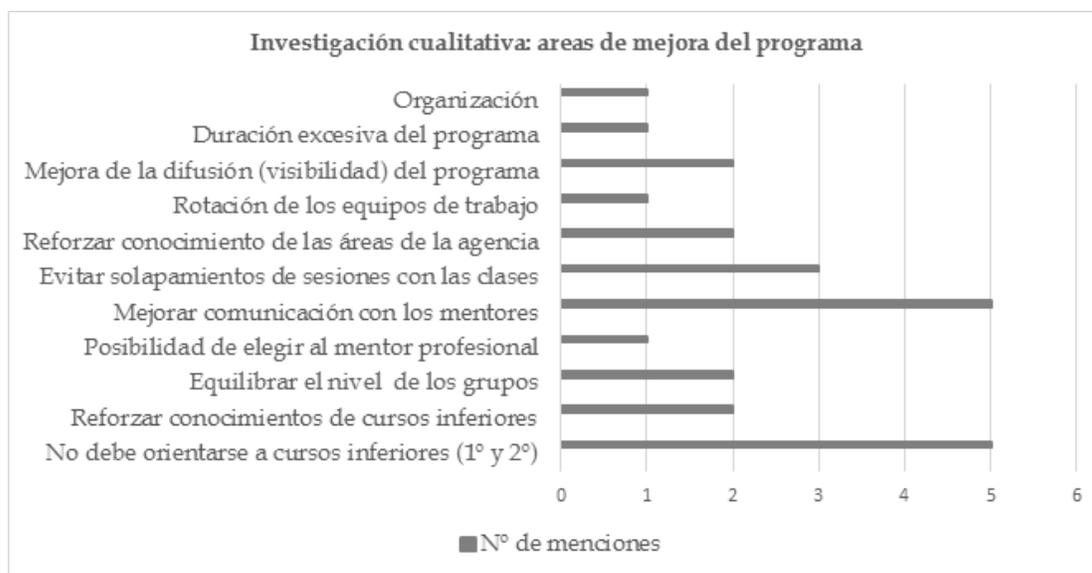
Graph 2. Number of mentions in the field of positive aspects of the program.
Source: Own elaboration based on research data.

The most repeated result with great difference over the rest of the opinions is the “closeness to professional reality” (15 mentions), while in second place “very positive global learning” (8 mentions) and thirdly, with the same number of mentions, the items “challenging program” and “academic and professional *feedback*” (6 mentions each).

In a second block, the rest of the items appear with a lower number of mentions (between 1 and 4 mentions): “teamwork” (4 mentions), “reinforcement of professional skills” (3 mentions), “*networking*” (3 mentions), “improvement of time management” (2 mentions) and “strengthens creativity” (1 mention).

Also it is possible to comment that the good organization of the program obtains 2 mentions.

As aspects of improvement pointed out by the students in the questionnaires, we highlight the 5 repetitions of the item “improvement of communication channels with mentors” and the item “should not be directed to lower courses”. In a second place, the item “avoid overlaps with the class schedule” appears with three repetitions, while with two repetitions we find the items “improvement of the visibility of the program”, “reinforcement of knowledge of all areas of the agency”, “balance of the level of knowledge of the groups” and “reinforcement of knowledge for lower courses”.



Graph 3. Number of mentions in the field of aspects to improve the program.
Source: Own elaboration based on research data.

5. DISCUSSION

Employability and proximity to professions (as reviewed in the introductory section), is one of the objectives of the strategic plan of the Faculty of Social Sciences and Communication of the EMU and, therefore, it is a priority for their teachers who are convinced that their commitment to students, goes through training them for a real world, in a competitive environment, in which they must be able to lead the sociocultural and digital transformation.

The communication department of the university accepts the challenge of using the CBL methodology with students of the degree in advertising thanks to the help of the Spanish advertising agency C+A, convinced that it can help the students to obtain their academic knowledge, their competence areas and, of course, their future employability.

Once the results of the research carried out have been analyzed, we can undoubtedly affirm that the CBL helps in the approach of the professional world to the academic world, and it improves the employability of the students participating in the program, as it had been stated in objective 3, and the students testify with the highest rating of the program (4 out of 5) and with the highest number of repetitions in the qualitative assessment of the program (15) in the statement “proximity to professional reality”. Likewise, we can observe that, in the competence aspects, the program carried out under the CBL methodology, helps students to receive criticism and to fulfill the tasks in the estimated times, competences that will be demanded in the labor world, so We can

infer that objective 2 set in this investigation is also met. On the other hand, within the academic area, the majority of students (72.4%) value very positively the reinforcement that the program makes of the knowledge of their future profession and, with this, affirmation, we would consider objective 3 of the investigation met.

Undoubtedly, one of the aspects that ratifies the usefulness of the methodology to increase the employability of the students of the degree in advertising, is that in each of the two editions, the students who have participated in the program and have done the internships have received a job offer from the heads of the human resources department of C+A (two students in the first edition and one in the second edition) (it should be noted that, so far, of the second edition only two students have been able to do the internship, since the other two are going to start them next October). Therefore, we can also deduce that the CBL program and methodology have helped C+A achieve talent detection and training according to its processes and corporate culture.

