Tuning

Latin America

Higher Education in Latin America: reflections and perspectives on **Administration**

César Esquetini Cáceres (ed.)

Higher Education in Latin America: reflections and perspectives on Administration

Tuning Latin America Project

Higher Education in Latin America: reflections and perspectives on Administration

César Esquetini Cáceres (editor)

Authors:
César Esquetini Cáceres, Mabel Becerra Urquidi,
Bernardina Cisternas Arapio, Beatriz Guinovart Firpo,
Guilherme Marback Neto, Calixto Mendoza Roca, Gustavo Pereda Lecuna,
Marcio Sierra Varela, Sergey Udolkin Dakova, Ricardo Uribe Marín,
Bárbara Valle Torres and Adán Vaquerano Amaya

2014
University of Deusto
Bilbao

This publication has been put together with the financial assistance of the European Union. The authors of this document are solely responsible for its content and it should in some way be considered to reflect the stance of the European Union.

Cover design: © LIT Images

Translator: Philip Cooper

© Deusto University Press
Apartado 1 - 48080 Bilbao
e-mail: publicaciones@deusto.es

National book catalogue No.: BI - 90-2014

Printed in Spain

Index

Tuning: past, present and future
An introduction

Major changes have taken place worldwide in higher education over the last 10 years, although this has been a period of intense reflection particularly for Latin America, insofar as the strengthening of existing bonds between nations has been promoted and the region has started to be considered as being increasingly close. These last 10 years also represent the transition time between Tuning starting out as an initiative that arose as a response to European needs and going on to become a worldwide proposal. Tuning Latin America marks the start of the Tuning internationalisation process. The concern with thinking how to progress towards a shared area for universities while respecting traditions and diversity ceased to be an exclusive concern for Europeans and has become a global need.

It is important to provide the reader of this work with some definitions of Tuning. Firstly, we can say that Tuning is **a network of learning communities**. Tuning may be understood as being a network of interconnected academic and student communities that reflects on issues, engages in debate, designs instruments and compares results. They are experts that have been brought together around a discipline within a spirit of mutual trust. They work in international and intercultural groups and are totally respectful of independence on an institutional, national and regional level, exchanging knowledge and experiences. They develop a common language to problems in higher education to be understood and take part in designing a set of tools that are useful for their work, and which have been devised and produced by other academics. They are able to take part in a platform for reflection and action about higher education - a platform made up of hundreds of communities

from different countries. They are responsible for developing reference points for disciplines that represent a system for designing top quality qualifications which are shared by many. They are open to the possibility of creating networks with many regions of the world within their own field and feel that they are responsible for this task.

Tuning is built on each person that forms part of that community and shares ideas, initiatives and doubts. It is global because it has pursued an approach based on worldwide standards while at the same time remaining both local and regional, respecting the specific features and demands of each context. The recent publication: *Communities of Learning: Networks and the Shaping of Intellectual Identity in Europe, 1100-1500* (Crossley Encanto, 2011) takes all the new ideas into consideration which are developed within a community context, whether of an academic, social or religious nature or simply as a network of friends. The challenge facing Tuning communities is to gain an impact on the development of higher education in its regions. Secondly, Tuning is a **methodology** with well-designed steps and a dynamic outlook that enables different contexts to be adapted. The methodology has a clear aim: to build qualifications which are compatible, comparable, are relevant to society and with top levels of both quality and excellence, while preserving the valuable diversity deriving from the traditions of each country involved. These requirements demand a collaborative methodology based on consensus which is developed by experts from different fields who are representatives of their disciplines, and who have the ability to understand local, national and regional situations.

This methodology has been developed around **three core themes**: the first is the **qualification profile**, the second is the **syllabus** and the third refers to the **trajectories of those who learn**.

The qualification profile enjoys a key position in Tuning. After a lengthy period of reflection and debate within Tuning projects in different regions (Latin America, Africa, Russia), the qualifications profile may be defined as being a combination of forces revolving around four core points:

- The region's needs (from local issues to the international context).
- The meta-profile of the area.

- The taking into consideration of future trends in the profession and society.

- The specific mission of the university.

