

## COMPETENCES OF GRADUATES AS AN INDICATOR OF EXTERNAL QUALITY ASSURANCE IN UNIVERSITIES \*

FREIRE SEOANE, M<sup>a</sup> Jesús<sup>†</sup>

TEIJEIRO ALVAREZ, Mercedes

---

### Abstract

In recent years universities have undergone structural changes, with the objective of harmonizing the European Higher Education System. This process has culminated with the entry into the European Higher Education Area (EHEA).

This study makes two key contributions. First, it provides an indicator used to evaluate the competences of graduates from A Coruña University and the competences demanded by the workforce. Then, it also offers relevant information on what competences are most valued and sought for by the business world. This information will be instrumental for the implementation of EHEA, for which graduate competences is a key part of University planning.

**Key concepts:** guarantee of quality, university education, graduate competences.

**JEL classification:** A22, I20, M10 and L00

---

### 1. Introduction

Under the European Higher Education Area (EHEA) it is particularly important to develop the professional competences of students to meet the demands of the workforce. However, for this system to be efficient and to improve the quality of universities, comprehensive and extensive information on these issues is needed.

This article is a qualitative and quantitative study using data on professional skills from two main sources: graduates of the University of A Coruña (UDC) and companies in the province of La Coruña (Spain)<sup>‡</sup>. This work aims to obtain reliable information on the strengths and weaknesses in the education of UDC graduates and determine what resources are available to students to overcome their shortcomings and meet the demands of the business world in a reasonable period of time.

This paper is divided into six chapters. Chapter 1 introduces the topic while chapter 2 examines the employability of graduates as a measure of the quality of universities.

---

\* The authors are grateful to the anonymous reviewers for their comments and suggestions which have notably helped improve the final version of the article.

<sup>†</sup> M<sup>a</sup> Jesús Freire Seoane (maje@udc.es), Mercedes Teijeiro Álvarez (mteijeiro@udc.es)

<sup>‡</sup> The reason for selecting only the province of A Coruña is because most of the university students work in companies from this area, especially in the first years after graduation.

Chapter 3 gives a theoretical summary of the major methodological approaches concerning the professional competences of university students, while chapter 4 describes the methodology of the research study. Chapter 5 presents an empirical analysis of the adequacy of the professional competences acquired in the UDC by graduates, those applied at work and those required of university workers by companies. Finally, we finish by exposing and analyzing the results in the conclusions section.

## **2. Graduate employment as a measure of the quality of universities**

At present the concept of quality has evolved to focus on the concept of "total quality" where quality is no longer restricted to scientific production, but rather to now include the programs, professors, students, institutional organizations, development, orientation of the university towards the customer, etc. (Buela-Casal, et al. 2009).

Participants at the World Conference on Higher Education (WCHE, 1998) indicated what elements should be included in the concept of quality as a whole. They refer to it as a multidimensional concept that includes teaching, research, personnel, students, institutions, etc, focusing on the importance of internal self-evaluation and external review. In said conference it was recommended that higher education institutions redefine their objectives, to involve all sectors of the university and to get the approval of the society.

With the Bologna Declaration in 1999 the member states of the European Union were urged to define the basic foundations for the establishment of the EHEA. These basic features include how to set academic criteria, competitive and professional qualifications to address the demands of the European workforce and to achieve the present educational, work and social goals.

Presently, the European debate on education focuses on the role it plays in knowledge economy. In fact, on many occasions it is said that the education provided in universities and secondary schools is not adequate to meet the needs of the market society and reach the growth objectives intended.

A recent study (OECD, 2005) reports that new questions have emerged on the adequacy between the education of the population and the needs of the job market. In this report several issues on education are left open:

- Is there an excess supply of graduates in relation to the demand of the job market?
- Do university students get an adequate education or is there an imbalance between the courses they choose and the needs of the economy?
- Are the skills and abilities these young people acquire appropriate to carry out the roles required in the workplace?