All of the above allows us to connect the results obtained in our CBL project with similar previous experiences studied in this article since it fully coincides with the literature review of the previous success cases that have been carried out in point 1.5 of this research. In this review, the outstanding benefits that the students perceived as resulting from participation in CBL-based programs were: leadership, approach to the professional world, improvement of oral and written communication skills, deeper knowledge about the topics addressed in the challenges, practical application of concepts and tolerance to frustration. In addition, CBL has shown as a program easily applicable to different areas of knowledge and scalable to a large number of students and, therefore, with significant growth potential even internationally due to its implementation in the most important universities of the world.

As a result of the success of our CBL program, the Faculty of Social Sciences and Communication has implemented and developed a new project called *Challenge Based School*, in which all CBL-based projects are accommodated in every and each one of the areas of knowledge of this faculty, such as legal and political sciences, education and humanities, business, marketing and, of course, communication.

Everything concluded so far leads us to validate our hypothesis and infer that the model can be replicated to other institutions and other areas of educational specialization. Finally, to say that we are already working on an improvement plan for the third edition, resulting from the analysis carried out in this article, which includes aspects such as optimizing the organization of the sessions in such a way that the class schedule is not modified, improve the visibility of the program and inspect whether the participation of first and second year students is an appropriate option to the objectives of the program.

6. REFERENCES

- Aalborg University (s.f.). *Global-Management*.
<http://www.en.aau.dk/education/master/operations-innovationmanagement-msc-in-tech/specialisations/global-management>
- Baloian, N., Breuer, H., Hoeksema, K., Hoppe, U. & Milrad, M. (2004). *Implementing the challenge based learning in classroom scenarios*. Proceedings of the Symposium on Advanced Technologies in Education, 4.
https://pdfs.semanticscholar.org/f4da/54660cbd763d9d3376aac9c7ba320cb99cde.pdf?_ga=2.191035561.263935819.1571150268-2057572188.1571150268
- Benítez, A. & García, M. (2013). Un Primer Acercamiento al Docente frente a una Metodología Basada en Proyectos. *Formación Universitaria*, 6(1), 21-28. Recuperado de https://scielo.conicyt.cl/scielo.php?script=sci_arttext&pid=S0718-50062013000100004
- Boud, D. & Feletti, G. (1998). *The Challenge of Problem-based Learning*. London. Kogan Page.
- Cancino, R. (2018). El PBL (Project Based Learning): El caso de la Universidad de Aalborg. En A. Villa Sánchez. (Ed.), *Tendencias actuales de las transformaciones de las universidades en una nueva sociedad digital* (pp. 57-70). Vigo, España: Universidad de Vigo.
- Carrión, C. Soler, M. y Avmerich, M. (2015). Análisis de la Validez de Contenido de un Cuestionario de Evaluación del Aprendizaje Basado en Problemas. Un Enfoque Cualitativo. *Formación Universitaria*, 8(1), 13-22. doi: <http://dx.doi.org/10.4067/S0718-50062015000100003>
- Cheung, R.; Cohen. J.; Lo, H. & Elia, F. (2011). *Challenge Based Learning in Cybersecurity Education*. In Proceedings of the 2011 International Conference on Security Management. world-comp.org. Las Vegas, Nevada, USA.
- De los Ríos, I., López, F. & García, C. (2015). Promoting Professional Project Management Skills in Engineering Higher Education: Project-Based Learning (PBL) Strategy. *International Journal of Engineering Education*, 31(1), 184-198.
- Digital Promise (2017). *Powerful Learning*. Recuperado de <https://digitalpromise.org/wp-content/uploads/2018/08/2017-Digital-Promise-Annual-Report.pdf>

Agüero Pérez, M. M.; López Fraile, L. A. & Pérez Expósito J.
Challenge Based Learning as a professional learning model.
Universidad Europea and Comunica +A program case study

Efrén Mora, L. C. & González Marrero, A. M. (2013). Real object mapping technologies applied to marine engineering learning process within a CBL methodology. *Procedia Computer Science*, (25), 406–410. doi: <https://doi.org/10.1016/j.procs.2013.11.051>

Escamilla, A. (2008). *Las competencias básicas. Claves y propuestas para su desarrollo en los centros*. Barcelona: Graó.

Gallego Ceide, A.; Terrón López, M. J.; Lagioia, R. & Valleni, C. (2015). *RPAS from cradle to flight: a project based learning experience*. Recuperado de <http://hdl.handle.net/11268/4218>

Hall, C. & Fernandez, L. A. (2018). UCONN Grad Students Gain Valuable Global Knowledge by Partnering with Henkel. Recuperado de <https://www.business.uconn.edu/2018/06/20/uconn-grad-students-gain-valuable-global-knowledge-by-partnering-with-henkel/#>

Harvard Innovation Lab (2015). *President's Challenge Topics*. <https://i-lab.harvard.edu/experientiallearning/presidents-challenge/president%E2%80%99s-challengetopics>

Hmelo-Silver, C. E. (2004). Problem-Based Learning: What and How Do Students Learn? *Educational Psychology Review*, 16(3), 235–266.

