

# The Adequacy of Academic Education to Companies Needs: The Business Project in Finance Case at ISCA-UA

Amândio Manuel Antunes, Fernando Miguel Moreira dos Santos Costa, Joaquim Alberto Neiva dos Santos (Aveiro Institute of Accounting and Administration, University of Aveiro [ISCA-UA], Aveiro, Portugal)

**Abstract:** Organizational realities undergo very rapid and profound transformation processes. Globalized contexts impose situations of constant challenges, caused by the extremely accelerated acceleration of information and communication networks.

As much domotized as the productive, organizational, and commercial processes are presented, human capital will be progressively one of the rare differentiating factors for the creation of value.

Realizing this, as active parts of the teaching and learning models, academically responsible for the preparation of professionals in accounting and finance, we share the vision of a broad conception of the nature of teaching: integration of learning in the classroom with the labor market.

The communication presents the adaptation of the ISCA-UA Business Project in Finance, based on the (re)design of the student's professional profile and the skills benchmark, within the framework of the challenges that are imposed on HEIs: opening Higher Education abroad and to the social and orientation dimensions in learning.

Key words: project, finance, ISCA-UA

JEL code: A

# 1. Introduction

In response to the imperatives of our times and seeking to reconcile academic teaching above all with the reality of current organizations, we sought to introduce in the curricular plan of the Business Project Course Unit (UC\_PE) — 3rd year of the Degree course in Finance in Aveiro Institute of Accounting and Administration — University of Aveiro (ISCA-UA) — a set of activities and skills development with action guided by references such as standards and guidelines for quality assurance — European Qualifications Framework and descriptors Dublin<sup>1</sup>.

More than the legal and formal aspects, it will be important for us to expose the operating model of UC\_PE, which, according to its Regulation, has as one of its purposes "to integrate and complement the knowledge acquired by the student throughout his academic career, namely in the context of professional activity and contact

Amândio Antunes, MSc in Business Management and Management Specialist, Adjunct Professor, Higher Institute of Accounting and Administration, University of Aveiro; research areas: corporate governance, finance and teaching methods. E-mail: amandio.antunes@ua.pt.

Joaquim Neiva Santos, MSc in Accounting and Corporate Finance, Adjunct Professor, Higher Institute of Accounting and Administration, University of Aveiro; research areas: Finance; Financial analysis; Corporate Governance; Risk Management. E-mail: joaquim.neiva@ua.pt.

Fernando Costa, MSc in Economics, Adjunct Professor, Higher Institute of Accounting and Administration, University of Aveiro; research areas: finance; financial analysis; corporate governance and management. E-mail: fernando.costa@ua.pt.

<sup>1</sup> http://www.dges.mctes.pt/Bolonha/.

with the labor market, preparing him for the exercise of functions related to financial management and others within the scope of management and operation in financial markets".

We believe that this is a transformative approach, in which teachers and students share the idea of pedagogy for involvement, builders and non-reproducers, and that, likewise, it is assumed as an anchor for the internal guarantee of teaching quality, within a framework more comprehensive of ISCA-UA teaching policy.

It's in this way that, based on the Competence Reference — "Set of skills required to obtain a qualification" (Decree-Law No. 396/2007, of 31 December), the structuring of the curricular plan of UC\_PE adopts a teaching organization based on the constituent elements of the Competence Unit, as defined in the Methodological Guide — design of qualifications based on learning results, Edition National Agency for Qualification and Vocational Education, IP (January 2015)<sup>2</sup>.

The outlined goals coexist with the development of cross-cutting skills, such as oral and written expression, leadership, interpersonal and ethical relationships, and stimulate through (self)involvement of both teachers and students, pedagogical research, and the adoption of innovative practices education. However, more than this interaction, it is essential to connect with business partners, intending to develop conflict resolution and decision-making capacities, assertive communication, autonomy, and personal responsibility, also besides, of course, to the conceptual competencies required.

Finally, the evaluation model seeks to include stakeholders in decisions about evaluation processes and policies, to favor a balance between institutional interests, students, and other entities involved. The management of these balances requires the use and adaptation of various instruments to specific teaching situations, which approve a continuous and regular assessment over time.