The question of **social relevance** is essential for the design of profiles. Without doubt, any analysis of the relationship existing between university and society lies at the heart of the matter of relevance in higher education. Tuning's aim is to identify and meet the needs of the production sector, the economy, society as a whole and the needs of each student within a particular area of study – measured by specific social and cultural contexts. With a view to achieving a balance between these different needs, goals and aspirations, Tuning has consulted leading people, key local thinkers and experts from industry, both learned and civil society and working parties that include all those interested. An initial period of this phase of the methodology is linked to general competences. Each thematic area involves the preparation of a list of general competences deemed relevant from the standpoint of the region concerned. This task ends when the group has widely discussed and reached consensus about a selection of specific competences, and the task is also performed with specific competences. Once the means of consultation has been agreed and the process completed, the final stage in this practical exercise involving the search for social relevance refers to an analysis of results. This is done jointly by the group, and special care is taken not to lose any contributions from the different cultural perceptions that might illustrate understanding of the specific reality.

Once lists of the general and specific agreed, consulted and analysed competences had been obtained, a new phase got underway over these last two years that is related to the **development of meta-profiles for the area** under consideration. For Tuning methodology, meta-profiles represent the structures of the areas and combinations of competences (general and specific) that lend identity to the disciplinary area concerned. Meta-profiles are mental constructions that categorise competences in recognisable components and illustrate their inter-relations.

Furthermore, thinking about education means becoming involved in the present, while above all also looking towards the future – thinking about social needs, and anticipating political, economic and cultural

changes. This means also taking into account and trying to foresee the challenges that those future professionals will have to face and the impact that certain profiles of qualifications is likely to have, as designing profiles is basically an exercise that involves looking to the future. Within the present context, designing degree courses takes time in order for them to be planned and developed and their approval obtained. Students need years to achieve results and mature in terms of their learning. Then, once they have finished their degree, they will need to serve, be prepared to act, innovate and transform future societies in which they will find new challenges. Qualification profiles will in turn need to look more to the future than the present. For this reason, it is important to take an element into consideration that should always be taken into account, which are future trends both in terms of the specific field and society in general. This is a sign of quality in design. Tuning Latin America embarked on a methodology so as to incorporate an **analysis of future trends into the design of profiles**. The first step therefore involved the search for a methodology to devise future scenarios following an analysis of the most relevant studies in education by focusing on the changing role of higher educational establishments and trends in educational policies. A methodology was chosen based on in-depth interviews with a dual focus: on the one hand, there were questions that led to the construction of future scenarios on a general society level, their changes and impact. This part needed to serve as a basis for the second part, which dealt specifically with the features of the area in itself, their transformation in general terms in addition to any possible changes in the degree courses themselves that might have tended to disappear, re-emerge or be transformed. The final part sought to anticipate the possible impact on competences based on present coordinates and the driving forces behind change.

There is a final element that has to be taken into account when constructing the profiles, which is linked to the **relationship with the university where the qualification is taught**. The mark and mission of the university must be reflected in the profile of the qualification that is being designed.

The second core theme of the methodology is linked to **syllabuses**, and this is where two very important Tuning components come into play: on the one hand, students' work volume, which has been reflected in an agreement to establish the Latin American Reference Credit (CLAR), and all studies are based on this and, on the other, the intense

reflection process into how to learn, teach and assess competences. Both aspects have been covered in Tuning Latin America.

Lastly, an important area is opened up for future reflection about the **trajectories of those who learn** – a system that proposes focusing on the student leads one to consider how to position oneself from that standpoint so as to be able to interpret and improve the reality in which we find ourselves.

Finally, Tuning is a **project** and as such came into existence with a set of objectives and results and within a particular context. It arose from the needs of the Europe of 1999, and as a result of the challenge laid down by the 1999 Bologna Declaration. Since 2003, Tuning has become a project that goes beyond European borders, in so doing embarking on intense work in Latin America. Two very specific problems faced by the university as a global entity were pinpointed: on the one hand, the need to modernise, reformulate and make syllabuses more flexible in the light of new trends, society's requirements and changing results in a vertiginous world and, on the other, which is linked closely to the first problem, the importance of transcending limits imposed by staff in terms of learning, by providing training that would enable what has been learnt to be recognised beyond institutional local, national and regional borders. The Tuning Latin America project thus emerged which, in its first phase (2004-2007), sought to engage in a debate whose goal was to identify and exchange information and improve collaboration between higher educational establishments, with a view to developing the quality, effectiveness and transparency of qualifications and syllabuses.

