

Perception of the Professional Competences of Last Year's Students of Pre-Primary Education and Primary Education Degrees and Students of Training Teachers Master

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ABSTRACT

This research aims to obtain knowledge of the perception of last year's students' in Pre-primary and Primary Education Degrees and Secondary Education, Vocational Education and Languages Education in Teachers University Master (better known as Training Teachers Master or Secondary Education Master) at Jaen University (UJA) and the National Distance Education University (UNED), about the most important competences in their learning process. Those competences allow students to develop their knowledge and practice, in order to be capable of dealing with those real demands that surround them. In order to achieve this, we use a descriptive methodology. We apply an ad hoc, pre-designed questionnaire, (n=638). The results reveal a positive opinion in students in relation to competences and how those competences are developed within their classrooms or Study centers. In addition to that, students present some proposals to boost the improvement of competences. They invite teachers to innovate and to create new educative models that allow them to achieve an optimal development as future professionals.

KEYWORDS: PROFESSIONAL COMPETENCES, PRE-PRIMARY EDUCATION, PRIMARY EDUCATION, SECONDARY EDUCATION, UNIVERSITY STUDENT.

1 INTRODUCTION

The objective of this research is to explore the competences of last year's students in Pre-primary and Primary Education degrees and Secondary Education Master at Jaen University. This research is part of the Innovative and Best Educative Practices Incentive Project of the Vice-Rector of Grades, Post-grades and Lifelong Learning studies at Jaen University (Project code: PID64_201617). The results of this study match with other research carried out by Benzanilla, Arranz, Rayón, Rubio, Menchaca, Guenaga and Aguilar (2014), Legault (2012) and Villa and Poblete (2011), and they will allow teachers to know all the general statements to design a competences learning model

according to all the needs found in each degree, without any negative consequences.

1.1 The European Higher Education Area

The European Higher Education Area (EHEA) is a plan, which searches for improvement in Higher Education, in which 49 countries are involved and three learning levels (grades, master and doctorate levels). In 2000 the *Tuning* Project started, that has as objectives "to determine reference points for the general competences and for those specific of each discipline in a group of contents" (EEES, 2018) and Eurydice (2012).

These new plans were implemented by the European Union, and they have given way to Educative transformations by both Directors/ Head Department and Teachers and Students of Higher Education Institutions (HEI). This is the origin of the requirement by which students are being taught and trained starting from competences work. In that way students are creating their professional profile and they would be capable of dealing with the professional reality (Lovanova & Sunin, 2008).

1.2 Competences within EHEA

Some authors have defined a competency as a process in which people can solve problems creatively, to develop activities, to carry out exercises, to pose questions, to search for relevant information, to analyze, understand and reflect by applying their knowledge giving an answer to the demands of the real environment (Ossa & Quintero, 2016; Ramos, Chiva, & Gómez, 2017; Serrano, Biedermann, & Santolaya, 2016; Tobón, 2008).

Following López and Parra (2017), competences allow not only to combine knowledge, abilities and attitudes, but also motivation that is developed in a gradual way all along the educative process. Teachers and Educative Directors are in charge of this tough task of modeling and training students performance in order to help them to develop those required competences.

The most common ranking of competences by authors in the Educative field is Basic Competences (those needed to correctly handle society and the workplace), Generic Competences (those common in some occupations that are acquired by a systematic learning process), and Specific Competences (those specific for an occupation and with high specialization), the last two types are essential for mastering those professional competences (Domínguez, Levi, Medina, & Ramos, 2014; Ossa & Quintero, 2016).

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Within these same competences we can find three critical elements, when those elements are related among them, the achievement of the competency is possible, we can find this idea in Martínez, Hernández and Gomora (2016). These elements are: To Know (knowledge), To Do (ability), To want to do (attitude) or as we can find in Ossa and Quintero (2016) as the knowledge to be (self-motivation), to know to know (understanding) and to know to do (performance).

1.3 Competences evaluation

In the follow up of the implementation of the above mentioned approaches, several pieces of research have been carried out to evaluate and self-evaluate the acquired competences by students in several academic fields (López & Parra, 2017; Ortiz, Marta-Lazo, & Martín, 2016; Ramos, Chiva, & Gomez, 2017; Serrano, Biedermann, & Santolaya 2016).

All this with the intention to check if the professional competences needed for the professional field have been developed in students, in which grade, where students obtained most of them (school, internships, workplace) and how students organize themselves according to their own perspective.

We don't just evaluate students' competences, but also those of teachers in their activity to inculcate them in their students and how those teachers have developed them during their own training and professional reality (Dominguez, Leví, Medina, & Ramos, 2014; García & Ferrer, 2016; Rodriguez & Meneses, 2017). In Sotelo, Vales, García and Barrera (2017) work, they establish the characteristics and competences that a good teacher, in face-to face and virtual modalities, must assume in order to transmit competences to students, this is responsibility, respect and comprehensive characteristics for the face-to face teacher and, responsibility, accessibility and availability as characteristics for the virtual teacher.