# 2. Purpose and Objectives

Focusing not only on the aspects provided for in the legislation but also on training aimed at developing students' competencies, the implementation of competency assessment models, the importance of experimental or project work components, the acquisition of transversal skills, support actions to the development of extracurricular skills, measures to promote school success and insertion into active life, UC\_PE defined a set of elements that aim to support internal quality assurance, within the broader framework of ISCA-UA teaching policy.

In this sense, the curricular plan's structuring adopts a teaching organization that takes into account outlined objectives and that coexists with the development of transversal skills, thus seeking to stimulate, through the (self)involvement of teachers and students, pedagogical research and the adoption of innovative teaching practices.

When we live in a world of organizations, in which it's the logic of the collective that imposes itself on the individual one, and in which challenges and developments are a constant, we appeal, through the structuring of the curricular unit (UC), the topicality of themes, students and available resources, to a strong interaction between teachers, students, and business partners, intending to develop conflict resolution and decision-making capacities, assertive communication, autonomy, and personal responsibility, besides, naturally, to the conceptual competencies that are required.

The objectives proposed to students are also part of a set of rules and guidelines for the teaching team that teaches the UC, to embody a consistent and coordinated performance of the entire teaching team.

In this sense, UC PE establishes for objectives:

<sup>&</sup>lt;sup>2</sup> http://www.angep.gov.pt.

- To integrate and complement the knowledge acquired in the student's academic path, namely in the
  context of professional activity and contact with the labor market, preparing him for the exercise of
  functions related to financial management and others in the scope of management and operation in
  financial markets.
- 2) To confront the student with practical situations and the pressure inherent in decision-making, which may occur or occur in the work context.
- 3) To stimulate a strong application and simulation component, giving priority to teamwork.

In pursuit of the aforementioned objectives, UC\_PE has its own regulation where they are shaped, bearing in mind the constituent elements of the Competence Unit recommended by ANQEP, the following characteristics, and specificities:

#### 2.1 Structure and Concepts

- 1) The Finance Degree course lasts for three academic years and is part of the Business Project course in the second semester of the third year of your study plan.
  - 2) For the purpose of regulating the UC\_PE:
- a) "Course Unit Coordination" the team that coordinates the process of conceptualizing and defining the teaching objectives for UC\_PE, consisting of three professors, chaired by the professor appointed by the Director of the Organic Unit, under the proposal of the Course Director;
- b) "Teacher Advisor" the teacher responsible for monitoring the student's skills development process under the objectives of the course;
- c) "Monitor" a person who ensures the logistical functioning of the course unit, during the performance of the work, in conjunction with the coordination team;
- d) "Entrepreneurial Project" the curricular unit that has as its general objective the realization of a final synthesis of a practical nature of the set of knowledge acquired by the student throughout the course;

#### 2.2 Professional Profile

The professional profile's definition, according to Felder et al. (2006), Rocha (2014), and Vieira (2015), must be very succinct and sufficiently clear, in order to allow correct identification of professional competences after the conclusion in this case of UC\_PE. It is so described:

To exercise functions in the financial area in organizations and the financial markets, including trading activities, autonomously or integrated into work teams. Develop a wide range of other professional functions related to business management, which require skills in the financial area, critical thinking, and decision-making skills.

#### 2.3 Main Activities

The UC\_PE Coordination sets thirteen main activities (A) for the UC:

- A1 Develop and implement treasury plans
- A2 Manage management control systems aimed at optimizing decision making
- A3 Develop and evaluate the diagnoses of an economic and financial nature adjusted to the requirements of the different recipients
- **A4** Analyze, interpret and criticize the content of accounting and accountability documents and interpret the financial situation of companies and their connection with different areas of business management
- A5 Assess business and investment risk in real and financial assets

- A6 Participate in teams to prepare investment plans in the economic and financial aspects
- A7 Assess the viability of companies and investment plans
- A8 Define and implement financing strategies appropriate to the organization's operational activity and investment policies
- **A9** Prepare, analyze and interpret documents related to financing operations and financial investments and build the respective debt service and cash flow generated maps
- A10 Analyze and systematize the accounting, legal, and tax framework for financial investments and investments
- A11 Constituting and managing securities portfolios and operating in the capital market
- **A12** Develop and monitor the execution of business plans
- A13 Create Project Finance for investment actions and corporate restructuring

#### 2.4 Learning Outcomes

The learning results, defined from the competency framework, are supported by the identification of knowledge (C), aptitudes (AP), and attitudes (AT). Listed below are each of these items.