This new phase of **Tuning Latin America (2011-2013)** started life on already-fertile terrain – the fruits of the previous phase and in view of the current demand on the part of Latin American universities and governments to facilitate the continuation of the process that had already been embarked on. The aim of the new Tuning phase in the region was to help build a Higher Education Area in Latin America. This challenge takes the form of four very specific central working themes: a deeper understanding of agreements involving **designing meta-profiles and profiles in the 15 thematic areas** included in the project (Administration, Agronomy, Architecture, Law, Education, Nursing, Physics, Geology, History, Information Technology, Civil Engineering, Mathematics, Medicine, Psychology and Chemistry); contributing to **reflections on future scenarios for new professions**; promoting the

joint construction of **methodological strategies in order to develop and assess the training of competences**; and designing **a system of academic reference credits (CLAR-Latin American Reference Credit)** to facilitate recognition of studies in Latin America as a region that can be articulated with systems from other regions.

The Tuning door to the world was Latin America, although this internationalisation of the process wouldn't have gone far if it hadn't been for a group of prestigious academics (230 representatives of Latin American universities), who not only believed in the project, but also used their time and creativity to make it possible from north to south and west to east across the extensive, diverse continent that is Latin America. This was a group of experts in different thematic areas that would go on to study in depth and gain weight in terms of their scope and educational force, and in their commitment to a joint task that history had placed in their hands. Their ideas, experiences and determination paved the way and enabled the results which are embodied in this publication to be achieved.

Yet the Tuning Latin America project was also designed, coordinated and administered by Latin Americans from the region itself, via the committed work carried out by Maida Marty Maleta, Margarethe Macke and Paulina Sierra. This also established a type of *modus operandi*, conduct, appropriation of the idea and of deep respect for how this was going to take shape in the region. When other regions decided to join Tuning, there would henceforth be a local team that would be responsible for considering what to emphasize - specific features, the new elements that would need to be created to meet needs which, even though many of them might have common characteristics within a globalised world, involve dimensions specific to the region, are worthy of major respect and are, in many cases, of major scope and importance.

There is another pillar on this path which should be mentioned: the coordinators of the thematic areas (César Esquetini Cáceres-Coordinator of the Area of Administration; Jovita Antonieta Miranda Barrios-Coordinator of the Area of Agronomy; Samuel Ricardo Vélez González-Coordinator of the Area of Architecture; Loussia Musse Felix-Coordinator of the Area of Law; Ana María Montaño López-Coordinator of the Area of Education; Luz Angélica Muñoz González-Coordinator of the Area of Nursing; Armando Fernández Guillermet-Coordinator of the Area of Physics; Iván Soto-Coordinator of the

Area of Geology; Darío Campos Rodríguez-Coordinator of the Area of History; José Lino Contreras Véliz-Coordinator of the Area of Information Technology; Alba Maritza Guerrero Spínola-Coordinator of the Area of Civil Engineering; María José Arroyo Paniagua-Coordinator of the Area of Mathematics; Christel Hanne-Coordinator of the Area of Medicine; Diego Efrén Rodríguez Cárdenas-Coordinator of the Area of Psychology; and Gustavo Pedraza Aboytes-Coordinator of the Area of Chemistry). These academics, chosen according to the thematic groups to which they belonged, were the driving forces behind the building of bridges and strengthening of links between the project's Management Committee of which they formed a part and their thematic groups which they always held in high regard, respected and felt proud to represent. Likewise, they enabled there to be valuable articulation between the different areas, showing great ability to admire and listen to the specific elements attached to each discipline in order to incorporate, take on board, learn and develop each contribution – the bridges between the dream and the reality. Because they had to carve new paths in many cases to make the ideas possible, design new approaches in the actual language of the area and the considerations proposed, and to ensure that the group would think about them from the standpoint of the specific nature of each discipline. Following group construction, the process always requires a solid framework based on generosity and rigour. In this respect, the coordinators were able to ensure that the project would achieve specific successful results.

Apart from the contribution made by the 15 thematic areas, Tuning Latin America has also been accompanied by a further two transversal groups: the Social Innovation group (coordinated by Aurelio Villa) and the 18 National Tuning Centres. The former created new dimensions that enabled debates to be enriched and an area for future reflection on thematic areas to be opened up. Without doubt, this new area of work will give rise to innovative perspectives to enable those involved to continue thinking about top quality higher education that is connected to the social needs of any given context.

The second transversal group about which one should recognise the major role played comprises the National Tuning Centres – an area of representatives from the highest authorities of university policies from each of the 18 countries in the region. These centres accompanied the project right from the outset, supported and opened up the reality of their national contexts to the needs or possibilities developed by Tuning, understood them, engaged in dialogue with others, disseminated them

and constituted reference points when seeking genuine anchors and possible goals. The National Centres have been a contribution from Latin America to the Tuning project, insofar as they have contextualised debates by assuming and adapting the results to local times and needs.