Investigations in Chile by Jerez, Valenzuela, Pizarro, Hasbun, Valenzuela and Orsini (2016) presents that universities of the five continents have passed with time from studied plans (curriculum) base on knowledge to those based on competences.

1.4 Competences in professional practices and in the professional field

It is important to know the competences that will be needed for each specific area during our first professional experiences, due to this, professional internships are included in the studies plan of universities to help students to be familiar with the professional reality and they acquire experience in the field.

In a piece of research carried out by Mareque and De Prada (2018) there is an evaluation of the specific and generic competences in students while they are developing their internships. They self-evaluate their competences and at the same time Managers of the internship companies evaluate those competences. The results were positive in all the competences except in the creativity competency, which was the lowest evaluated.

Due to this, to develop some research about professional competences in students at Jaen and UNED universities is important, in order to understand how those competences are in students and base on the results, to design the above-mentioned training model, which will help teachers and students to acquire and to teach the needed competences at each degree in a more effective way.

2 MATERIAL AND METHODS

The results were obtained by a descriptive study with the objective to describe a situation taking in consideration several aspects of the researched phenomenon (Hernández, Fernández, & Bap-

tista, 1991). A questionnaire with 62 items was applied, it was previously designed, with the title "Professional Competences of students". The grades of the questionnaire are Likert's scale, in which 1 (never- no-one) is the lowest grade and 6 (always) is the highest grade. The questionnaire is composed of nine major dimensions; (competences): 1) Communication (10 items), which is to be about oral and written communication in students and with teachers, 2) Tutorial (6 items), orientation and counselling about their learning, 3) Evaluation (7 items), of teachers' teaching process and continuous improvement of the course, 4) Research (6 items), about their learning process, 5) Innovation in teaching (6 items), 6) Professional identity (7 items), about the development and involvement with their future teaching profession, 7) Collaborative culture (7 items), 8) Leadership (6 items) and 9) Entrepreneurship (7 items). Adding an open question at the end of each of these sections.

In the penultimate section of the instrument students are asked to rank the nine competences, based on the importance that each student provides, giving a grade of 1 (the most important one), to 9 (the least important). The last section of the questionnaire presents an open integrative question about the most relevant elements of the training program that have shaped students, based on their opinion.

In December 2017 there was a pilot test of the questionnaire, in which 48 students of game and sport subject participated. This subject is elective mentioned in UJA in Primary Education Degree (12113013) and elective for Pre-primary (12013031). The application of the questionnaire was in the first week of May of the current year and the instrument was written, answered by participants. At the end of the gathering process, the information was registered in the Statistical Package for the Social Sciences (SPSS) program, 22 version. Following this way it was possible to obtain the mean, mode, standard deviation. The test of the questionnaire was developed by the analysis of contents by 20 experts, taking in consideration the following criteria: clarity, coherence, suitability and adequacy to the generated questions within the dimensions' frame. Accepting those questions were experts on a scale from 1 to 6 value with 5, after this the questionnaire was applied to a different pilot test group, however considerably similar to those groups that will be targeted for the study.

A reliability study on the instrument was developed applying Cronbach's alpha coefficient and the punctuation was .948, which reveals that the scale is reliable.

Participants in the research are students of the last year of Pre-primary Education (31.50%), Primary Education (48.58%), Secondary Master (19.90%). 98.9% of participants are students from Humanities and Social Sciences Education at Jaen University and only The 1.1% from National Distance Education (UNED). The global number of students who answered the instrument was 638. In relation to age, most of them were between 19 and 21 years old at 62.1%, the rest of them were over 22 years old. Regarding the last grade of their studies, we can find that 71.9% finished their High School Degree, 16.5% their Vocational Learning, the .5% their old Grade, 2.2% have done a Master, Doctorate studies 1.3% and Degree 8.6%. In relation to their studies modality 98.7% study face to face modality and 1.3% Distance modality. In order to finish, 53.13% of participants (339 people) were female and 46,86% (299 people) were male.

3 RESULTS

With the purpose to analyze students' punctuations of the last year Pre-Primary Education and Primary Education Degree of Jaen University and the National Distance Education University

about their professional competences as students, the punctuations of means and standard deviations obtained in each ítem of the different scale factors in the research were examined, revealing the following facts.

3.1 Communication Competence

Table number 1 reveals means punctuations obtained in this first factor, those means discover how 44.0% of surveyed students note that frequently the speech used in their learning process is clear (M=4.41; S.D.=0.939). At the same time 37.1% consider that frequently their communicative process with other students include suitable codes to the communication, verbal, paraverbal, iconic and written communication (M=4.53; S.D.=1.001). On the other hand, 35.0% of students consider that, frequently, the interaction grade with teacher is made of empathy (M=4.45; S.D.=1.039). 31.7% of students with low frequency ask innovative questions about the topic explained by the teacher (M= 3.52; S.D.=1.281); frequently, for 36.5% of surveyed students, communication in the teaching-learning process is facilitated by the incorporation of the ICT (M=4.38; S.D.=1.083). Most of the students (38.4%) consider that communication is frequently a competency that supports the improvement of their learning (M=4.43; S.D.=0.990); The (35.3%) of students mention that almost always they are able to do written presentations with clarity (M=4.72; S.D.=1.001); in the same way, almost always, 30.6% of students adapt their work to the established rules for the bibliographical references (M=4.71; S.D.=1.078) and, almost always, 36.4% of them use ICT as a support to their communication competency (M=4.83; S.D.=1.020). Finally, 29.2% of learners mention that they have frequently oral expression techniques in the classroom (M=3.91; S.D.=1.395). It is worth mentioning that for students presentations in class and debates for boosting the improvement of communication as competence tends to be very important