The analysis of the socio-professional integration of our graduates will serve to assess and improve the quality of university education and will be useful in quality accreditation

processes, given it will provide relevant information to the university community as well as to the different groups associated.

Until recent times higher education institutions had no systematic studies to assess the employability of its graduates, as well as their satisfaction with the education received. The evaluation committees identified this as a weakness and established among their priorities to bring about improvements to encourage these types of studies. Following this recommendation for about nearly a decade, follow-up studies were conducted to monitor the employability of graduates, but despite this, the complexity of analyzing the socio-professional insertion of university students, the professional competences of the graduates, their relevance to the needs of the company and the need to address the process from different disciplines, made this lack of knowledge on the situation of the graduates of different fields one of the main concerns of most higher education institutions (Jimenez, 2009; Mora, 2003).

One of the aspects of institutional evaluation addressed by Spanish universities is the academic results achieved and it is determined by studying the following issues:

- Employment and demand for graduates of each specific type of degree.
- Proportion of graduates whose first job is directly related to their studies.
- Graduate opinions regarding their education, in terms of looking for or finding a job.
- Employer opinions regarding the education of graduates entering the workforce.
- Assessment of the adequacy between the educational profile of graduates and the job characteristics of the graduates.

This article aims to answer the last three points indicated above.

### **3. Professional competences of university students**

Nowadays, the old family aspiration of a college degree being synonymous with having talent is in crisis and has now been replaced with professional competences (management of knowledge, skills, abilities, strategic leadership and other emerging capabilities) in the contemporary context of modification of productive methods. This is the scenario forcing universities to adapt to the demands of the economy and the job market.

Furthermore, the professional competences of an individual must be considered when selecting personnel, as well as the importance of these in the development of one's work experience, hence, another reason for conducting this research. However, it is not easy to delimit the concept of professional competences. Upon briefly reviewing the literature, although efforts have been made to achieve this task and the different perspectives (employment, economic and psychological) have been taken, the term remains ambiguous.

Moreover, it is important to note that when defining these terms, assumptions or levels of abstraction, different for each investigation, must be dealt with. This initial differentiation, involving different reference parameters, results in a conceptual idea that is more variable than expected. Typically, in the different definitions of competence there

are other concepts that in most cases they themselves are also ambiguous or contain semantic difficulties (Fallow and Steven, 2000; Barth, et al. 2007; Alonso, et al. 2009).

A fairly generalized acceptance of competences refers to an individual's ability, in terms of degree of training, know-how, knowledge and expertise, to learn. In this case, the aptitudes directly refer to the skills and abilities of an individual. Moreover, one could also consider competence as the qualification, which basically refers to the education necessary to achieve the desired professional expertise. So, competence is the result of the qualification process that allows one "to be able to" or "to have the ability to".

Professional competences of workers are defined as a set of identifiable and evaluable knowledge, aptitudes, values and abilities that are related to each other, allowing satisfactory performance under real work situations, according to the standards used in the occupational area. In agreement with the study of DESECO (Definition and Selection of Competences, 2003), carried out by OECD (Organization for Economic Co-operation and Development), competence is the ability to respond to the demands and carry out tasks in an adequate manner.

Work competences are not a likelihood of success when carrying out work, but rather the real and demonstrable ability to do things. Moreover, it is the productive ability of an individual defined and measured in terms of performance during a particular work context, and not only of knowledge, skills, abilities and aptitudes; these are necessary but not sufficient by themselves to effectively perform a job (Corominas, 2001; Cajide, et al, 2002; Villa and Poblete, 2007, Freire and Teijeiro, 2009).

Competences are classified as generic and specific:

- Generic competences are those referring to transversal competences, transferable to many functions and tasks.
- Specific competences are those directly related to a particular occupation.