We find ourselves coming to the end of a phase of intense work. The results envisaged over the course of the project have succeeded all expectations. The fruits of this effort and commitment take the form of the reflections on the area of Administration that will be provided below. This process comes to an end in view of the challenge faced in continuing to make our educational structures more dynamic, encouraging mobility and meeting points within Latin America, while at the same time building the bridges required with other regions on the planet.

This is the challenge facing Tuning in Latin America.

July 2013

Pablo Beneitone, Julia González and *Robert Wagenaar*

Prior considerations

Degree courses in Administration are the most popular at both an undergraduate and post-graduate level throughout Latin America, and recognition of the role of the professional working in administration as a very important player in the functioning of organisations is being increasingly recognized.

There is a growing demand on the part of business for administration professionals to be trained in handling new information and communications technologies (NICTs), to have the ability to act in a range of scenarios with levels of complexity and ambiguity, to work in teams, communicate orally, in writing and electronically and to ensure the company's sustainability.

On the other hand, new curricular design proposes that courses should not only focus on conventionally-studied content according to discipline, but also above all on the capacities of professionals demanded by society and the market. With this new approach, curricula can be seen to be becoming more flexible and there is a more globalised view that demands education preparing graduates to act in national and overseas scenarios in which the command of a foreign language is deemed fundamental if the professional is to be competitive.

The pedagogic strategy most commonly used works with the following core themes of administration: human talent, communication, general theory of organisations, finance and organisation of production, of which the content that helps define the administrator's specific competences will be the ones that come to the fore. This content

must have a sequence congruent with the order in which they are implemented in a company, and the bringing into line of concepts as defined by teaching staff based on an interdisciplinary approach. The following basic principles need to guide the pedagogic work:

- The general objectives of the course must be contextualized within the institutional, political, geographic and social milieu that stresses the need to integrate the institution and the context in which it operates.

- The interdisciplinary approach that enables the student to articulate the content studied in other disciplines with their own discipline and with implications with the real world.

- Integration between theory and practice, stressing the importance of significant learning and preventing the student from being a mere receiver of content. Within the current context, the creation of more jobs and the need to improve the level of professionalization have become imperative, and attaining a higher level of professionalization requires a major effort in order for the being, knowing and knowing how to do things come together, as set out at the UNESCO World Higher Education Conference in 1998.

- Constant improvement is viewed as being a vital value that enables the student and worker to be involved in permanent learning processes and continuous improvement. In his futurist view, Alvin Toffler (1984, 2007) considers illiterates in the 21st century to be those who are unable to learn, unlearn and re-learn – in other words, the predisposition for lifelong learning must be constant.

One of the major demands is the change in the view of teaching staff towards education to one in which the student enjoys greater freedom and independence, with the advantage of learning and teamwork that has a direct connection with the real milieu. The new profile of young people requires new teaching-learning strategies based on dialogue, participation, creativity and mobility.

The construction of knowledge in administration has tended to be marked by complex interactions between the business world and the academic field. Connections between these two spheres of knowledge

are marked by stereotypical notions based on reciprocal resistance (Versiani and Versiani, 1998), which need to be overcome.

In some Latin American countries, evaluation of administration programmes has become a constant and has become a major improvement and accountability mechanism, which has even resulted in the search for international accreditation.

An aspect of this that higher educational establishments need to analyse is the way of obtaining feedback and being enriched by contributions made by students and graduates, the academic community in general and entrepreneurs who are willing to contribute towards the education of new professionals.

Graduates in this area must meet characteristics that combine leadership, expertise, a business outlook and entrepreneurial spirit, and who are able to provide both themselves and others with wellbeing. They also need to carry out research in the area, which means having a thorough knowledge of administrative science and knowing how to make interdisciplinary demands to human and social science in order to integrate them into a systemic approach to the organisation.

Society requires future administrators who are motivated to break down paradigms and act in a world of growing and changing complexity. The knowledge acquired by the professional needs to be in line with labour requirements to ensure that they comply with social responsibility and job market expectations. Barriers existing between disciplines can thus be overcome.

This report is structured into four chapters that cover the definition of the graduate meta-profile of an administrator, a future view of the area of administration, an estimation of students workload and the identification of teaching-learning strategies and assessment of competences. It concludes with some general reflections that summarise the most important criteria developed in this work.