Table 1. Communication as competence

Communication	Percentage valid	M	S.D.
I.1 The discourse of the employee in his learning is simple.	44.0%	4.41	0.939
I.2 The communicative process I take part with other students incorporates the appropriate codes to the communication (verbal, para-verbal, iconic and written).	37.1%	4.53	1.001
I.3 The level interaction with the teacher conducts with empathy.	35.0%	4.45	1.039
I.4 I ask innovative questions about the subject explained by the teacher.	31.7%	3.52	1.281
I.5. Communication in the teaching-learning process is provided with the incorporation of ICT.	36.5%	4.38	1.083
I.6 Value this competence to improve your learning.	38.4%	4.43	0.990
I.7 I make written presentations clearly.	35.3%	4.72	1.001
I.8 I adapt my work to the established norms for bibliographic citations.	30.6%	4.71	1.078
I.9 I use ICT as support for communicative competence.	36.4%	4.83	1.020
I.10 I have worked in the classroom oral expression techniques.	29.2%	3.91	1.395

3.2 Tutorial Competence

As shown in table 2, 38.1% of surveyed students hold that frequently the counselling received during the learning process is meaningful (M=4.00; S.D.=1.142); at the same time, for 41.4% of students, frequently tutorial modality trains them for their future teaching practice benefiting their learning, (M=4.19; S.D.=1.059). For 33.9% of students, with frequency, the tutorial process is improved by the use of ICT (M=4.30; S.D.=1.128); the tutorial activity is aimed at answering their own questions and difficulties found in the learning process of 39.5% of students (M=4.28; S.D.=1.096). 36.1% of surveyed students reveal that frequently time received during tutorial orientation is enough (M=3.93; S.D.=1.210); and 39.2%, frequently, value tutories as an essential competency for the improvement of their professional practice. Some of the most common students' proposals for boosting a mastering of this competency is to carry it out with more frequency and in a group, at the same time they propose tutorials on-line using Hangouts and Skype.

Table 2. Tutorial as competence

Tutory	Percentage valid	M	S.D.
II.1 The advice received as a student in my learning process satisfies me.	38.1%	4.00	1.142
II.2 The tutorial modality will train for their future teaching practice, benefiting their learning.	41.4%	4.19	1.059
II.3 The tutorial process is satisfied with the use of ICT.	33.9%	4.30	1.128
II.4 The tutorial task is oriented to attend the questions and difficulties found in their learning process.	39.5%	4.28	1.096
II.5 The time at tutorial orientation is enough to solve my difficulties.	36.1%	3.93	1.210
II.6 Value this competence to improve your practice.	39.2%	4.29	1.072

3.3 Evaluation Competence

Based on table 3, students (38.2%) consider that with frequency the evaluation of the acquired competences is being done in a formative and personalized way (M=3.90; S.D.=1.149); furthermore 39.6% of them affirm that the assessment methods that have been used are frequently suitable to the evaluation of the achieved competences (M=3.94; S.D.=1.107). On the other hand, in the opinion of 37.9% of the surveyed students, different alternatives have been used with frequency in order to estimate the mastering of learning competences (M=3.84; S.D.=1.183). 43.4% of students explain that, frequently, they take decisions to improve training in competences taking as based on the results obtained in the evaluation (M=4.21; S.D.=1.051); 32.8% of students analyze the results obtained in their evaluations (M=3.53; S.D.=1.360). Frequently tasks carried out to test the mastering of intended competences are suitable, 41.2% of students of the surveyed sample estimate (M=3.94; S.D.=1.116). At the end, 39.5% of students value as frequent the improvement of their professional practice thanks to the evaluation (M=4.21; S.D.=1.087). The proposals of students to boost an improvement in the evaluation, are taking more into account the process of the whole semester of study and not only the result of the final exam and, moreover, that teachers use new techniques and rubrics of evaluation.

