

## PILOT STUDY: RELEVANCE OF NORMATIVE AND INVESTIGATIVE LEARNING OF THE PROFESSIONAL IN ADMINISTRATION

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### Abstract

Professional training in management has two perspectives in its observation; from what is proposed and done in the training centers and what the productive sector requires. Therefore, a challenge for educational institutions is to assess the relevance of learning outcomes. This study evaluates the learning outcomes related to the regulations and formative research of the professional in administration from the perception of employers in order to know their relevance. It is a research of quantitative approach that allowed to know, with numerical results, the level of relevance of the professional training in administrators. In particular, two variables related to research and normative are worked on. It began with the recognition and written declarations of learning outcomes by teachers from their disciplinary areas; subsequently, the Likert scale instrument is designed; then, it is applied to a sample of 224 bosses who employ graduate students from a private university in Bogotá. The level of convenience that is presented from the productive sector against the learning outcomes that are worked on in the training of administrators in the investigative and normative is at a general level high at 76%.

**Keywords:**-Educational relevance, learning outcomes, training, knowledge management, competitiveness.

### INTRODUCTION

Higher education-E.S.- has a continuous effect on the sustainable development and competitiveness of a country, due to the human capital it forms (Ramos et al. 2021). Well, the demands of society require workers with generic and disciplinary skills that allow them to develop professionally (Castañeda, 2015), the area of administration is no stranger to it. Hence, the knowledge of the administrator represents a challenge for university programs, since professional training in administration has two perspectives in its observation; from what is proposed and done in training centers and what the productive sector requires. The first ones guide the development of knowledge and skills aimed at knowledge (Merino, 2020). While companies expect a professional with learning results-R.A.- that contribute according to organizational responsibilities and society.

Therefore, a challenge of the E.S. is to evaluate the relevance of the R.A. and its social relevance. In this way, Hernández (2018) highlights the challenge of synergy between the university and the environment in response to the understanding and solution of its needs. Likewise, Ramos et al. (2021) consider the need to adapt the knowledge of a discipline to changes in the business context. Based on this, from the National Education Plan of Colombia - PNDE- (2006), it states that the programs offered by the E.S. are relevant when they are consistent with the social conditions and needs of the context: Constitution and the Law, economic, social and human development, and demands of the globalizing process. In this aspect,

the relevance of training from the E.S. is related to the demand of both the productive sector and the challenges of the global context depending on what society expects from it and what it really does (Dueñas-Peña et al., 2022). It is therefore necessary to compare vocational training with its stakeholders, especially with companies.

However, the concern of the E.S. to respond to the needs of the context in general, and to respond, in decreasing to the gap exposed by DANE (2012), faced with the fact that in Colombia there is a low correspondence between the training of human resources and social and economic needs, the E.S. maintains the challenge of verifying its correspondence with the demands that the country has in terms of growth and economic development.


## LITERATURE REVIEW

### *Relevance and relevance of education in society*

The quality of higher education is related to its relevance and relevance in real contexts (Hernández, 2015). For the application of educational results are what define whether there really is a correspondence relationship between the training provided in educational institutions and what ultimately comes to achieve with their performance when trying to solve the situations that arise. But what is the similarity or difference that exists in these two characteristics?, according to Martuscelli and Martínez (2002) relevance refers to the degree of correspondence that must exist with social and individual needs. Gago (2002) differs somewhat from the previous concept to the extent that he considers that educational relevance only has to do with the social part by stating that this is the degree to which education responds to the problems, demands and expectations of society. Very similar to the previous concept, De la Orden (2007) raises the quality of education as functionality or relevance from the satisfaction of expectations and social needs. When reviewing the position of UNESCO (1998), there is great affinity to the previous concepts since this institution considers that the relevance of higher education should be evaluated in terms of the adequacy between what society expects from institutions and what they do.