This paper will analyze the generic or transversal competences. These competences are common to most professions and are related to the implementation of aptitudes, personality traits, acquired knowledge and values, required in various occupational areas and are transferable between different activities within a sector. In the words of Levy-Leboyer (2003) "competences are behavioral routines that some people can do better than others, making them effective in a given situation". In the Final Report (2001/2002) of Tuning Education Structures in Europe, generic competences were classified into three main groups: instrumental, interpersonal and systemic.

Instrumental competences are cognitive, methodological, technological and linguistic abilities. These are necessary for understanding, construction, operation and critical use in different professional activities. These competences are the skills and training of a university graduate and can be summarized as:

- Basic general knowledge.
- Basic knowledge of the profession.
- Ability to analyze and synthesize.

- Ability to organize and plan.
- Problem solving.
- Decision making.
- Oral and written communication in the native language.
- Oral and written communication in a second language.
- Basic skills in handling a computer.
- Skills in managing information.

Interpersonal competences are related to one's ability to relate with others socially and to form part of different groups, as well as the ability to carry out work in specific or multidisciplinary groups. They are summarized as:

- Ability to critique and self-critique
- Teamwork.
- Interpersonal skills.
- Ability to work in interpersonal groups.

Systemic competences are skills relative to the systems (combination of understanding, sensitivity and knowledge), but require prior acquisition of instrumental and interpersonal skills. In general, they refer to the individual qualities, as well as to having motivation for work:

- Ability to apply theoretical knowledge to practical situations.
- Research skills.
- Ability to learn.
- Leadership qualities.
- Ability to adapt to new situations.
- Ability to work independently.
- Responsibility at work.
- Motivation about work.
- Self-esteem.

#### **4. Study methodology**

Data collection and fieldwork were carried out in the months from July to October 2007. Prior to the data collection in questionnaires the competences were defined "as a set of evaluable and identifiable knowledge, attitudes, values and abilities related to each other, to carry out normal work tasks" (Freire, 2008). Only 19 items were included in the questionnaire for competences analysis, to keep the questionnaire from being too long. The information obtained has been valuable, since it has allowed us to study each of the following sections individually:

- Competences acquired in UDC by graduates.
- Competences applied in the company.
- Competences required by companies of graduates.

- The difference between the company demands and the level of competences acquired by the graduates.

To obtain information on graduates, files from the Calculation Center of the University (UDC) were used, this allowing us to access information on all graduates having completed their studies in the last five years. The University degrees have been grouped according to the five fields of knowledge and in 14 groups by competence affinity (Table 1). The sample design was stratified, by degree and by graduation year following the usual sampling techniques. Once various sample sizes were obtained, the one showing a confidence level of 98% and a margin of error of  $\pm 2\%$  was selected. The population universe was defined as the set of UDC graduates in the academic years 2001/2002 to 2005/2006. The composition of the graduate sample by fields of knowledge and competence affinities is presented in Table 1.

For the acquisition of information about companies a series of protocols, specified below, were followed. The first step in this stage of the study consisted in having the maximum amount of information available about the companies of the Metropolitan Area of A Coruña, and with the accessible sources prepare a directory of companies for the study. General information was used from the census-directories of INE (Instituto Nacional de Estadística/National Institute of Statistics) and of IGE (Instituto Galego de Estadística/Galician Institute of Statistics), as well as the “Ardan” directory, that we had to refine and complete using information from accessory registries or directories until obtaining a database for the study.

**Table 1.** Composition of the graduate sample

| Fields of knowledge                 | University degree by competences affinity | Number of graduates |
|-------------------------------------|---|---------------------|
| <b>Architecture and Engineering</b> | Architecture                              | 216                 |
|                                     | Engineering                               |                     |
|                                     | Computer engineering                      |                     |
|                                     | Transportation and navigation             |                     |
| <b>Art and humanities</b>           | Biblioteconomy and social sciences        | 129                 |
|                                     | Humanities                                |                     |
|                                     | Teachers                                  |                     |
|                                     | Sociology and psychopedagogy              |                     |
| <b>Sciences</b>                     | Sciences                                  | 50                  |
| <b>Health sciences</b>              | Health sciences                           | 69                  |
|                                     | Physical education and sports sciences    |                     |
| <b>Social and judicial sciences</b> | Economic and judicial sciences            | 233                 |
|                                     | Business sciences                         |                     |
|                                     | Tourism and labor relations               |                     |
| <b>TOTAL</b>                        |   | <b>697</b>          |