- 2.4.1 Knowledge
- C1 Deep and specialized knowledge of theories and models of financial mathematics
- C2 Deep and specialized knowledge of the norms and rules that structure financial markets and the products traded in them
- C3 Deep and specialized knowledge of theories and models for evaluating projects and companies
- C4 Deep and specialized knowledge of theories and models for evaluating financial investments
- C5 Deep and specialized knowledge of the rules and rules of operation of global financial markets
- C6 Deep and specialized knowledge of financial analysis methods and techniques
- C7 Deep and specialized knowledge of financial planning methods and techniques
- C8 Deep and specialized knowledge of investment and business risk assessment methods and techniques
- C9 Specialized knowledge of financial products available on the global market
- C10 In-depth knowledge of financial and management accounting
- C11 Comprehensive knowledge of organizational management
- C12 Comprehensive knowledge of taxation, commercial and corporate legislation
  - 2.4.2 Skills
- **AP1** Assess the economic and financial situation of organizations
- AP2 Build and manage financial and treasury plans
- **AP3** Develop and monitor management control systems
- **AP4** Using trading platforms in financial markets
- AP5 Build and manage investment portfolios
- AP6 Adapt investment solutions to the financial reality of organizations
- **AP7** Negotiate funding sources
- **AP8** Evaluate companies, financial holdings, and businesses
- **AP9** Create and evaluate business plans
- AP10 Build maps and forecast financial planning and control indicators
- AP11 Assume the exercise of functions related to middle and/or top management
  - 2.4.3 Attitudes

- **AT1** Demonstrate communication skills
- AT2 Working as a team
- AT3 Adapting to the social and economic context
- AT4 Leading work teams
- AT5 Demonstrate interpersonal skills, namely in terms of conflict management and motivation
- AT6 Demonstrate autonomy in solving problems and proposing solutions
- AT7 Reveal time management skills
- AT8 Reveal analytical and critical analysis skills
- AT9 Establish technical and functional relationships with areas adjacent to and complementary to your work area
- AT10 Comply with and ensure compliance with rules, regulations, and other applicable legal imperatives
- AT11 Assume ethically and deontologically correct attitudes

# 2.5 Correspondence Between Main Activities and Competencies

After the complicated and difficult exercise of, from the professional profile, defining the main activities and proposing the learning results that should derive from it, it is necessary to proceed to the respective correspondences and crossings. We are thus left with a general and conclusive reading matrix that allows us to see the coherence between A, C, AP, and AT. The result is as follows:

			Main activities												
			A1	A2	A3	A4	A5	A6	A7	AB	A9	A10	A11	A 12	A13
ms	Knowle dge	Cl	X	X	X	X	х	х	X	х	X		X	X	X
		CZ	X	X			х			х	X	X	X	X	X
		СЗ		X	X			х	X					X	X
		C4		X			х	х	X		X			X	X
		CS		x			х			х	X	X	x		
		C6	X	X	X	X		х	X				X	X	X
		C7	X	X	X		х	X	X	X		X		X	X
		C8		X	X	X	х	х	X	х	X		X	X	X
		C9	X	X		X	х	х	X	X	X	X	X	X	X
		C10	X	X	X	X						X		X	X
		C11	х	х	X	х	х			х				х	X
Ē		C12	х	X	X	х						X	X	X	X
See	Skills	AP1	X	X	X	X		Х	X	X				X	X
Competency benchmark in Learning outcomes terms		A P2	X	X	X	X	х	х	X	X	X	X		x	x
		A P3	х	x	x	х		х		х	х			X	X
		AP4		x			х	х					x		
		A PS		X			х	х					X		
		AP6	X	X	X		х	х	X	х	X	X		x	x
포		AP7	х	x	x		х	х	X	х	х	X		x	X
cy benchm		A P8			x	х	х		X						
		A P9	х	x	x	х	х	х	х	х	х	х		x	X
		AP10	X	X	X	X	х	х	X	х	X	X	X	X	X
ter		AP11	X	X	X	х	х	х	х	х	х	х	X	X	X
adu.	Attitudes	AT1	X	x	X	х	х	х	X	х	X	X	x	X	X
Ŝ		AT2	x	x	x	х	х	х	X	х	x	X	x	X	X
		AT3	х	X	X	х	х	х	X	х	х	х	X	X	X
		AT4	х	X		х		х		х			X	X	X
		AT5	x	X		х		х		х			X	X	X
		AT6	x	x	x	х	х	х	X	х	x	X	x	x	X
		AT7	х	X	X	х	х	х	X	х	х	X	X	X	X
		AT8	х	X	X	х	х	х	х	х	х	х	X	X	x
		AT9	х	x		х		х		х			x	X	X
		AT10	х	x	x	х	х	х	х	х	х	х	x	x	X
		AT11	х	x	x	х	х	х	х	х	х	х	x	x	x