Twelve Latin American academics from eleven countries took part in putting together this study: Mabel Becerra Urquidi (Bolivia), Bernardina Cisternas Arapio (Chile), César Esquetini Cáceres (Ecuador), Beatriz Guinovart Firpo (Uruguay), Guilherme Marback Neto (Brazil), Calixto Mendoza Roca and Ricardo Uribe Marín (Colombia), Gustavo Pereda Lecuna (Venezuela), Marcio Sierra Varela (Honduras), Sergey Udolkin

Dakova (Peru), Bárbara Valle Torres (Mexico) and Adán Vaquerano Amaya (El Salvador). Together they constitute a fine example of friendship, teamwork, commitment and integration.

To conclude these initial considerations, we would like to share a thought by the Brazilian, Marilena Chauí, who profoundly defines what the learning process should be: "We can say that training exists when there is deed of thought and that deed of thought exists when the present is understood as being that which demands inquiring, reflective and critical work from us, to the extent that we may become capable of raising what was experienced as an issue, question, problem or difficulty to a conceptual level."

1

Study of the graduate meta-profile for an Administrator

1.1. Background

One of the concerns put forward by the Administration Group prior to preparing the meta-profile for the area was the need to review the 47 competences (27 generic and 20 specific ones) defined in Phase 1 of the Tuning Project, for two major reasons: the time that had elapsed since the initial definitions were made was more than 5 years, and a wealth of experience had been gained over this period with the practical application of these competences.

From the first analysis the conclusion was drawn that the number of competences was high. On the one hand this made the whole assessment process and objective verification of progress achieved in each competence in each student difficult and, on the other, there was the complexity faced by teaching staff, students, employers and the general public in understanding graduate profiles. This suggested that it was essential to find a combination of a minimum number of core capacities needed by an administration graduate that would capture the identity of the disciplinary area.

The process is described below following on from an analysis of the 47 initial competences to a definition of thirteen macro competences that describe the meta-profile of the graduate in the administrative area, in addition to the validations made in Latin American countries and the reflections arrived at.

It should be pointed out that the process that was carried out was of an upward spiral type. As one advanced, one had to go back to review the previous work and thus always monitor the consistency of the changes made.

1.2. Identifying macro competences

Firstly, an analysis of the generic competences was carried out, i.e. when answering the question as to whether these competences define the entire profile of a university graduate at the present time, the response was that 27 competences were valid and that it was necessary to include an additional competence, which should be a valid competence for all areas. This was above all extremely important for administration —"the capacity for entrepreneurship and innovation"— with a broad scope not only for embarking on new business ventures but also individual, social and governmental projects, with the innovation component for generating aggregate value.

With this set of twenty-eight competences an exercise was then carried out involving reducing the number without meaning the loss of any substantial capacity on the part of the administration graduate. Efforts thus focused on finding more general, globalising competences (macro competences). Eleven competences were then arrived at from the first phase of this process and in a second phase, five competences were obtained from an exhaustive procedure.

A similar process was carried out with the twenty specific competences. The relevance and importance of these competences was then analysed and the conclusion was drawn that a new specific competence still needed to be included In addition to the previously defined twenty: "administering human, physical, financial and other resources in the organisation." The word other implies technology, information and knowledge, etc.

In this phase of the process, an analysis was carried out not only of these twenty-one competences but also to associate them with the five new generic ones, due to the fact no distinction is made between generic and specific competences in the meta-profile. A new grouping, redefining, eliminating and debugging process then got underway from which thirteen macro competences were obtained that define the meta-profile of an administrator in the world at present.

Table 1
Generic and specific competences defined in Phase 1
of the Tuning-Latin America Project

Generic competences		Specific competences	
1	Capacity for abstraction, analysis and synthesis	1	Develop a strategic, tactical and operative approach
2	Capacity to apply knowledge in practice	2	Identify and manage risks faced by organisations
3	Capacity to organise and plan time	3	Identify and optimize business processes in organisations
4	Knowledge about the area of study and profession	4	Administer an integral logistics system
5	Social responsibility and citizens' commitment	5	Develop, implement and manage administrative control systems
6	Capacity for oral and written communication	6	Identify functional inter-relations in the organisation
7	Capacity for communication in a second language	7	Assess the legal framework applied to business management
8	Skills in the use of information and communications technologies	8	Prepare, assess and administer business projects in different types of organisation
9	Capacity for research	9	Interpret accounting and financial information for managerial decision-making
10	Capacity to learn and keep up-to-date permanently	10	Use information about costs for planning, control and decision-making
11	Skills for seeking out, processing and analysing information from different sources	11	Take decision regarding investment, funding and management of the company's resources
12	Capacity for criticism and self-criticism	12	Exercise leadership in order to achieve the organisation's goals
13	Capacity to act in new situations	13	Administer and develop human talent in the organisation