The sampling design for companies varied depending on size. For small companies and microcompanies random and independent sampling was performed with a sample of 25%, however, in the medium and large companies we worked with the entire directory, although the final sample did not reach all the companies selected. At all times sample representation was observed by activity sectors, although selection was random at the others levels. Once various sample sizes were obtained, the one showing a confidence level of 98% and a margin of error of  $\pm 3\%$  was selected. The population universe was defined as a set of companies in the province of La Coruña (Table 2).

**Table 2.** Composition of the sample of companies in the province of La Coruña

| Types of companies                 | Census | Target Sample | Obtained Sample | Percentage covered |
|------------------------------------|--------|---------------|-----------------|--------------------|
| Microcompanies and small companies | 2297   | 574           | 112             | 19.51%             |
| Medium companies                   | 185    | 185           | 70              | 37.84%             |
| Large companies                    | 38     | 38            | 21              | 55.26%             |
| Total                              | 2520   | 797           | 203             |                    |

## 5. Empirical analysis

### 5.1. Competences graduates claim to have acquired.

The information available in the survey of graduates refers to the mean scores of professional competencies for each of the 19 items that this young individual claims having acquired at UDC. In this section, all the individuals in the sample were considered, these being classified by fields of knowledge and University degrees by competences affinity. The following are the categories presented in the questionnaire: from 1 = “none or nothing” to 7 = “ample or very high”.

In the added analysis of the evaluation performed by the graduates of the professional competences and each item in particular, acceptable results were observed. The total mean score for the items was 4.732, equivalent to having “reasonable and sufficient” competences.

The scores obtained were also high for each of the items analyzed, as observed in Table 3. The evaluation ranged from a minimum of 4.275 points, equivalent to “reasonable” acquired competences in decision making, to a maximum score of 5.452, in this case considered “sufficient and much” for the ability to learn.

**Table 3.** Mean score of the competences graduates claim to have acquired at UDC

|  |       |
|--|-------|
| Ability to learn                                   | 5.452 |
| Ability to work as a team                          | 5.035 |
| Ability to analyze and synthesize                  | 5.003 |
| Interpersonal abilities                            | 4.957 |
| Responsibility at work                             | 4.956 |
| Concern about quality and improvement              | 4.941 |
| Motivation to reach goals                          | 4.916 |
| Ability to work independently                      | 4.901 |
| Motivation for work                                | 4.774 |
| Ability to adapt to new situations                 | 4.624 |
| Information management abilities                   | 4.594 |
| Basic knowledge of the profession                  | 4.587 |
| Ability to communicate (oral and written)          | 4.561 |
| Ability to organize and plan                       | 4.537 |
| Ability to generate new ideas                      | 4.534 |
| Ethical commitment                                 | 4.524 |
| Problem solving                                    | 4.373 |
| Ability to apply knowledge to practical situations | 4.355 |
| Decision making                                    | 4.275 |

## 5.2. Competences of graduates that are applied in companies.

This section includes the analysis of the competences, but only for part of the sample, that is, for those who are employed (Table 4). Initially, the mean scores of the applied competences were always above those of competences claimed having been acquired at UDC. All items show a notable increase, with the exception of basic knowledge of the profession with a score of 4.624 between “reasonable and sufficient”, approaching the value obtained for the competences claimed to have been acquired at UDC (4.587). For all the other items, the scores went from a minimum for ability to generate new ideas with a score of 5.278, between “sufficient and much”, to a maximum for responsibility at work with 6.281, between “much and amply qualified”.