On the other hand, with respect to the relevance of the quality of the educational system, Robles et al. (2012) indicate that this element is important because of the congruence that must exist between the objectives of education and the needs of the society in which it operates. In addition, it emphasizes that the objectives defined by the curriculum must be focused on being and correspond to the particular needs that students have. However, Taccari (2007) argues that quality education includes a relationship between the particular conditions of people (relevance), with the development challenges they must face (relevance). Likewise, from the point of view of Santos and Delgado (2011) they consider that relevance is oriented to individual needs and relevance to those of society. In this order of ideas, Unesco-Orealc (2007) considers that relevance should be framed in 'the four pillars of education' according to social needs-learning to be, to know, to do and to live together-. With regard to relevance, this is oriented according to the diversity, flexibility and adaptability of the educational offer to the particular conditions of the people.

According to the concepts presented above, relevance and relevance are two elements that influence the student's training through educational content embodied in a curriculum, as well as in the process of insertion of future professionals in the labor market (Fresán, 1998). In other words, they constitute powerful diagnostic mechanisms of the real role that Higher Education Institutions (HEIs) have in the face of social needs. Because, according to public guidelines, in order to achieve quality education, they constantly evaluate, update and adjust the educational offer according to the requirements, expectations and potentialities of the productive sector and those who produce in the different sectors (ILO, 2006). For this, they must



also adapt pedagogical approaches, materials and didactic equipment, according to the characteristics, problems, needs and expectations of students, in order to ensure the quality and relevance of their actions (Sánchez et al., 2007). Nowadays, this correlation between the relevance and relevance of HEIs with the productive sector is a challenge since the actions that are developed cannot be isolated or temporary, (Lopera, 2005), but must be a source of systemic and permanent questioning for their role, their organization and their methodologies. This means that, together with the study of theoretical elements, they know the relevance of the programs and generate elements for the improvement and updating of plans and programs of study.

#### *University-business in the production of knowledge and competitiveness*

Previously, universities and educational and research institutions were responsible for developing some type of basic research while companies or the productive environment were responsible for something more specialized, applied research and technological development (Vega et al., 2012). Thus, and according to the motivations and interests of each of them, they had their own freedom and autonomy, so a relationship between the two was not conceivable, much less relevant, since each one was responsible for very own and different tasks. However, after the industrial development and innovation processes that this brought, the company considered it necessary to generate development spaces with other agents and institutions, including HEIs (Porter and Kramer, 2011). In this way, universities cease to be isolated spaces and have the ability to work with their economic environment for the development of innovations.

Nowadays, the relations between the university and the productive sector have acquired such a degree of prominence that they are considered complementary to the already traditional missions of teaching and research, and whose development gives the university a relevant role in the management of knowledge, competitiveness and therefore, growth economic (Etzkowitz and Leydesdorff, 1997). Knowledge management is presented as a systematic process around detecting, recognizing, locating, systematizing and using information and knowledge within the organizational environment, in order to potentiate business competencies and generate value. In this way, the role is then contextualized, in a strategic framework, of what is knowledge in the growth of organizations in the globalizing spectrum where the permanent in regulations, products, technologies, etc., is change (Acosta et al, 2013), leaving with this inferring that competitive advantages are linked to the way knowledge is used in companies.

The educational institution, in the considered knowledge society, is facing a requirement from the business sector in terms of qualified labor, which is that of people formed by competencies, thus forcing institutions to reengineer their learning processes based on the best professional performance of their graduates (García, 2006). So the renewal of methodologies in the teaching-learning processes in Higher Education Institutions, in response to the demands of the different professions, makes competency-based training imperative, in order to grant HEIs a responsibility focused on the realities and demands of the labor market where they correspond to a better performance of their students, in the different jobs that are presented in organizations. (UNESCO-UNDP, 1998).

The accumulation of knowledge and its management is increasingly imperative, regardless of the areas of training, especially that new knowledge is disseminated faster and faster because of new technologies and media, leading then to modifications of the modes of production and all that this entails (Santillana, 1998). From this maxim it is thought that "dynamic capabilities" should be considered as a complement to knowledge management, as it is referred to here that companies have the ability to acquire knowledge of the environment articulating R+D, "For this reason, the dynamic absorption capacity represents an important part

of the competences of a company to create new knowledge, that allows to obtain better business results, incorporating new knowledge to existing previous knowledge" (Garzón, 2016, p. 98).