Generic competences		Specific competences	
14	Creative capacity	14	Identify ethical and cultural aspects that may have a reciprocal impact on the organisation and the milieu
15	Capacity to identify, consider and deal with problems	15	Improve and innovate administrative processes
16	Capacity for decision-making	16	Detect opportunities for embarking on new business ventures and/or develop new products
17	Capacity for teamwork	17	Use information and communications technologies in management
18	Inter-personal skills	18	Administer the company's technological infrastructure
19	Capacity to motivate and drive people towards common goals	19	Formulate and optimise information systems for management
20	Commitment to preserving the environment	20	Formulate marketing plans
21	Commitment to their socio-cultural environment		
22	Regard and respect for diversity and multiculturalism		
23	Ability to work within international contexts		
24	Ability to work independently		
25	Capacity to formulate and administer projects		
26	Ethical commitment		
27	Commitment to quality		

Table 2
Initial macro competences

	Macro competences
1	Develop a strategic, tactical and operative approach in different scenarios
2	Improve and innovate the administrative and business process
3	Exercise leadership in order to achieve the organisation's goals
4	Formulate, assess and administer business projects in different types of organisation
5	Interpret accounting and financial information for decision-making purposes
6	Ethical commitment and social responsibility
7	Identify and manage business risks in organisations
8	Formulate and use information systems for management
9	Assess the impact of the legal framework in the management of organisations
10	Administer human, physical, financial and other resources in the organisation
11	Capacity to learn how to learn
12	Detect opportunities for embarking on innovative business ventures/Capacity for entrepreneurship and
13	Capacity for communication and teamwork

1.3. Defining categories

Four categories that cover all basic fields in the area of administration were defined in order to corroborate the completeness of the thirteen macro competences identified. The thirteen macro competences were grouped together into these categories. The final decisions of these categories are described in Table 3 below.

Once the thirteen new competences had been defined and validated within the Administration Group, the next step was to validate them outside the Group to check whether these macro competences effectively make up the core of the graduate profiles of degree courses in Administration.

Table 3
Categories and macro competences

	Categories	Macro competences
1	Personal and organisational development	Ethical commitment and social responsibility
2		Exercise leadership in order to achieve the organisation's goals
3		Capacity to learn how to learn
4		Capacity for communication and teamwork Innovation and entrepreneurship
5	Innovation and entrepreneurship	Detect opportunities for embarking on innovative business ventures/capacity for entrepreneurship and innovation
6		Formulate, assess and administer business projects in different types of organisation Strategic management
7	Strategic management	Develop a strategic, tactical and operative approach in different scenarios
8		Improve and innovate the administrative and business process
9		Identify and manage business risks in organisations
10		Formulate and use information systems for management Analysis of the business
11	Analysis of the business	Interpret accounting and financial information for decision-making purposes
12		Administer human, physical, financial and other resources in the organisation
13		Assess the impact of the legal framework in the management of organisations

1.4. Contrasting the meta-profile in different countries

To fulfil this objective, it was agreed that each member of the Group should compare the results with sources in their respective countries. The alternative validation proposals put forward were: with degree courses in Administration from their own university, with degree courses in the area of Administration from other leading universities

in the country, with profiles defined by official bodies and with profiles established by the relevant guilds.

The basic tool for study consisted of a matrix, the rows of which showed the categories and the macro competences for each of them, and the columns which featured the institutions analysed. This matrix had to be completed by rating the level of relevance of each macro competence by each of the institutions analysed, as well as including comments provided by each macro competence (horizontal analysis), and a vertical analysis, i.e. general comments provided by institutions.

As stated in the previous paragraph, it was requested that the level of global relevance of the thirteen macro competences be rated with the profiles analysed in each country in addition to carrying out a qualitative analysis that gathered together comments about macro competences. A scale of 1 to 4 with the following meaning was established for such purpose:

Table 4
Rating of level of relevance

Rating	Meaning
4	Totally relevant
3	Relevant
2	Not very relevant
1	Not relevant

The techniques used to gather information were as follows: interview, workshops, and above all access to documents via institutional websites.

The sources of the information required were those in charge of degree courses, graduate profiles and, where necessary, the networks or syllabuses with their content.

The study was carried out in ten Latin American countries: Bolivia, Chile, Colombia, Ecuador, El Salvador, Honduras, Mexico, Peru,

Uruguay and Venezuela. The profiles of 138 universities were analysed in these countries and one profile designed by a guild and two profiles designed by state institutions.

The point should be made clear that this was not an exhaustive study in each country or of the region in general. Rather, it simply entailed validation of the definitions made by the Administration Group via specialists or documentation in order to make reliable feedback available.