**Table 4.** Mean score of the competences of UDC graduates that are applied in companies

|  |       |
|--|-------|
| Responsibility at work                             | 6.281 |
| Ability to learn                                   | 5.903 |
| Concern about quality and improvement              | 5.837 |
| Interpersonal abilities                            | 5.836 |
| Ability to adapt to new situations                 | 5.812 |
| Motivation to reach goals                          | 5.741 |
| Decision making                                    | 5.731 |
| Ability to work as a team                          | 5.665 |
| Motivation for work                                | 5.662 |
| Ability to organize and plan                       | 5.642 |
| Ability to communicate (oral and written)          | 5.627 |
| Ability to apply knowledge to practical situations | 5.586 |
| Ability to work independently                      | 5.567 |
| Ethical commitment                                 | 5.565 |
| Problem solving                                    | 5.544 |
| Information management abilities                   | 5.458 |
| Ability to analyze and synthesize                  | 5.403 |
| Ability to generate new ideas                      | 5.278 |
| Basic knowledge of the profession                  | 4.624 |

### 5.3. Competences required by companies.

This section presents the answers given by all the companies of the sample on the competences required of their workers. The transversal competences analyzed are the evaluations made by the different business professionals of the 19 items. This simplifies the common competences of most of the professions and relates, as indicated before, the competences to having attitudes, personality traits and knowledge the business professional considers necessary for career advancement.

The same items with the same number of categories and values were included. The categories presented in the questionnaire, as indicated before, were as follows: from 1 = “none or nothing” to 7 = “ample or very high”.

Table 5 presents the scores given by the business professionals to each of the items. With the available information one can confirm that the evaluation of the competences ranges from a minimum for ability to work independently with 5.189 points to a maximum for responsibility at work with 6.597 points. Among the highest values, after this item, is motivation for work with 6.296, slightly different from the two that follow: ability to

learn and problem solving with 6.265 and 6.163, respectively. The rest of the items analyzed are in a range that is significantly lower than the scores mentioned.

**Table 5.** Competences required by companies

|  |       |
|--|-------|
| Responsibility at work                             | 6.597 |
| Motivation for work                                | 6.296 |
| Ability to learn                                   | 6.265 |
| Problem solving                                    | 6.163 |
| Ability to work in a team                          | 6.087 |
| Concern about quality and improvement              | 6.031 |
| Ability to organize and plan                       | 6.020 |
| Ability to adapt to new situations                 | 5.980 |
| Ethical commitment                                 | 5.883 |
| Decision making                                    | 5.877 |
| Ability to apply knowledge to practical situations | 5.867 |
| Motivation to reach goals                          | 5.796 |
| Ability to generate new ideas                      | 5.714 |
| Ability to communicate (oral and written)          | 5.656 |
| Ability to analyze and summarize                   | 5.515 |
| Interpersonal abilities                            | 5.482 |
| Basic knowledge of the profession                  | 5.423 |
| Information management abilities                   | 5.393 |
| Ability to work independently                      | 5.189 |

### 5.3.1. Competences required by companies of different sizes

The competences most highly scored by businessmen should be differentiated by company size, since they do not agree for some items. So, in this section there is a distinction between microcompanies and small companies, medium-sized companies and large companies, the results found in Table 6.