Table 3. Evaluation as competence

Evaluation	Percentage valid	M	S.D.
III.1 It considers that the evaluation of the acquired competences is carried out in a formative and personalized way.	38.2%	3.90	1.149
III.2 It considers that the valuation instruments that have been applied are adequated to the evaluation of the competences reached.	39.6%	3.94	1.107
III.3 Various evaluation alternatives have been used to estimate the knowledge of the skills learnt.	37.9%	3.84	1.183
III.4 I make decisions to improve competency training based on the results obtained in the evaluation.	43.4%	4.21	1.051
III.5 I analyze with my teachers the results achieved in their evaluation.	32.8%	3.53	1.360
III.6 The tasks conduct to estimate the knowledge of the proposed competences are correct.	41.2%	3.94	1.116
III.7 Rate from 1 to 6 this competence for the improvement of their professional practice.	39.5%	4.21	1.087

3.4 Research Competence

Analyzing the punctuations obtained in table 4, the agreement of 30.3% of the surveyed students emphasized how to underline that frequently working in team works to develop educative research (M=3.73; S.D.=1.514). 37.1% of students consider that research applied to their learning processes improves with frequency their quality as future professionals (M=4.10; S.D.=1.204); On the other hand, 29.8% of students mention that they frequently participate in activities of research with other students (M=3.53; S.D.=1.521); and sometimes they share their results obtained in their research with colleagues and teachers, in the opinion of 28.4% of surveyed students (M=3.54; S.D.=1.504). With frequency, the research shows that 35.0% of what students develop

Table 4. Research as competence

Investigation	Percentage valid	M	S.D.
IV.1 I take part in work teams to make educational research.	30.3%	3.73	1.514
IV. 2 The research applied to my learning process improves its quality as a professional future.	37.1%+C7:C8	4.10	1.204
IV. 3 I participate in research activities with other students.	29.8%	3.53	1.521
IV.4 I share the results of the research obtained in the working groups with colleagues and teachers.	28.4%	3.54	1.504
IV. 5 The research I make in my learning process has benefited me in the innovation culture as a student.	35.0%	3.83	1.364

in their learning process benefit them in the culture of innovation as a student (M=3.83; S.D.=1.364); and 35.6% value research as a competency that frequently improves their professional practice (M=4.06; S.D.=1.262). Students propose diversity and innovation in the research proposals suggested by teachers, so with the use of ICT, in order to improve this competency and they invite teachers to promote with greater encouragement research in students.

3.5 Innovation Competence

As shown in table 5, punctuations of means reveal that 36.1% of surveyed students consider that almost always innovation in their learning process is a needed line in order to train them as future professionals in the field of education (M=4.61; S.D.=1.050); innovation frequently is coherent with needed transformations in their learning process, in the opinion of 38.2% of the surveyed population (M=4.40; S.D.=1.062). For 37.5% of students, with frequency, the learning process has to be based on some educative innovative model (M=4.42; S.D.=1.005); innovation applied to learning for 37.8% of students has to be based on an indagatory and reflective process of their training (M=4.41; S.D.=1.028). 35.3% of students consider that, frequently, research is the main source for innovation in their learning process (M=4.46; S.D.=1.080); and the 34.0% of students value frequently that is innovation a competency to improve their professional practice. Finally, students propose teachers to use new technologies which mainly motivate their students relying on ICT or other resources that boost innovation.

Table 5. Innovation as competence

Innovation	Percentage valid	M	S.D.
V.1 He considers the innovation of his learning process as a necessary line for his training as a professional future.	36.1%	4.61	1.050
V.2 Innovation is consistent with the necessary transformations in your learning process.	38.2%	4.40	1.062
V.3 The learning process must be based on some model of educational innovation.	37.5%	4.42	1.005
V.4 The innovation applied to their learning must be based on a process of inquiry and reflection of their training as a student.	37.8%	4.41	1.028
V.5 He considers that research is the principal source for innovation in his learning process.	35.3%	4.46	1.080
V.6 Rate from 1 to 6 this competence for the improvement of their professional practice.	34.0%	4.53	1.028

3.6 Professional Identity Competence

In this section, table 6 reveals that for 34.3% of students the learning process developed during the last few months is frequently relevant for their future occupation (M=4.35; S.D.=1.192); at the same time, for 35.1% of students the learning process executed during their training frequently produce them satisfaction (M=4.29; S.D.=1.168). Students (33.1%) reveal that frequently find a harmonic situation during their learning (M=4.26; S.D.=1.157); 34.2% assume, frequently, professional identity as a permanent challenge (M=4.47; S.D.=1.080); the practice of their

learning almost always is improved by the advance in their professional occupation, in opinion of 32.8% of the surveyed students (M=4.53; S.D.=1.078); 33.9% of student value that frequently professional identity is a competence capable of improving their future occupation (M=4.55; S.D.=1.075). Last, 33.5% of students mention that with frequency professionalism is more needed than vocation in their professional performance. Students propose to develop practices base on to the reviewed topic during their student performance, due to this they will explore and will obtain a greater learning.