From now on, it is possible to think about the (model of) the functioning of the UC, concerning the most tangible and usual aspects. We are, therefore, talking about the proposal of the syllabus, the teaching methodology, and the difficulty that it's always to propose the most appropriate regime and evaluation weights, which are the clearest and most objective possible for all audiences.

# 3. Course Unit Organization

UC\_PE was organized with relative proximity to models and references that, in other contexts, proved to be adequate and that, in this case, and our opinion, have full applicability. Following Barnett (1994), Crespo (2003), and Fonseca (2010), the model implemented is described below.

#### 3.1 Duration

The UC\_PE lasts for one academic semester, according to the legally approved academic calendar, and has an associated weekly load of 12 teaching hours, in person, for any of the predicted models. UC\_PE corresponds to a total of 18 ECTS.

# 3.2 Operating Models

UC\_PE works in Project or Internship model.

The **Project model** takes place in a classroom context supported by real information provided by companies/entities and by complementary information provided by the UC Coordination.

The **Internship model** takes place in a business context and essentially aims to complement the academic training of the student through integration oriented in activities in companies or organizations that provide a relevant work environment for the area of the course.

The Internship occurs at the initiative and the request of the student, upon presentation and approval by the UC Coordination of an internship plan that corresponds to the objectives defined for the UC\_PE.

The Project and Internship models are based on the established in the Pedagogical Dossier, to be released at the beginning of each academic year, which defines and schedules the main activities to be implemented, by the students and the teaching team, the specific skills to be evaluated, evaluation times and dates.

## 3.3 Coordination and Guidance

UC\_PE has an associated coordination team, defined in terms of the regulations approved by the Pedagogical Council for UC\_PE, whose mission is to plan, organize, direct and control all the functioning of the UC, being responsible for the implementation of the model(s) of Business Project that may be applied.

UC\_PE is also associated with all teachers who have assigned teaching time for this purpose. These must ensure the orientation of all working groups, corresponding to companies/entities or internships within the scope of UC\_PE.

The orientation and monitoring of students must be done in class, for a minimum period of one hour, for students in the Project model; in the case of internships, supervision is carried out in collaboration with the Host Entity (EA), and always goes through face-to-face meetings, previously scheduled, at the internship location.

In addition to the student monitoring hours, each teacher must have provided in their teaching schedule at least one hour for the weekly meeting of all teachers who are part of the UC\_PE team.

With the purposes of monitoring and evaluation, a dossier per group is created, available in the Coordination file, which must contain the form:

- Each company/entity;
- The group and the records of the elements and moments of evaluation;
- Internship, when applicable.

All of these documents must be completed in full by the teachers for the different elements and moments of assessment and kept in the respective file during the legally established period.

It is also incumbent upon the UC\_PE Coordination to ensure the proper functioning of the UC, in conjunction with the Course Director, and namely: to elaborate and disseminate the Pedagogical Dossier for each academic year; plan and coordinate the functioning of the UC for the proposed models; coordinate student assessment; set requirements and approve internship plans for the Internship model.

The UC\_PE Coordination may be supported by monitors who, under their guidance and instruction, are responsible for the logistical and operational support of the activities to be carried out by the students, namely as regards the functioning and availability of the means and equipment assigned to the UC, current hours, general bureaucratic movement, ensuring the good use of facilities and all the means of work assigned to UC\_PE. They are expressly forbidden to provide direct help in carrying out the work or any pedagogical intervention with the working groups.

# 3.4 Execution/Implementation

The activities of UC\_PE in a Project model are carried out at the ISCA-UA facilities.

The activities of UC\_PE in an Internship model are carried out in public or private entities, national or foreign, of recognized merit, named, for the purposes of this regulation, by Host Entities (EA).