**Table 6.** Competences required by companies of different sizes

|  | Microcompanies and small companies | Medium-sized companies | Large companies |
|--|------------------------------------|------------------------|-----------------|
| Responsibility at work                             | 6.542                              | 6.706                  | 6.524           |
| Motivation for work                                | 6.318                              | 6.279                  | 6.238           |
| Ability to learn                                   | 6.29                               | 6.191                  | 6.381           |
| Problem solving                                    | 6.093                              | 6.338                  | 5.952           |
| Concern about quality and improvement              | 6.047                              | 6.029                  | 5.952           |
| Ability to adapt to new situations                 | 5.916                              | 6.044                  | 6.095           |
| Ability to work in a team                          | 5.907                              | 6.279                  | 6.381           |
| Ability to apply knowledge to practical situations | 5.897                              | 5.882                  | 5.667           |
| Ability to organize and plan                       | 5.86                               | 6.353                  | 5.762           |
| Ethical commitment                                 | 5.822                              | 5.868                  | 6.238           |
| Decision making                                    | 5.804                              | 5.91                   | 6.143           |
| Motivation to reach goals                          | 5.776                              | 5.735                  | 6.095           |
| Ability to generate new ideas                      | 5.766                              | 5.647                  | 5.667           |
| Ability to communicate (oral and written)          | 5.617                              | 5.642                  | 5.905           |
| Ability to analyze and summarize                   | 5.589                              | 5.456                  | 5.333           |
| Interpersonal abilities                            | 5.406                              | 5.471                  | 5.905           |
| Information management abilities                   | 5.346                              | 5.515                  | 5.238           |
| Basic knowledge of the profession                  | 5.336                              | 5.603                  | 5.286           |
| Ability to work independently                      | 5.336                              | 4.985                  | 5.095           |

Companies having 1 to 49 workers have been analyzed jointly given the scarce degree of response obtained given only 12.91% of the total sample responded. This situation is somewhat logical since these companies may not have university graduates in their staff, and based on the reliability of the information to be presented, we decided to use the combined group of micro- and small companies, consisting of 112 companies, making up 19.51% of the total.

The first column of Table 6 presents the scores given by the businessmen of microcompanies and small companies. The available information confirms that the item scores undergo very few changes, given there is only a difference of 1.20 points between the maximum and the minimum scores. The highest score was obtained for responsibility at work with 6.542 points and the lowest was produced in basic knowledge of the profession and in ability to work independently with 5.336. The results clearly show that the employer does not really value if a young individual is able to make decisions

independently or has basic knowledge of the profession. One can predict, almost surely, that the employer prefers to teach these competences in the company. Among the competences with the highest scores, with small differences of 0.22 to 0.25 points, are the following items: motivation at work (6.318), ability to learn (6.290), problem solving (6.093) and concern about quality and improvement (6.047).

The second column of Table 6 presents the scores given by businessmen of medium-sized companies, that is, those having 51 to 250 workers. From the available information note that the item scores undergo considerable changes, showing a difference of nearly two points between the highest and the lowest. The highest score was obtained for responsibility at work with a value of 6.706 points and the lowest was produced for ability to work independently with 4.985. Once again, and in view of the scores obtained, the businessman clearly does not value being independent when making decisions. In any case, note that the differences between the lowest item (4.985) and the three items that follow on the scale are quite large, from 0.5 to 0.6 points, in ability to analyze and summarize, interpersonal abilities and information management abilities. Among the highest scored competences, showing small differences of 0.3 to 0.4 points, are the following items: ability to organize and plan (6.353), problem solving (6.338) and ability to work in a team and motivation at work (6.279).

The third column of Table 6 presents the scores of businessmen from large companies, that is, those having over 250 workers. The available information confirms that businessmen value quite positively workers having transversal competences, being significant the fact that all the items scored above 5 points. Note that the general level of nearly all the scores obtained is very high and quite similar for almost all competences, the scores ranging between 5.095 and 6.524 points. It is necessary, however, some clarification in this regard, we refer to the competences with the lowest scores, which logically focus on those aspects that businessmen want to teach themselves to individuals of their choice, and do not think it is important for workers to already have these. Among these items are: ability to work independently (5.095), information management abilities (5.238), basic knowledge of the profession (5.286) and ability to analyze and summarize (5.333).

The highest scored competence is responsibility at work with a value of 6.524 points but there is hardly any difference between this item and those that follow on the scale, varying by 0.1 and 0.2 points. Among the items with the highest scores are: ability to work in a team and ability to learn, both with 6.381 points, and ethical commitment, as well as motivation at work with 6.238 points.