Table 6. Professional Identity as competence

Professional Identity	Percentage valid	M	S.D.
VI.1 Considers that the learning made during these months is relevant to their future profession.	34.3%	4.35	1.192
VI.2 The learning process carried out during his training gives him satisfaction.	35.1%	4.29	1.168
VI.3 He is in a harmonious situation when he learns.	33.1%	4.26	1.157
VI.4 The professional identity assumes it as a permanent challenge.	34.2%	4.47	1.080
VI.5 The practice of their learning is improved by advancing their professional development.	35.9%	4.53	1.078
VI.6 VI.6 Value this competence for the improvement of your identity with your future profession.	33.9%	4.55	1.075
VI.7 Professionalism is more necessary than the vocation in the performance of my work.	33.5%	3.96	1.266

3.7 Collaborative Culture as Competence

Table number 7 shows that 38.8% of students frequently practice collaboration in the learning process (M=4.41; S.D.=1.046); this culture among students is considered positively according

Table 7. Collaborative culture as competence

Collaborative culture	Percentage valid	M	S.D.
VII.1 Collaboration is practiced in the learning process.	38.8%	4.41	1.046
VII.2 The culture of collaboration among students is positively estimated.	37.5%	4.29	1.099
VII.3 Value the collaborative learning carried out among the students.	37.3%	4.30	1.113
VII.4 Among the methods applied by the teaching staff, there are those that promote collaboration among students.	35.0%	4.30	1.108
VII.5 I learn more if I do cooperative work.	32.2%	4.46	1.194
VII.6 In today's society, cooperative work is more useful.	32.5%	4.60	1.129
VII.7 Value this competence for the improvement of your professional practice.	33.8%	4.62	1.081

to 37.5% of population (M=4.29; S.D.=1.099). 37.3% of students consider usual the collaborative learning carried among them (M=4.30; S.D.=1.113). 35.0% of students confirm that teachers use frequently methods that foster collaboration within students (M=4.30; S.D.=1.108), based on this 32.2% of students answer that with frequency tend to obtain a higher learning if they develop cooperative work (M=4.46; S.D.=1.194), 32.5% of students reveal that currently collaborative work is almost always useful (M=4.60; S.D.=1.129). 33.8% of the surveyed population value collaborative culture as a competence that almost always improves the professional practice (M=4.62; S.D.= 1.081). In order to improve the collaborative culture, students propose teachers to boost work in team and the exchange of ideas in all subjects.

3.8 Leadership Competence

Analysing the table 8, 36.2% of students believe that with frequency to learn leadership is valued positively by teachers (M=4.10; S.D.=1.194); 38.9% of surveyed people consider leadership's responsibility frequently value for their classmates in classroom (M=4.18; S.D.=1.116). To learn responsibility and to assume functions is considered frequently as positively for 38.5% of students from the surveyed classrooms or centers (M=4.33; S.D.=1.073); so the same 35.9% of them mention that, frequently, to assume leadership increase responsibility towards themselves and classmates (M=4.36; S.D.=1.084). With frequency, for 38.9% of population, the learning of leadership has meant the commitment for the global development in people in the educative community (M=4.27; S.D.=1.086). Students (39.9%) value as frequent the improvement of their professional practice thanks to leadership (M=4.34; S.D.=1.080). Some tasks proposed by students in order to boost leadership are to promote works in team and to assign roles to each member of the team facilitating them to behave as leaders.

Table 8. Leadership as competence

Leadership	Percentage valid	A	S.D.
VIII.1 Value this competence for the improvement of your professional practice. The learning of leadership is valued positively by the teaching staff.	36.2%	4.10	1.194
VIII.2 The leadership responsibility is a value for your classmates.	38.9%	4.18	1.116
VIII.3 The learning of responsibility and assumption of functions is considered positive for students in their classroom or center.	38.5%	4.33	1.073
VIII.4 Assuming leadership increases responsibility to oneself and colleagues in the class.	35.9%	4.36	1.084
VIII.5 The learning of leadership has meant the commitment for the integral development of all the people of the educational community.	38.9%	4.27	1.086
VIII.6 Rate from 1 to 6 this competence to improve your future professional practice.	39.9%	4.34	1.080

3.9 Entrepreneurship Competence

Table 9 shows that 33.1% of students believe that with frequency the improvement of initiative is considered as a value among students ($M=4.46$; $S.D.=1.058$); at the same time, 32.5% value as frequent the contribution of original ideas to create new organizations ($M=4.43$; $S.D.=1.121$); for 35.5% of students, the innovative learning, is usually the guarantee of the comprehensive development ($M=4.47$; $S.D.=1.081$); at the same time is usual the contribution of original ideas, which is valued as positive in the educative institution in opinion of 33.4% of students ($M=4.47$; $S.D.=1.091$); the support to students' initiative tends to be usual (35.9%) as a guarantee to promote creative learning ($M=4.55$; $S.D.=1.049$). Students (37.2%) reveal that usually entrepreneurship is encouraged in class ($M=4.08$; $S.D.=1.194$). Finally, 30.9% of surveyed people value as frequent the improvement of their professional practice thanks to entrepreneurship as competence. Some suggestions to teachers, from students' side in order to boost the improvement of the competence, are the promotion and motivation of entrepreneurship and to carry out interships outside university to explore new horizons that allow them to obtain innovation and creativity when time to start a business comes.