The Internship model is achieved through the signing of a Collaboration Protocol between the University of Aveiro and EA, where the internship takes place, and an internship agreement between those and the student, which includes, necessarily, the training plan. work, the activities to be carried out, the beginning and the end of it, and the rights and obligations of the parties.

The guidance of UC\_PE is the responsibility of the Faculty Advisors, with the supervision of the UC Coordination, ensuring, whenever necessary, logistical and operational support for the activities to be developed at each moment. The External Advisor appointed by EA and who is identified in the internship agreement also intervenes in the Internship model.

# 4. Teaching Methodology

## 4.1 Methodology

The activities of companies/entities must be integrated within the general parameters previously defined for each of the evaluation moments, as provided for in the **Curricular Unit Business Project Regulation**.

Regardless of the UC-PE model at work, students should take into account the following guidelines:

- 1) The teaching team promotes the discussion of innovative ideas among students' workgroups, to encourage business creation/development;
- 2) In the case of the Project model, the teaching team assigns students, by lot, an initial dossier of the company/entity to be simulated, in digital format, with information and documentation, which allows, together with elements to be researched by the group, the characterization a starting situation;
- 3) The path of students throughout the semester is developed in making financial decisions and in their foundation, through the management of resources that are theoretically made available, conditioned by

- the behavior that the different variables assume, in the permanent interaction with the markets and with a view to the defined objectives;
- 4) Whenever appropriate and justified, the students' activity will be complemented by the existence of a Financial Market and a Virtual Goods and Services Market, managed by the UC teaching team;
- 5) The groups will consist of two students, excepting when authorized by the UC Coordination, the number of three elements per group;
- 6) The act of enrollment in the working group is made by the students, with the coordination, until the beginning of the teaching activities;
- 7) After analyzing the applications for registration and introducing the necessary adjustments, the definitive list of regularly constituted groups will be released;
- 8) Each group will work with a single company or entity in simulation;
- 9) All members of the group must actively participate in the work and share the functions and work of the group among themselves, but will respond jointly in all operational and pedagogical aspects for the purposes of evaluation;
- 10) No changes or changes in the constitution of the groups are allowed after the first evaluation moment;
- 11) Conflict situations between members of the group will be analyzed by the Coordination and may be subject to appropriate penalties, with effect on the classification. If it is impossible to find an adequate solution for the resolution of the conflict, the Coordination may decide for the extinction of the group and exclusion of its members from the UC attendance in the current academic year, under the legal and regulatory terms provided for;
- 12) In cases of proven, and justified, the impossibility of one of the members of the group to continue the work, the other member may be allowed to continue the activities planned for the group in isolation.

In parallel, at the initiative of the teaching team or students, conferences, seminars, and workshops are held, with topics of interest for the work to be carried out by students within the scope of UC\_PE and even post UC\_PE. However, taking into account the relevance of the themes, some of these events, namely conferences and seminars, are open to the community and involve the participation of personalities of recognized merit and local economic agents with a dual intention: the commitment to the work developed in students, the approximation to the reality of the work of companies and entities, through the importance of themes, the sharing of experiences and the network of relationships to be built.

Throughout the school year, special operations (OE) will be launched by the Coordination of UC\_PE aimed at all companies/entities and will be considered prominently in the continuous assessment, integrating the specific assessment elements for each of the anticipated assessment moments.

The OE, under the Coordination responsibility, may be proposed by the UC\_PE professors and must be subject to a previous presentation and discussion to the entire teaching team.

After approval by the teaching staff of UC\_PE, the author (s) of the special operation (s) will make the respective presentation to the students at the time of its dissemination, to frame, clarify and justify the objectives intended with the special operation.

The OE propose to students the confrontation with a specific work to be carried out, with or without surprise effect, and with limited resolution time. In addition to evaluating technical knowledge, they intend to simulate pressure environments in decision making, so characteristic of the exercise of financial functions. Within this scope, quite diverse situations are inserted, such as treasury and investment financing operations in the banking

market; financing of companies in the capital market; real-time trading of financial investments; treasury management; etc..

The resolution of these OE, whose scope may include scenarios of expansion, the opening of a branch, restructuring, merger, acquisition, alteration of financial market conditions, alterations to the financing model, etc., must comply with the following requirements:

- a) Theoretically characterize the proposed operation;
- b) Resolve the proposed transaction;
- c) Support the solutions in the accounting, tax, and legal aspects;
- d) Measure the expected impacts on the structure and economic and financial viability of the company and on the final objectives.