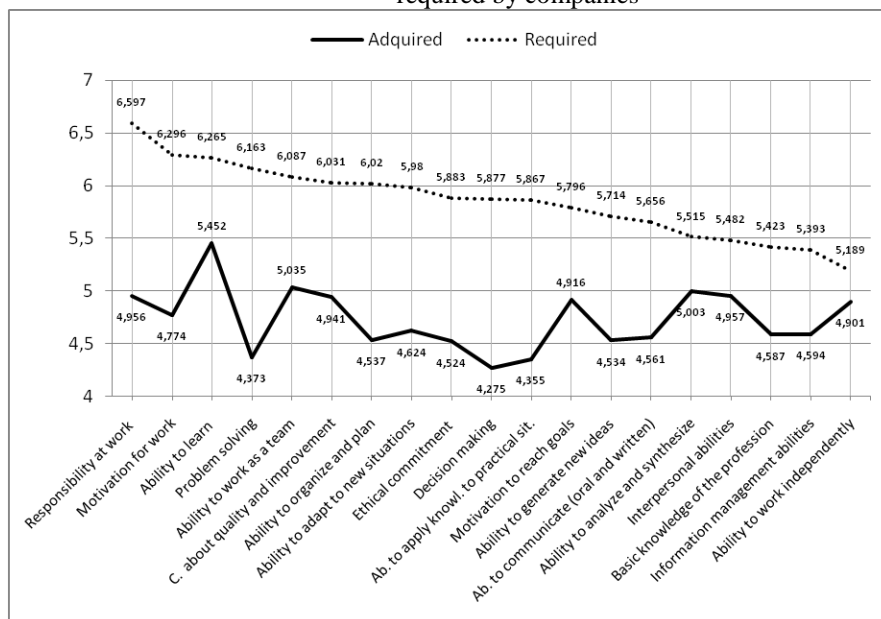
#### **5.4. Comparison of the competences graduates claim having acquired at UDC and those required by companies**

Among the objectives of this section is to evaluate the differences for each of the 19 items, from the point of view of the opinions of the companies and of the graduates, based on the education acquired at the university. The scores given to each item by the

graduates when studying at UDC and the level required by companies for each competence will be compared.

Figure 1 presents these results. For the graduates, in terms of the level of acquisition of said competences a mean score of 4.732 was obtained, while the level required by companies reached 5.854 points, indicating that the demand is greater in the case of employers than in that of graduates.

**Figure 1:** Adequacy of the level of mean competences acquired by graduates and level required by companies



In terms of the prioritization of competences in one or another setting, clear asymmetries are observed in certain cases.

Among the competences the company considers important and the university, in contrast, considers unimportant, the most significant are:

- Problem solving (4<sup>th</sup> most important for companies and 17<sup>th</sup> for the university)
- Ethical commitment (9<sup>th</sup> most important for companies and 16<sup>th</sup> for the university)
- Ability to organize and plan (7<sup>th</sup> most important for the company and 14<sup>th</sup> for the university)

Among the competences considered unimportant for the company and important for the university are:

- Ability to work independently (19<sup>th</sup> most important for the company and 8<sup>th</sup> for the university)
- Ability to analyze and summarize (15<sup>th</sup> for the company and 3<sup>rd</sup> for the university)

- Interpersonal abilities (16<sup>th</sup> most important for the company and 4<sup>th</sup> for the university).

## 6. Conclusions

In this article we analyze the professional competences in processes involving the selection of personnel and their relevance in the professional development of UDC graduates. Firstly, the competences graduates claim to have acquired at UDC and those applied to the company have been analyzed. Secondly, the competences required by companies in the Metropolitan Area of A Coruña have been studied, and finally, the prioritization of the competences required by companies and the level obtained at UDC has been compared.