Institute of Education Sciences (2010). Effects of problem-based economics on high school economics instruction. Recuperado de https://ies.ed.gov/ncee/edlabs/regions/west/pdf/REL_20104012.pdf

Johnson, L. & Adams, S. (2011). *Challenge based learning: The report from the implementation project*. Austin, Texas: The New Media Consortium.

Johnson, L. & Brown, S. (2011). *Challenge Based Learning: The Report from the Implementation Project*. Austin, Texas: The New Media Consortium. Recuperado de <https://www.learntechlib.org/p/49837/>

McWilliam, E. & Taylor, P. (2001). Rigorous, Rapid and Relevant: Doctoral Training in New Times. In B. G., TW Maxwell & Peter Shanahan (Ed.), *Doctoral Education and Professional Practice: The Next Generation?* (pp. 229–246). Armidale: Kardoorair Press.

Membrillo-Hernández, J. et al. (2018). Challenge-based Learning: The Case of Sustainable Development Engineering at the Tecnológico de Monterrey, Mexico City Campus. *International Journal of Engineering Pedagogy*, 8(3), 137-144.

Agüero Pérez, M. M.; López Fraile, L. A. & Pérez Expósito J.
Challenge Based Learning as a professional learning model.
Universidad Europea and Comunica +A program case study

MIT (2015). *MIT Ideas Global. Challenge.* <http://globalchallenge.mit.edu/problems>

Morales, C. & Torres, A. (2015). Aprendizaje basado en proyectos para el desarrollo de competencias. *Revista Iberoamericana de Producción Académica y Gestión Educativa*, (2), 1-10.

Nilsook, P.; Premsmith, J. & Wannapiroon, P. (2016). System Design of Challenge-Based Learning Management System. In: *The 4th International Conference of technical Education*. Faculty of Technical Education, King Mongkut's University of Technology North Bangkok, Bangkok, Thailand.

O'Mahony, T.; Vye, N.; Bransford, J.; Sanders, E.; Stevens, R.; Stephens, R.; Richey, M., Lin, K. & Soleiman, M. (2012). A Comparison of Lecture-Based and Challenge-Based Learning in a Workplace Setting: Course Designs, Patterns of Interactivity, and Learning Outcomes. *Journal of the Learning Sciences*, 21(1), 182-206.
doi: <https://doi.org/10.1080/10508406.2011.611775>

Perrenoud, P. (2004). *Diez nuevas competencias para enseñar*. Barcelona: Graó.

Perrenoud, P. (2012). *Cuando la escuela pretende preparar para la vida*. Barcelona: Graó.

Przybysz-Zaremba, M.; Rimkūnienė, D.; Vasilienė-Vasiliauskienė, V. & Butvilas, T. (2017). Project-based learning: the complexity, benefits and challenges within 21st Century Education. *Journal of Educational Review*, 10(1-2), 95-99.

Rice, M. & Shannon, L. (2015). *Developing Project Based Learning, Integrated Courses from Two Different Colleges at an Institution of Higher Education: An Overview of the Processes, Challenges, and Lessons Learned*. En: EDSIG Conference, Wilmington, North Carolina USA. Recuperado de <http://proc.iscap.info/2015/pdf/3432.pdf>

Saverv, J. (2006). Overview of problem-based learning: Definitions and distinctions. *Interdisciplinary Journal of Problem-Based Learning*, 1(1), 9-20.

Schmidt, R. & Gibbs, P. (2009). The challenges of work- based learning in the changing context of the European Higher Education Area. *European Journal of Education*, 44(3), Part 1.399-410.

Swiden, C. (2103). *Effects of Challenge Based Learning on student motivation and achievement*. (Master thesis). Montana State University, Bozeman Montana.

Agüero Pérez, M. M.; López Fraile, L. A. & Pérez Expósito J.
Challenge Based Learning as a professional learning model.
Universidad Europea and Comunica +A program case study

Terrón López, M. J; Blanco Archilla, M. Y. & Velasco Quintana, P. (2017). *A project based learning experience using NGO Projects and a volunteer program abroad.* Recuperado de <http://hdl.handle.net/11268/6328>

Trujillo Torres, J. M; Hinojo Lucena, M. A.; Marín Marín, J. A.; Romero Díaz de la Guardia, J. J. y Campos Soto, A. (2015). Análisis de experiencias de aprendizajes basados en proyectos prácticas colaborativas B-Learning. *edmetec, Revista de Educación Mediática y TIC*, 4(1), 51-77.

Velasco Quintana, P.; Gómez de Merodio Perea, M. R. & Terrón López, M. J. (2017). *Learning together - working together. PBL in cooperation with companies.* Recuperado de <http://hdl.handle.net/11268/6549>

Xu, Y. & Liu, W. Q. (2010). A project-based learning approach a case study in China. *Asia Pacific Education Review*, (3), 636-370.

Zabala, A. & Arnau, L. (2007). *Como aprender y enseñar competencias.* Barcelona: Gráo.

Zavirov, C. (2013). New Challenges for the Project-based learning in the Digital Age. *Trakia Journal of Sciences*, (3), 298-302.

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