Table 9. Entrepreneurship as competence

Entrepreneurship	Percentage valid	M	S.D.
IX.1 The improvement of the initiative is recognized as a value among the students.	33.1%	4.46	1.058
IX.2 The contribution of original ideas to generate new organizations is valued.	32.5%	4.43	1.121
IX.3 Innovative learning is the guarantee of the integral development of students.	35.5%	4.47	1.081
IX.4 The contribution of original ideas is favorably estimated in the educational institution.	33.4%	4.47	1.091
IX.5 Support for the students' initiative is a guarantee to encourage creative learning.	35.9%	4.55	1.049
IX.6 Entrepreneurship is promoted in class.	37.2%	4.08	1.194
IX.7 Value this competence for the improvement of your professional practice.	30.9%	4.51	1.104

3.10 The Importance of Competences for the improvement of the Professional Practice

Table 10 reveals the results of a section within the applied questionnaire, where participants are asked to rank competences according to the importance level for each competence (organizing them starting from position 1, the most important one, until, position 9, placing there the lowest one). So, for 46.9% of students, communication is the most important competence for the improvement of their professional practice, in the second position, 16.4% of students, research is the competency with the highest level of importance; next to that position is position 3 occupied by innovation (21.6%) and entrepreneurship (15.1%) based on the value that these competences have for students. After them, collaborative culture is the next one in importance for 16.1% of participants, followed by tutorial (18.5%) and professional identity (16.8%) according to students' perception. Among the competences with less importance stands out leadership chosen for 17.7% of the surveyed population, and finally, for 28.0% of students, the last one is evaluation competence which is the one that influences the least in the professional practice.

4 DISCUSSION AND CONCLUSIONS

Competences are developed gradually during the educative process (López & Parra, 2017); due to this to know students' perception about competences as part of their professional development is important, this induces the design of new training models according to the obtained results.

This work presents that 46.9% of students value communication as the competence that in most cases promotes the improvement of the professional practice, underlying that the use of ICT facilitates communication in the teaching-learning process, being this ICT use frequently by 36.4% of the surveyed population. After communication, 21.6% of students, innovation is the competence with the greatest importance, meanwhile 36.1% of the surveyed people consider that almost always this competence, within their learning process, is a needed line for their training as future professional.

Then, research is the competence chosen in the fourth and fifth importance's level in opinion of 15.5% of population, 37.1% of students consider that with frequency, research applied to their learning process improve their quality as future professionals, and ask teachers to promote this competence, launching creative research proposals and allowing to incorporate to them the use of ICT although, in opinion of Froehlich (2018, 88), digitalization is

Table 10. Relative frequencies of the importance that competences present for students

	1	2	3	4	5	6	7	8	9
A	46.9%	20.3%	8.9%	8.9%	7.9%	3.6%	2.6%	0.7%	1.4%
B	6.5%	6.6%	9.5%	9.5%	7.9%	14.2%	18.5%	16.0%	10.4%
C	3.2%	5.2%	7.9%	4.3%	8.2%	10.9%	12.2%	20.3%	28.0%
D	5.2%	16.4%	11.8%	15.4%	15.5%	11.6%	9.6%	8.7%	6.5%
E	12.9%	18.0%	21.6%	15.4%	9.9%	8.9%	5.3%	5.3%	1.4%
F	9.7%	7.9%	7.2%	12.1%	13.8%	15.2%	16.8%	11.3%	5.4%
G	3.2%	10.8%	9.2%	15.1%	16.1%	15.5%	12.9%	10.3%	8.2%
H	3.6%	3.3%	8.9%	6.6%	8.2%	11.9%	12.2%	17.7%	25.1%
I	8.7%	11.5%	15.1%	12.8%	12.5%	8.3%	9.9%	9.7%	13.6%

Note: A) Communication, B) Tutorship, C) Evaluation, D) Investigation, E) Innovation, F) Professional Identity, G) Collaboration Culture, H) Leadership, I) Entrepreneurship.

not always visible in the learning environment of High Education centers, which poses questions about the adequacy of teaching's results.

Collaborative culture occupied position number 6 for 15.5% of the studied population, for 32.5% of students, not only at school but in current society, the cooperative work is almost always more useful and 38.8% manifest, frequently, collaborative practices in the learning process; students propose teachers to promote work in team and the exchange of ideas in all subjects in order to improve the collaborative culture.

38.1% of students that participate in this research consider that frequently, the counselling received in a learning process is satisfactory and 41.4% mention that tutorial modality with frequency benefit their learning, however this competence was allocated by 18.5% of students as one of the least importance competences, addressing position 7 of 9 in importance order.

The competence that, 28.0% of participants of this study, rank as the least importance is evaluation, there is a discrepancy with the results obtained in the study of Mareque and De Prada (2018) in which creativity resulted the competency with the least importance for the studied population; so students propose teachers to take more in consideration the whole process of the semester and not just the results of the final exams, moreover they would like that their teachers will use new techniques and rubrics of evaluation that boost the improvement of their learning and motivate them to value more this competence within the professional practice.