However, the arguments of authors such as Porter (1990) and Krugman (1995) state that companies are the ones that compete, not nations. Those who make a country competitive are the competitive companies that produce within it, so things, only companies are the basis of a nation's competitiveness. For Rubio and Aragón, (2006) business competitiveness is the ability they have, these, to compete with others, where it reaches a favorable position of superior performance to the companies with which it has competition. Meanwhile, for Lall et al., (2005), companies compete and measure their competitiveness according to their participation and profitability obtained in the market, then, competitiveness is the basis of the organization's strategy that must be used to improve its performance. On the other hand, it is stated that business competitiveness is based on the competitive advantage that the company has, achieved through production processes that compare it with its competition (Abdel and Romo, 2004).

According to Cervantes (2005), companies in the framework of competitiveness depend on general factors such as that they are at three levels: the first is related to the competitiveness of the country, determined by variables such as macroeconomic stability, trade and capital openness, various regulations for the business sector; the second level concerns regional infrastructure; and as a third level, the business level, which explains the competitiveness of companies and is related to what happens within the entity itself. These factors lead companies to develop the capacity to increase or maintain their market share in a permanent development of business strategies that allow them to participate in negotiations with different organizations in an environment of policies and lianzas built by national governments and regional economic alliances (Solleiro and Castañón 2005).

Business competitiveness is disaggregated from the competitive advantage or advantages it may have because of its strategies and methods of production, administration and organization itself, aspects that reflect the quality and relevance of its products in its competitive environment. Taking into account these elements, it is inferred that the competitiveness of a company is a result of productivity, participation in the internal and external market, profitability, relations with the business sector and regional infrastructure (Abdel and Romo, 2004). In conclusion, to what is stated in the paragraph it is useful to comment on the reflection of Porter (1990), in relation to the fact that comparative advantages are inherited while competitive ones are created, there are few times in which permanent growth is generated supported, purely, in comparative advantage, factors and activities such as business strategies and the industrial structure of the business environment are required. Thus, competitiveness at the company level is related to the ability to grow in the different aspects listed above: human resources, research and development, updating technologies, adaptation to market changes, flexible management, sustained profitability, financial leverage, among others that guarantee sustainability and permanence in the market.

#### METHODOLOGY

It is a quantitative research of descriptive type that aimed to evaluate the learning in administration professionals with respect to the formative research and current legal regulations, from the perception of the productive sector. Thus, it examines the business environment at a given time according to (Cajavilca and Sulca, 2007) this level of depth lies in collecting information on a phenomenon to obtain an updated knowledge of it (Hernández et al., 2014). The

research units are 224 contractors that employ students who have lived their training process at the post-graduate level in the area of management at a private university in Bogotá. The population is made up of public and private companies: small, medium and large. As the students were intermediaries with the bosses, the sample was worked in a census way so that everyone was part of it (Bernal, 2016).