Additionally, students will have access to a virtual portfolio of financial assets, to be managed accordingly and as per the schedule of evaluation activities. In this way, the management of the financial assets portfolio is continuously promoted, based on the investment/divestment decisions made in the period, based on specific software for this purpose. Portfolio management is subject to periodic reports, which should reflect the analysis of the portfolio's behavior in the previous period and the definition of investment strategies for the following period.

The adequacy that this whole process imposed has resulted in much more than mere formal changes. The transition from a passive model, based on the acquisition of knowledge, to a teaching model based on the development of competences (generic or specific associated with the training area), reinforced the role that the experimental, experiential, and project components play, which if they intend to increase with the UC\_PE, and that goes far beyond the mere demonstration of the apprehension of the knowledge taught.

Therefore, a first step consists of structuring a work methodology that coordinates an adjustment in contact hours and awareness for the accounting of study times.

The knowledge acquired by students and the development of appropriate skills to promote active learning throughout life, with a high degree of autonomy, will be complemented and supported by consulting all available bibliography, whether suggested by the teaching team or all those with relevant interest for the topics under discussion/analysis.

The UC is organized in six stages of development throughout the academic semester, and students are provided, at the beginning of each one, with information about the minimum content to be included in the works subject to evaluation. Each of these moments contains several elements proposed and defined by the UC\_PE coordination, including reports, asset management, OE, attitudes, and behaviors of students and working groups.

#### 4.2 Articulation Between Contents and Methodology

Students are organized in workgroups (except for the Internship model), are oriented towards practical activities, and have their own resources for that purpose, including access to a stock exchange trading platform in the real market.

Each group has pedagogical supervision by the teaching team and, whenever justified, collective clarification sessions are held on topics of general interest, within the scope of the work and other activities to be carried out. Other training actions, seminars, conferences, and other activities deemed relevant may also take place.

Classroom attendance is mandatory for the Project model and subject to regular monitoring, in compliance with the proposed evaluation model. In the case of students included in the Internship model, the control is carried out by the host entity.

The works' presentations are public and all students are required to attend the presentations of the assessment moments in person.

The challenges posed to students, based on the UC competency framework (knowledge, skills, and attitudes) and the strong connection to real-life events, aim to promote an attitude of lifelong learning, which has to be consistent with the environment dynamic and complex life of organizations and with the development of a high degree of autonomy on the part of the future professional student.

The intensification of a continuous evaluation process, which links the moments of evaluation with the learning activities involved, stimulates, on the other hand, the constant search for relevant information (for decision making) that has to be complemented and supported in the consultation of the appropriate bibliography.

Given that the main objectives are to integrate and consolidate the knowledge acquired during the three years of the degree course in finance, aiming to prepare students for the responsible exercise of professional activities in the financial area, the UC is structured to enable students to fully apply the knowledge to practical life, through its orientation for the resolution of real or simulated cases in the scope of the economic and financial management of companies or investment in financial markets.

Both through the Project model and in the context of the Internship, the approximation to professional reality and employability issues is promoted.

# 5. Evaluation Methodology

#### 5.1 Evaluation

The Evaluation Scheme is defined in UC\_PE own Regulations, presenting the following characteristics:

- (1) Evaluation Scheme
- 1) UC\_PE, in any of the models, takes place under a continuous evaluation regime.
- 2) The continuous evaluation has six evaluation moments, abbreviated as M1, M2, M3, M4, M5 and M6, which correspond to a final classification attributed according to the following article.
- 3) Each evaluation moment consists of the presentation of one or more evaluation elements, following the provisions of paragraph e) of Article 4 of the Studies Regulation of the University of Aveiro (REUA), hereinafter referred to as REUA.
- 4) In cases where the assessment elements are part of the oral exams, a jury is appointed by the UC Coordination.
- 5) The jury is composed of at least two professors from UC\_PE, as provided for in paragraph 8 of article 30 of the REUA, and may also be integrated by external personalities, linked to the companies that served as the basis for the practical work performed by the students during the semester.

The UC\_PE evaluation is based on the continuous evaluation model and consists of six evaluation moments, which contain various elements proposed and defined by the UC\_PE Coordination including, as previously mentioned, reports, asset management, OE, attitudes, and behaviors of students and working groups.