As we have observed, the value of competences for the professional development has a great importance for students, because these competences allow them to analyze, to understand and to reflect when they apply their knowledge to the demands of a real environment (Ossa & Quintero, 2016; Ramos, Chiva & Gómez, 2017; Schall, 2015; Serrano, Biedermann & Santolaya 2016; Tobón, 2008). Although the research of Sancho and Padilla (2016, 63) is focus on the digital competence and in Secondary students, matches with part of our research, founding that when digital technologies are use to research, to think, to elaborate, to creat and recreat, to improve the acquisition and the development of the processing of the information and the digital competence.

In the university field, Tejada and Ruiz (2016) develop a research starting, previously, with a conceptualization of the professional competences, which are key to deal not only their training and development, but also their own evaluation, resulting in new strategies and evaluation solutions of the professional competences.

On their behalf, Brennan, Edmunds, Houston, Jary, Lebeau, Osbourne and Richardson (2010) agree, in general, with the conclusions of our research when they assert that what is really learned at UK universities and what differs among students and those English institutions where they study, doesn't always follow conventional lines of thought in competence development and learning.

In the previous mentioned research in section 1.3. Jerez, Valenzuela, Pizarro, Hasbun, Valenzuela and Orsini (2016) conclude that there is a gap between the announcement of a curriculum base on competences and the traces of the programs of real studies in Chilean High Educative insitutions, that matches with our research in relation with the studied competences, but overall focuses on the evaluation competence. However in the investigation developed by Medina (2013), in five American and European universities, it reveals that the most valued competence by teachers is planification, which is defined as essential and decisive for the development of teaching's function, meanwhile in our research students prefer in first position communication com-

petence according to their opinion, that boost their professional practice. On another hand, and more linked to the communication competence of this study (the competence best valued by students), Le Boterf (2010) implements, with good results, communication competence in companies and organizations oriented to future employees and their future abilities.

Keinänen, Ursin and Nissinen (2018) establish the basis of working innovation and evaluation competences as an improvement of the professional practice of the university students.

At the same time, taking really in consideration the obtained results in this study, teachers are invited to practice each one of the competences and to start from new designs of educative models that allow students to acquire and to practice the mentioned competences and, with this, to improve the quality as future professionals, matching with the contributions of De la Orden (2011) when he asserts that general competence is lodged with a highest level of abstraction and, consequently, could be apply to functions' performance and vital roles but just in those aspects of the performance common in all them.

Finally, we would like to suggest future lines of research, which stress teachers' leadership and their self-esteem as complement to competences' development and professional's development that are presented in this study, work already initiated by Fernández (2010), Mas (2012) and De Vries, De Grift and Jansen, (2013) when confirm that teachers' believes about learning and teaching are related to their continuous professional development.

REFERENCES

- Benzanilla, M. J., Arranz, S., Rayón, A., Rubio, I., Menchaca, I., Guenaga, M., & Aguilar, E. (2014). A proposal for generic competence assessment in a serious game. *Journal of New Approaches in Educational Research*, 3(1), 44-54.
- Brennan, J., Edmunds, R., Houston, M., Jary, D., Lebeau, Y., Osbourne, M., & Richardson, J. T. E. (2010). *Improving what is learned at university: An exploration of the social and organisational diversity of university education*. London, UK: Routledge.
- De la Orden, A. (2011). El problema de las competencias en la educación general. *Bordón: Revista de Pedagogía*, 63(1), 47-61.
- De Vries, S., De Grift, W., & Jansen, E. (2013). How Teachers' beliefs about learning and teaching relate to their continuing professional development. *Teachers and Teaching: Theory and Practice*, 20(3), 338-357. doi:10.1080/13540602.2013.848521
- Dominguez, C., Leví, G. C., Medina, A., & Ramos, E. (2014). Las competencias docentes: diagnóstico y actividades innovadoras para su desarrollo en un modelo de educación a distancia. *Revista de Docencia Universitaria*, 12(1), 239-267. doi:10.4995/redu.2014.6431
- Espacio Europeo Educación Superior (2018). *Estructura del EEES*. Retrieved from <http://www.eees.es/ees>
- European Commission/EACEA/Eurydice (2012). *Developing Key Competences at School in Europe: Challenges and Opportunities for Policy*. Eurydice Report. Luxembourg: Publications Office of the European Union.
- Fernández, A. (2010). La evaluación orientada al aprendizaje en un modelo de formación por competencias en la educación universitaria. *REDU. Revista de Docencia Universitaria*, 8(1), 11-34. Retrieved from <http://redaberta.usc.es/redu/index.php/REDU/article/view/144/120>
- Froehlich, D. E. (2018). Non-Technological Learning Environments in a Technological World: Flipping Comes To The Aid. *Journal of New Approaches in Educational Research (NAER)*, 7(2), 88-92. doi:10.7821/naer.2018.7.304
- García, C., & Ferrer, F. (2016). Competencias de los egresados del Espacio europeo de Educación Superior: relatos de vida de los nuevos estudiantes universitarios frente a los antiguos licenciados. *Revista de Docencia Universitaria*, 14(2), 187-203. doi:10.4995/redu.2016.5933
- Hernández, C. R., Fernández, C., & Baptista, P. (1991). *Metodología de la Investigación*. México DF: McGraw-Hill.
- Jerez, O., Valenzuela, L., Pizarro, V., Hasbun, B., Valenzuela, G., & Orsini, C. (2016). Evaluation criteria for competency-based syllabi: a Chilean case study applying mixed methods. *Teachers and Teaching*, 22(4), 519-534. doi:10.1080/13540602.2015.1082728
- Keinänen, M., Ursin, J., & Nissinen, K. (2018). How to measure students' innovation competences in higher education: Evaluation of an assessment tool in authentic learning environments. *Studies in Educational Evaluation*, 58, 30-36. doi:10.1016/j.stueduc.2018.05.007