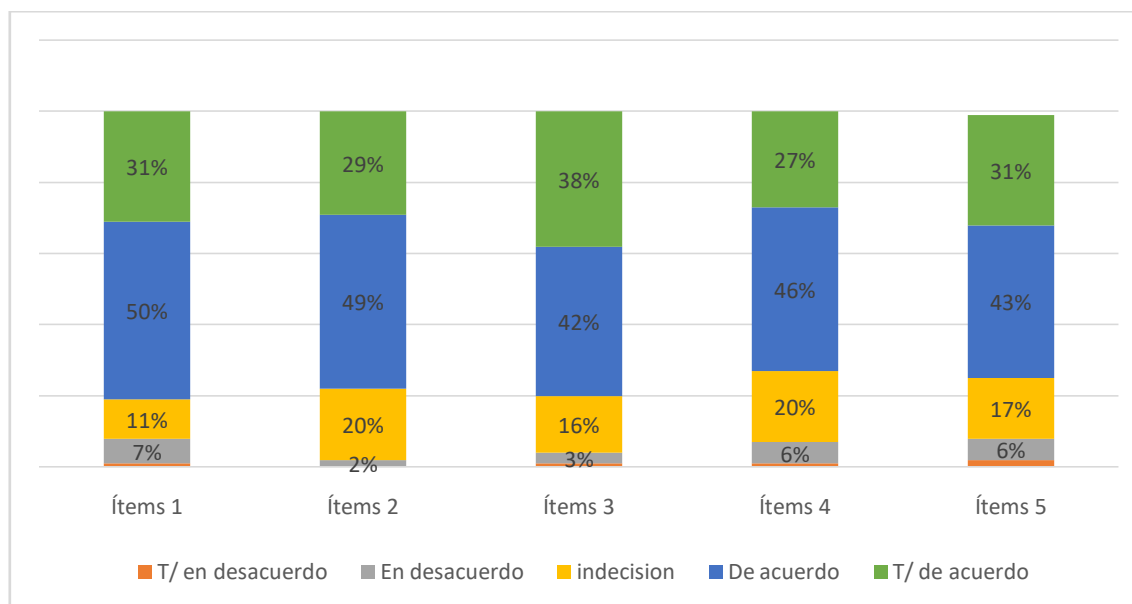
Two variables are worked on: formative research and normativity, which give evidence of feasibility for the items that compose them. Cronbach's alphas are 857, 883 and 836 respectively, which reports to be a reliable instrument. For the collection of information, a questionnaire adapted from the R.A., structured in a Likert scale, with 25 items, was used: 5 for characterization, 20 for recognition of R.A., with five response options. Data collection has been developed since the first half of 2021. The levels with which the study variables are described are: high, medium and low. Their intervals are established from the method of minimums and maximums, within the 33rd and 66th percentiles. It begins with the recognition of R.A. by disciplinary teachers. Subsequently, the reagents are formulated; The instrument is then designed, applied and validated. Finally, systematization and preparation of reports.

## RESULTS

With regard to obtaining information through the instrument applied, it is found that in its order 72%, 17% and 11% are private, public and mixed. Likewise, 52% are large companies, the rest are medium and small with 20% and 28% respectively. 85% are over 16 years of age; 22% operate locally, 55% nationally and 23% internationally.

The relevance in terms of research is confirmed, there is a high level of correspondence of 80%, 17% medium and 3% low. When discriminating this variable, it was found that at least 89% of employers agree that the productivity and competitiveness in the work of those who develop activities that support managerial actions with their learning, must be able to identify problems or opportunities in their work context to reflect on possible solutions; Of this percentage, 41% say they strongly agree with it.

Figure 1. *Perception from the component items of the Formative Research variable*