The conclusions of this work are quite significant and clear. Among the most important are:

1. The competences graduates claim to have acquired at UDC show high mean scores, ranging from a minimum of 4.275 points to a maximum of 5.452 points, equivalent to a category between “reasonably qualified and highly qualified”. This finding is quite significant if compared with other studies carried out at national and foreign universities.
2. With respect to the competences applied in companies the mean scores are always above those said to have been acquired at UDC. All the items undergo a notable increase, with the exception of basic knowledge of the profession. The competences range between a minimum of 5.278 and a maximum of 6.281, with a high category between “highly qualified and amply qualified”.
3. For the competences required by business professionals, they are always higher than those graduates claim to have acquired at UDC. The available information shows that the evaluation goes from a minimum for ability to work independently with 5.189 points to a maximum for responsibility at work with 6.597 points.
4. In the analysis of the priority of competences graduates claim to have acquired at UDC with respect to those required by companies, there are clear asymmetries in certain cases. The most notable are:
  - a) Problem solving, ethical commitment and ability to organize and plan, being very or moderately important for the company and not important at all for the university.
  - b) Ability to analyze and summarize, interpersonal abilities and ability to work independently, not being important for the company and very to moderately important for the university.

The data obtained corroborate the fact that the university is faced with an important challenge in terms of improving the competences needed by the graduates, to help the graduate develop professionally to be able to meet the demands of the workforce.

Lastly, there is a considerable void between university education and the demands of companies in terms of generic competences. More research of this type is necessary to confront the changes that entering the European Higher Education Area entail, to improve the professional competences of our universities and have more resources to be able to deal with the job market.

## References

- Alonso Benito, L. E., Fernández Rodríguez, C.J. and Nyssen, J.M. (2009). *El debate sobre las competencias: una investigación cualitativa en torno a la educación superior y el mercado de trabajo*, ANECA, Madrid.
- Barth, M., Godemann, J. Rieckmann, M. and Stoltenbert, U. (2007). "Developing key competences for sustainable development in higher education", *International Journal of Sustainability in Higher Education*, 8 (4), pp. 416-430.
- Buela-Casal, G., et al. (2009). "Comparación de los indicadores de la calidad de las universidades", *Revista de la Sociedad y del Conocimiento*, vol 6, nº 2, pp. 9-21.
- Cajide, J., Abeal, C., Barreiro, F., Zamora, E., Expósito, A. and Mosteiro, J. (2002). "Competencias adquiridas en la universidad y habilidades requeridas por los empresarios", *Revista de Investigación Educativa*, vol 20, nº 2, pp. 449-467.
- Corominas, E. (2001). "Competencias genéricas en la formación universitaria", *Revista de la Educación*, nº 325, Madrid, pp. 299-322.
- DESECO (2003). *Key competencies for a successful life and well-functioning society, Final Report*. OECD, Paris.
- Fallow, S. and Steven, C. (2000). *Integrating key skills in higher education*, London, Kogan Page Limited.
- Freire, M. J. (2008). *Competencias profesionales de los universitarios*, Consello Social da Universidade da Coruña.
- Freire, M. J., Teijeiro, M. (2009). "Análisis de los factores que afecta a la decisión de ser emprendedor", *Cuadernos de Economía*, vol. 32, nº 90, pp. 5-27.
- Jiménez Vivas, A. (2009). "Reflexiones sobre la necesidad de acercamiento entre la universidad y mercado laboral", *Revista de la Educación Superior*, nº 50.
- Levy-Leboyer, C. (2003). *Gestión de las competencias: Cómo analizarlas, cómo evaluarlas, cómo desarrollarlas*, Gestión 2000, Barcelona
- Mora, J.G. (2003). "Competencias y empleo de los jóvenes graduados universitarios" *Revista de Educación*, 330, pp. 157-170.
- OECD (2005). *The definition and selection of key competencies. Executive Summary*, Paris.
- Villa, A. and Poblete, M. (2007). *Aprendizaje basado en competencias. Una propuesta para la evaluación de las competencias genéricas*, Bilbao, ed. Mensajero.