The elements of evaluation can be revised at any time, whenever the development of the works or the context of the UC\_PE so requires.

The evaluation will consist of a global assessment related to each of the moments, focusing on a set of items defined in a specific file.

Regarding the constitution and attributions of the Jury of oral exams and/or public presentations.

- (2) Assignments and Composition of the Jury
- 1) The test is chaired by a jury, constituted under the terms of the following numbers.
- 2) The UC\_PE jury is made up mainly of UC\_PE teachers and will be appointed by the Coordination team.
- 3) One of the UC\_PE professors will be appointed president of the jury and will have a casting vote in the evaluation decisions.
- 4) It is up to the UC\_PE jury to preside over the oral presentations and proceed to the respective evaluation.
- 5) The UC\_PE jury will have the constitution per the provisions of REUA and will include at least two professors from UC.

About the Final Classification of UC\_PE it was established:

1) The final classification of UC\_PE is based on the classification attributed to the six moments of the evaluation, according to the following weighting factors:

$$05\% \le p1 \le 15\%;$$
  
 $05\% \le p2 \le 20\%;$   
 $15\% \le p3 \le 25\%;$   
 $05\% \le p4 \le 15\%;$   
 $05\% \le p5 \le 20\%;$   
 $20\% \le p6 \le 35\%;$ 

2) The formula for calculating the final grade is as follows:

$$\mathbf{CF} = \sum_{i=0}^{6} (p_i * M_i)$$

where:

CF - Final classification;

Mi - moment evaluation i,

pi = weighting of each Mi in the final classification,

and in what:

$$\sum_{i=0}^{6} p_i = 100\%$$

- 1) The weightings (pi) related to each evaluation moment (Mi) are fixed annually in the Pedagogical Dossier, within the intervals mentioned above in point 1.
- 2) The lack of any of the evaluation moments implies the respective classification with zero values.
- 3) The delivery of any of the evaluation elements, beyond the established period, implies a reduction to the note corresponding to 0.5 values for each day of delay up to the limit of seven calendar days.
- 4) After the period provided for in the preceding paragraph has elapsed, it is considered a failure to deliver the assessment moment.
- 5) UC\_PE, in any of its models, is not subject to improvement in classification and there is only a new enrollment in case of failure.

The behavior of each workgroup and the students that compose it, namely their ethical positioning and posture, may be subject to bonuses and penalties. These bonuses and penalties will constitute specific parameters of the continuous evaluation component.

For evaluation purposes, concerning attendance aspects, the provisions of REUA apply.

In the specific case of students included in the Internship model, the final classification includes, in addition to the teacher assessment, referred to above, the EA assessment, with the respective weightings of 60% and 40%. The EA assessment is carried out based on the following parameters: compliance with the internship plan; appreciation of the final written report; quality and quantity of work developed by the student; knowledge demonstrated in the course area; professional development; student's performance (attendance, motivation, initiative, integration, responsibility).

Failure to comply with the Internship Plan automatically implies the student's non-approval in this UC.

The final classification is only published after receiving the written assessment of the EA Advisor, before the oral presentation of M6.

# 5.2 Articulation Between Evaluation and Methodology

Given the curricular nature of this unit, in addition to the core technical skills of the course, which UC\_PE fully addresses, it seeks to stimulate the development of transversal skills.

Thus, regardless of the model adopted, the teaching team promotes the discussion of innovative ideas among the working groups in order to encourage the creation/development of businesses.

Furthermore, it provides information and documentation, which allows, together with elements to be researched by the group of students, the characterization of a starting situation, as well as the basic foundation of all decision making that students have to take about different activities that are proposed throughout the term.

The teaching team permanently supervises the financial decision making and its foundation and is attentive to the performance of all elements of the group, with regard to active participation in the work and the contribution of each element in the solutions presented. Students will respond jointly in all operational and pedagogical aspects for the purpose of assessment.

Finally, by promoting public presentations of the works developed, it promotes the practice of public speaking, the experience of reacting to possible confrontations in an interview environment, and defending points of view and the proposed technical solutions.

The possible presence of external elements in the composition of the jury encourages, in our view, the students' exhibition capacity and allows a strong approximation to the business reality, so the evaluation gains a dimension that goes beyond the purely academic scope.

## 6. Some Experiences

UC\_PE has eight editions already concluded and in each new edition, we tried to present innovative aspects aimed at the continuous improvement of its functioning.