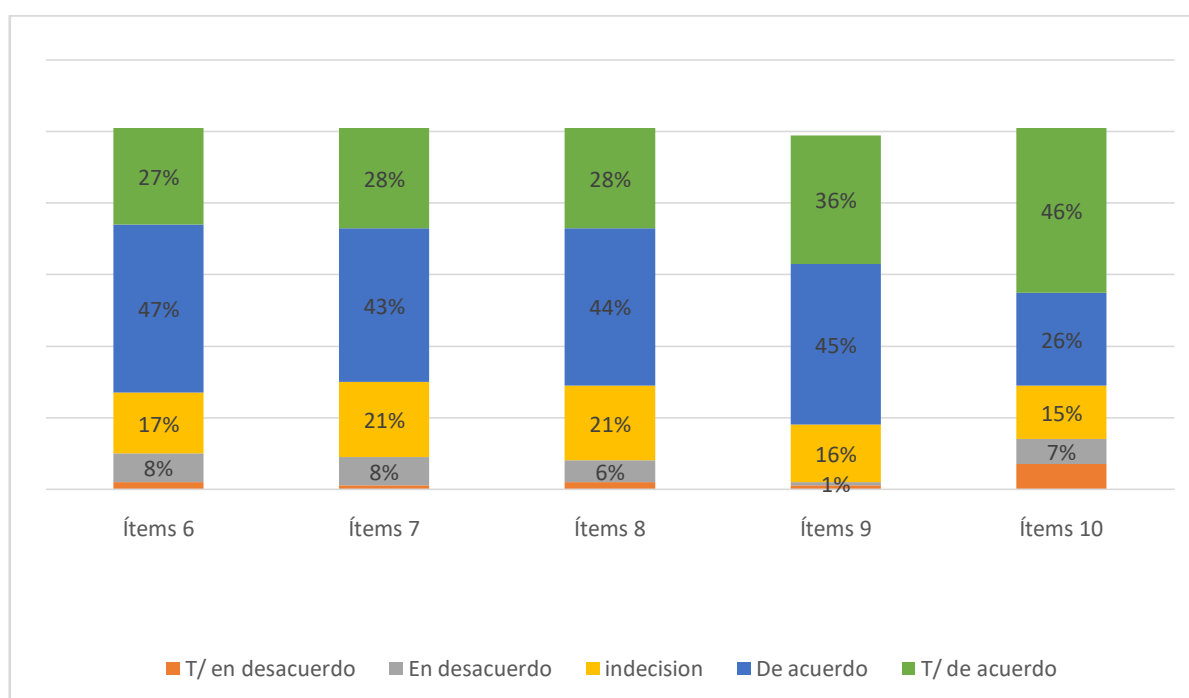


Source: Own elaboration (2023), based on applied instrument data.

Likewise, it was found that communicating their own ideas and those of others orally and in writing and in this way make their personal positions known, 37% perceive it as a great need, when responding to fully agree. Meanwhile, 52% admit to agree; in sum, there is an acceptance of 83% against the need for these R.A.

91% of employers show evidence of reciprocity in terms of classifying information based on bosses' own requirements to facilitate decision making. 92% agree to use tools such as graphs and tables, among other systematization alternatives for disclosure of business results. Meanwhile, 83% agree to formulate proposals for improvement based on the needs of their work environment.

Figure 1. *Perception from the component items of the Formative Research variable* (continued...)

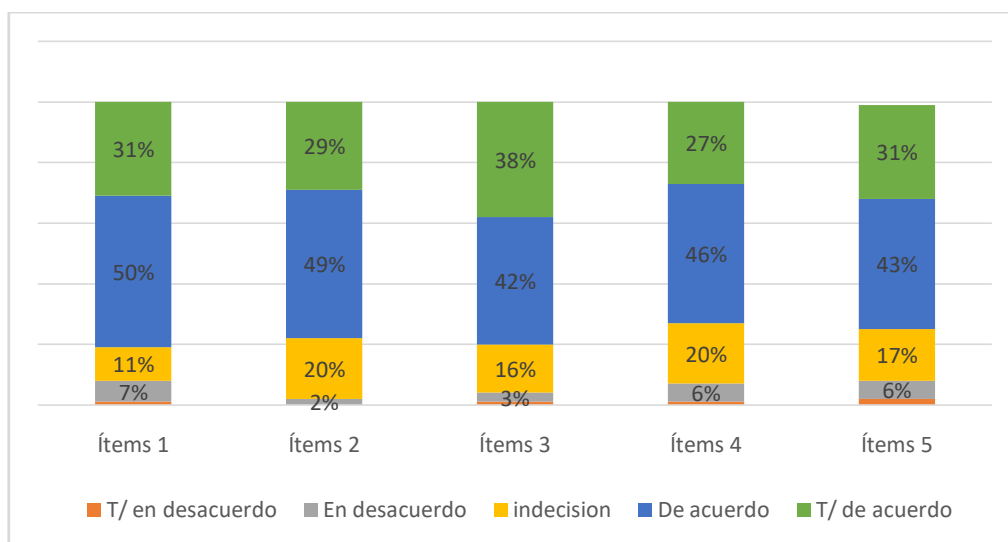


Source: Own elaboration (2023), based on applied instrument data.