- Le Boterf, G. (2010). *Repenser la compétence*. Paris: Edition D'Organisation.
- Legault, A. L. (2012). ¿Una enseñanza universitaria basada en competencias? ¿por qué? ¿cómo? *Revista Electrónica De Desarrollo De Competencias (REDEC)*, 5(9), 51-83.
- López, M. L., & Parra, K. L. (2017). *Desarrollo de competencias genéricas durante la etapa básica. Una mirada de estudiantes universitarios*. Debates en Evaluación y Currículum. Congreso Internacional de Educación. No. 3.
- Lovanova, T., & Sunin, T. (2008). Competence- Based Education: A Common European Strategy. *Computer modeling and New Technologies*, 2, 45-65.
- Mareque, M., & De Prada, E. (2018). Evaluación de las competencias profesionales a través de las practicas externas: incidencia de la creatividad. *Revista de Investigación Educativa*, 36(1), 203-219. doi:10.6018/rie.36.1.275651
- Martínez, M., Hernández, M. C., & Gómora, J. Y. (2016). Modelos de competencias directivas en escenarios globales para las Instituciones de Educación Superior. *Revista Iberoamericana para la Investigación y el Desarrollo Educativo*, 6(12). doi:10.23913/ride.v6i12.212
- Mas, O. (2012). Las competencias del docente universitario: la perspectiva del alumno, de los expertos y del propio protagonista. *REDU*, 10(2), 299-318.
- Medina, A. (Coord.) (2013). *Formación del Profesorado. Actividades innovadoras para el dominio de las competencias docentes*. Madrid: Ramón Areces.
- Ortiz, M. A., Marta-Lazo, C., & Martín, D. (2016). La formación de competencias profesionales en los estudiantes de comunicación Social de las emisoras universitarias en España y Portugal: situación y resultados asimétricos. *Revista Javeriana de Educación*, 35(68).
- Ossa, Y. J., & Quintero, J. M. (2016). Valoraciones de las competencias profesionales específicas en estudiantes de psicología de la Corporación Universitaria Minuto de Dios, sede Bello, que realizaron prácticas profesionales durante el 2014. *Revista Temas*, 3(10), 123-133. doi:10.15332/rt.v0i10.1610
- Ramos, G., Chiva, I., & Gómez, Ma. B. (2017). Las competencias básicas en la nueva generación de estudiantes universitarios: Una experiencia de Innovación. *Revista de Docencia Universitaria*, 15(1), 37-55. doi:10.4995/redu.2017.5909
- Rodríguez, D., & Meneses, J. (2017). La adquisición de las competencias profesionales a través de las prácticas curriculares de la formación inicial de maestros. *Revista de Educación*, 376, 229-251.
- Sancho, J. M., & Padilla, P. (2016). Promoting digital competence in secondary education: are schools there? Insights from a case study. *Journal of New Approaches in Educational Research*, 5(1), 57-63. doi:10.7821/naer.2016.1.157
- Schall, D. M. (2015). *Two Case Studies of the Contribution of Emotional Intelligence, Communication Style, Job Competency, Vision, and Ethics to Constituent Buy-In for Leaders*. Missouri: Lindenwood University.
- Serrano, T. A., Biedermann, A. M., & Santolaya, S. J. (2016). Perfil, objetivos, competencias y expectativas de futuro profesional de los estudiantes del Grado en Ingeniería en Diseño Industrial y Desarrollo de Producto de la Universidad de Zaragoza. *Revista de Docencia Universitaria*, 14(1), 69-96. doi:10.4995/redu.2016.5908
- Sotelo, M. A., Vales, J. J., García, R. I., & Barrera, L. F. (2017). Características del buen profesor de modalidad presencial y virtual desde la perspectiva de los estudiantes. *European Scientific Journal*, 13(13), 78-89.
- Tejada, J., & Ruiz, C. (2016). Evaluación de competencias profesionales en educación superior: retos e implicaciones. *Educación XXI*, 19(1), 17-38.
- Tobón, S. (2008). *La formación basada en competencias en la Educación Superior*. Bogotá: Instituto CIFE.
- Villa, A., & Poblete, M. (2011). Evaluación de competencias genéricas: principios, oportunidades y limitaciones. *Bordón: Revista de Pedagogía*, 63(1), 147-170.

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