The translation into numbers of the activity and work developed within the scope of UC\_PE can be seen in this table:

Number of students involved	249
International Students	8
UC pass rate	97%
Students who opted for the Internship model	9
Internship model (international scope)	2
Approval rate for the Internship model	80%
Conferences held	15
Post-curricular internships carried out (national scope)	15
Post-curricular internships carried out (international scope)	2
Entities filed for the provision of information	14
Entities filed for granting internships	9
Entities registered for the use of resources	3

The Coordination of UC\_PE seeks through those types of initiatives to accompany the process of inserting students into active life, with a relevant number of cases in which, after the post-curricular internships, that insertion actually occurred.

#### 7. Conclusion

Within the framework of the importance and adequacy of academic education to the needs of companies, permanently monitoring the changes taking place in the external environment as well as the implications arising from it, UC\_PE presents itself as a UC that, much more than preparing future professionals in the field of finance, seeks to anticipate the work contexts and challenges of students, by connecting with economic agents. Since it was conceived, a path has been defined that, through experiences and the consolidation of knowledge, in addition to academic success, feels the concern of employability and insertion in the active life.

The evaluation of the functioning of UC\_PE includes the collection of diversified information on the model of knowledge transmission adopted, but also on the level of technical-scientific competencies acquired by the student, including the reinforcement of his own learning capacities.

In this phase, formal aspects are achieved and learning is gained with the launch of the proposed model for UC. However, this path is not independent of the need for the evolution of the corresponding institutional and training culture, and the path does not end with what was described in this document. More than a document, what really counts are the implications of all stakeholders in the process.

Thus, in the future, it is intended to extend these experiences to new audiences (already qualified professionals, company staff, attendance under a single UC regime), to provide mobility to students, and to test international cooperation strategies, either through partnerships or for carrying out more internships in a real context, namely, revisiting internship situations abroad that promote, immediately, the exchange of professional experiences in the area in other latitudes.

#### References

AAVV (2009). DocÊncia no Ensino Superior: Partilha de Boas PrÁTicas, Aveiro, Universidade de Aveiro.

AAVV (2015). Guia Metodológico - Conceção de Qualificações Baseadas em Resultados de Aprendizagem (1st ed.), Lisboa, Agência Nacional para a Qualificação e Ensino Profissional, IP (ANQEP).

- Alteração ao Regulamento de Estudos da Universidade de Aveiro, Regulamento n.º 863/2016, publicado no Diário da República, 2.ª série, n.º 173 de 8 de setembro de 2016.
- Barnett P. (1994). The Idea of Higher Education, Buckingham, Open University Press.
- Barrows H. S. (1999). "A taxonomy of problem-based learning methods", in: J. Rankin (Ed.), *Handbook on Problem-Based Learning*, New York, Forbes Custom Publishing.
- Crespo V. (2003). Ganhar Bolonha, Ganhar o Futuro. O ensino superior no espaço europeu, Lisboa, Gradiva.
- DGES (2015). Descritores de Dublin, acessed 23 October 2015, available online at: http://www.dges.mctes.pt/DGES/pt/Estudantes/Processo+de+Bolonha/Objectivos/Descritores+Dublin/.
- Felder R. M. and Brent R. (2006). *Effective Teaching: A Workshop*, Department of Chemical Engineering-North Carolina State University and Rebecca Brent, Ed.D. Education Designs Inc.Cary, North Carolina, Aveiro, Universidade de Aveiro.
- Fonseca M. (2010). Acreditação Ano Zero. Os Sistemas Internos de Garantia de Qualidade das Instituições de Ensino Superior em Portugal, A3ES, acessed 23 October 2015, available online at: http://www.a3es.pt/sites/default/files/SIGQ\_IES\_PT.pdf.
- Regulamento de Estudos de Licenciaturas e Mestrados de Universidade de Aveiro, deliberação n.º 1374/2008, publicado no Diário da Republica, 2.ª série, n.º 91 de 12 de maio de 2008.
- Rocha A. (2014). *Guia Interpretativo do Quadro Nacional de Qualificações* (1st ed.), Lisboa, Agência Nacional para a Qualificação e Ensino Profissional, IP (ANQEP).
- Vieira R. (2015). Competências a Promover: Enquadramentos e Desafios, Aveiro, Universidade de Aveiro.