79% of employers agree that they should know how to present oral and written information about their work to find out the results of the work. Meanwhile, 87% agree to present results supported by body language, oral expressions, organized ideas and argumentation in order to make the exposed more enjoyable. 87% agree that they should apply techniques and procedures to obtain data obtained in information databases and thus contribute to decision-making. 92% agree that they should know how to use Word, PowerPoint and Excel tools in the construction of information. 58% of employers agree to be able to manage, participate and network to expand skills in their work.

With regard to learning in terms of current legal regulations, there is a high level of correspondence of 68%, 30% medium and 1% low.

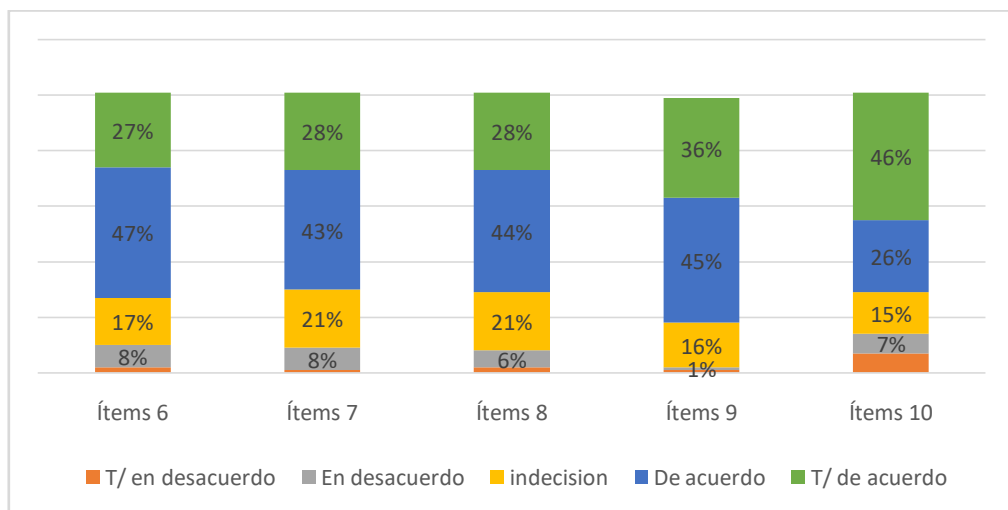
Figure 2. Perception from the component items of the normativity variable



Source: Own elaboration (2023), based on applied instrument data.

In their discrimination, of the 10 R.A. evaluated, 81% of the bosses agree that the regulatory legal system should be used in activities related to the commercial exercise to guarantee organizational confidence. 77% in interpreting the concept of commercial contract and its elements of legal classification, to guide good economic practice. 80% in recognizing the concept of merchant, rights and duties from Colombian regulations for consumer protection and state interests. 73% in recognizing the act of trade in the regulatory framework in order to support decisions according to the need and organizational objectives.

Figure 2. Perception from the component items of the normativity variable (Continued...)



Source: Own elaboration (2023), based on applied instrument data.

74% agree to interpret and apply regulations, which guarantee to minimize sanctions to the company. 74% in recognizing causes and compensation for dismissal, payroll settlement from current legal regulations. 71% in identifying types of employment contracts, as well as types of working hours according to the Colombian legal framework. 81% in using the different



mechanisms of consultation, application, execution and settlement of taxes in the company according to institutional policies and regulations. 72% in identifying basic business taxes to ensure the value of the organization within accounting principles and standards.

The level of convenience that is presented from the productive sector compared to R.A. that work on the training of administrators in the investigative and regulatory is at a general level high at 76%. Likewise, independently for what is related to research and regulations, it is 80% and 68% respectively.

Table 1. *Level of perception by variable*

Level	Commercial	Labour	Tax	Research	T.Normativo	T.General
Low	2%	5%	4%	3%	1%	1%
Middle	31%	63%	50%	17%	30%	22%
High	67%	32%	46%	80%	68%	76%

Source: Own elaboration (2023), based on applied instrument data.

The correspondence between the needs of the productive sector for the R.A. against commercial, labor and tax regulations are at a high level at 67%, 32% and 46%, while the average is 31%, 63% and 50% respectively. The average for those who are in full agreement with the R.A. in research is 41%, only 47% agree. For regulations it is in the same order, 31% and 44%. It is evident that the research variable predominates, in high 10 points and in medium 3. Similarly, the average of the high is 62% and half 36%. In itself, there is a relevant correspondence in what is worked on versus the training of administrators with needs of the productive sector.

### DISCUSSION

The evaluation by employers of the apprenticeships in management professionals with respect to the formative research and current legal regulations allows us to see the significance of the correspondence between R.A. and business needs.

The training in administrators based on what is reported from the productive sector allows to demonstrate the importance of research and regulations in the work of their professional activities and the relevance that is had. However, it must be accepted that continuous improvement is necessary to reduce the gap that separates the high level from the medium and the low level that on average is 23% and 1% respectively.

Therefore, from the dynamics of development of the academy the challenge is maintained for the professionals it offers, who will contribute to the growth and development of the country.


### CONCLUSIONS

The product sector shows that the level of convenience that exists for the learning outcomes that are worked on in the training of administrators from the university in the research and normative at a general level is high at 76%; Likewise, independently for what is related to research and regulations, it is 80% and 68% respectively. Faced with the training of administrators, based on what is reported from the productive sector, it allows us to think that the challenge we have with society from the academy, has elements to confront it successfully. However, it must be accepted that continuous improvement in educational institutions is necessary to reduce the gap in the middle and lower levels, which average 23% and 1% respectively; In addition to a study of the needs of companies on the learning of the graduate



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## Annex A

*Learning outcomes collated with employers*

Item: RA for Formative Research	No.	Item: AR for regulations	No.
Identify problems or opportunities in their work context to reflect on solution approaches	1	Use the regulatory legal system in activities related to the commercial exercise in order to guarantee the confidence of the organization	1
Communicate their own ideas and those of others orally and in writing and in this way make their personal positions known.	2	Interpret the concept of commercial contract based on the elements of classification in the country in order to guide good commercial practice	2
Classify information based on the requirements of the bosses in order to facilitate decision making.	3	Interpret the concept of merchant against the rights and duties set forth in Colombian regulations in order to protect the consumer as well as the interests of the state.	3
Use tools such as graphs and tables, among other systematization alternatives for disclosure of business results	4	Recognize an act of commerce in the business and regulatory framework in order to support decisions according to the need and objective of the company	4
Formulate proposals for improvement based on the needs of their work environment based on identification and possible solutions	5	Apply the regulatory legal system related to labor activities based on Colombian regulations that lead to minimize risks sanctions to the company	5
Expose orally and in writing information of their work in order to inform of the results of the work.	6	Recognize the causes of dismissal for just cause, as well as their compensation for dismissal without it, a way to settle overtime from Colombian labor regulations based on the responsibilities of the company against the rights of the company	6
Expose results of the work supported by body language and expressions of voice and organized ideas and thus make the dialogue more enjoyable	7	Identify the types of employment contract, types of working hours and types of salary according to the Colombian legal framework and thus support compliance with the responsibilities of the company.	7
Apply techniques and procedures for obtaining data achieved in information bases and thus contribute to decision making.	8	Use the different mechanisms for consultation, application, execution and settlement of taxes according to institutional policies and current legal regulations based on tax compliance.	8
Use the tools provided by the word processor Word, PowerPoint and spreadsheet in the construction of information.	9	Use the different mechanisms for consultation, application, execution and settlement of taxes in the company based on tax compliance according to institutional policies and current legal regulations.	9
Manage, engage and network to expand capabilities in their work	10	Identify basic business taxes within accounting principles and current rules on tax legislation in order to ensure the value of the organization	10