The results obtained from the study essentially have four dimensions:

a) *Level of relevance of the thirteen macro competences in the different countries*

The following conclusions may be drawn from the table provided:

- The general average for the thirteen competences was 3.36, which means that —according to the scale defined— they were located between relevant and totally relevant.
- Ten of the thirteen macro competences —77%— were rated in terms of three points, i.e. between relevant and totally relevant.
- There are six competences that exceeded the 3.5 rating, which means they were considered to be totally relevant.
- Three macro competences gained a rating of less than three, but above 2.5, i.e. they would be considered relevant.
- Rating according to country ranged from 2.42 to 3.85; however, nine of the ten countries gave a global rating of over three.

Broadly speaking, based on the results obtained, it might be stated that the thirteen macro competences do constitute a core for degree courses in Administration and a starting point for subsequent analyses.

Table 5
Relevance of macro competences according to country

Categories	Macro competences	Bolivia	Chile	Colombia	Ecuador	El Salvador	Honduras	Mexico	Peru	Uruguay	Venezuela	Average country
Personal and organisational development	Ethical commitment and social responsibility	4.00	4.00	4.00	3.86	3.00	4.00	4.00	3.75	4.00	2.83	3.74
	Exercise leadership in order to achieve the organisation's goals	4.00	4.00	3.00	3.71	4.00	3.00	4.00	3.75	4.00	2.83	3.63
	Capacity to learn how to learn	3.00	4.00	3.50	4.00	4.00	3.00	4.00	3.50	4.00	1.67	3.47
	Capacity for communication and teamwork	4.00	4.00	3.50	4.00	4.00	4.00	4.00	4.00	4.00	1.00	3.65
Innovation and entrepreneurship	Detect opportunities for embarking on innovative business ventures/capacity for entrepreneurship and innovation*	4.00	4.00	4.00	3.57	4.00	3.00	4.00	3.75	3.50	1.83	3.565
	Formulate, assess and administer business projects in different types of organisation	3.00	3.00	3.00	3.71	3.00	2.00	4.00	3.25	4.00	2.42	3.14

Categories	Macro competences	Bolivia	Chile	Colombia	Ecuador	El Salvador	Honduras	Mexico	Peru	Uruguay	Venezuela	Average country
Strategic management	Develop a strategic, tactical and operative approach in different scenarios	4.00	4.00	4.00	3.86	4.00	4.00	4.00	4.00	4.00	3.42	3.93
	Improve and innovate the administrative and business process	3.00	3.00	2.50	3.57	4.00	3.00	4.00	3.75	3.00	2.75	3.26
	Identify and manage business risks in organisations	3.00	3.00	3.00	3.21	3.00	3.00	3.00	3.25	3.00	1.17	2.86
	Formulate and use information systems for management	3.00	3.00	2.50	3.57	2.00	3.00	3.00	3.50	3.00	2.33	2.89
Analysis of the business	Interpret accounting and financial information for decision-making purposes	4.00	3.00	2.50	3.43	4.00	3.00	4.00	3.25	3.00	2.92	3.31
	Administer human, physical, financial and other resources in the organisation	4.00	4.00	3.50	4.00	4.00	3.00	4.00	3.25	3.00	3.25	3.60
	Assess the impact of the legal framework in the management of organisations	2.00	2.00	1.50	3.21	2.00	3.00	4.00	2.75	3.00	3.00	2.65
Average	Average	3.46	3.46	3.12	3.67	3.46	3.15	3.85	3.52	3.50	2.42	3.36

b) *Observations made for each of the macro competences*

Observations were gathered for each of the macro competences as part of the methodology for validating their relevance as core elements in the graduate profile of an administrator and the quantitative rating process described above. The main observations were included in the following table:

Table 6
Observations for each macro competence

	Macro competence	
1	Develop a strategic, tactical and operative approach in different scenarios	In the view of those interviewed, this is an essential competence framework for an administrator. It was noted that the strategic thought required of an administrator is developed via this competence.
2	Improve and innovate the administrative and business process	The importance for an administrator in handling processes was highlighted. It was suggested that the scope of the administrative and business process should also be understood in financial, technical and commercial areas.
3	Exercise leadership in order to achieve the organisation's goals	All considered that although it is true that this is a major competence required for engaging in many professions, in the case of the administrator it is of paramount importance, as administrators are the ones in charge by dint of their performing their duty of managing human talent and of giving an example of leadership in order to achieve institutional objectives. It is suggested that bargaining skills be developed within this competence.
4	Formulate, assess and administer business projects in different types of organisation	There was general agreement that handling business projects is a basic competence for an administrator in order for them to perform their duties. The observation was made that the verb prepare is more appropriate than formulating projects.
5	Interpret accounting and financial information for decision-making purposes	It was suggested that this macro competence be referred to as: Manage the balance between investment and funding and, on the other hand, it was noted that, for decision-making purposes, not only is it necessary to interpret financial information, but also statistics.
6	Ethical commitment and social responsibility	This competence was the second most-highly rated. It was argued whether, to develop this competence, one should opt to treat it from simply a transversal standpoint or as a mixed solution via specific subjects accompanied by transversal treatment. It was suggested that the ethical and cultural aspects with reciprocal impact between the organisation and social milieu be identified in order to better develop this competence.

	Macro competence	
7	Identify and manage business risks in organisations	This gained the third-lowest score. In most networks it appears not to be directly related to one or more subjects in particular, but rather, its presence is noted on a content level.
8	Formulate and use information systems for management	This gained the second lowest score. The observation that was repeated was that of not using the word formulate, but rather, define. The recommendation also existed that this should be a competence with greater scope that not only refers to information systems but also to the use of information and communications technologies.
9	Assess the impact of the legal framework in the management of organisations	This is the competence that gained the lowest score. Two observations were made about its scope: whether it should end up assessing the impact or only being familiar with the legal framework, and that it should only refer to the area of commercial, labour and tax regulations. On the other hand, in terms of the way of facing this competence, it was considered whether either a transversal perspective or via specific or mixed subjects should be opted for in order to develop it better.
10	Administer the human, physical, financial and other resources in the organisation	This gained the fourth best score. There was agreement about the scope provided to include other resources, because it was thought information and knowledge management in organisations should be made a priority at the present time.
11	Capacity to learn how to learn	The observation made was to stress the fact that there is no other way of being up-to-date in such a changing environment as the one in which we are living, with all the fast changing developments in science that are taking place.
12	Detect opportunities for embarking on innovative business ventures	It was thought that the scope of entrepreneurship and innovation should be included in the heading, i.e. the proposal would be: detect opportunities for embarking on innovative business, and individual, social and governmental projects.
13	Capacity for communication and teamwork	This gained the third highest score. It was noted that communication not only refers to oral and written forms, but should also emphasize digital communication at the present time.

The fact should be highlighted that each observation was treated by the team and assessed and, depending on the result of this analysis, was accepted and therefore included in their draft.

c) *The level of relevance of the categories*

Table 7
Relevance according to category and country

Categories	Bolivia	Chile	Colombia	Ecuador	El Salvador	Honduras	Mexico	Peru	Uruguay	Venezuela	Average country
Personal and organisational development	3.75	4.00	3.50	3.89	3.75	3.50	4.00	3.75	4.00	2.08	3.62
Innovation and entrepreneurship	3.50	3.50	3.50	3.64	3.50	2.50	4.00	3.50	3.75	2.13	3.35
Strategic management	3.25	3.25	3.00	3.55	3.25	3.25	3.50	3.63	3.25	2.42	3.23
Analysis of the business	3.33	3.00	2.50	3.55	3.33	3.00	4.00	3.08	3.00	3.06	3.19

Some conclusions drawn from Table 7 are as follows:

- As was pointed out previously, the level of relevance of the macro competences was high and, consequently, the categories that group them together also obtained high ratings. All averages were between 3 and 4, meaning that they would be totally relevant to relevant on the agreed scale.
- The category with the lowest score was that of Analysis of the Business and the one with the highest was Personal and Organisational Development.
- If this is analysed according to country, then the category that gained the best score in nine out of the ten was Personal and Organisational Development, which shows the interest in and emphasis placed on generic capacities related to the individual and groups. In the case of Venezuela, the best score was obtained by Analysis of the Business,

i.e. the methodologies and tools that ensure the company remains in business and grows.

- As regards the categories that were rated the least highly in terms of their relevance according to country, five (Peru, Uruguay, Chile, Colombia and Ecuador) gave the lowest score to Analysis of the Business, four to Strategic Management (Bolivia, Ecuador, El Salvador and Mexico) and two to Innovation and Entrepreneurship (Venezuela and Honduras).

e) *Inclusion of feedback received in the country consultation process*

It should be recalled that the first definition of the categories was given at the start of this work in order to confirm whether the four core themes of business administration were covered by the definition given of the thirteen macro competences. Below are shown the definitive names of the categories and their definitions.

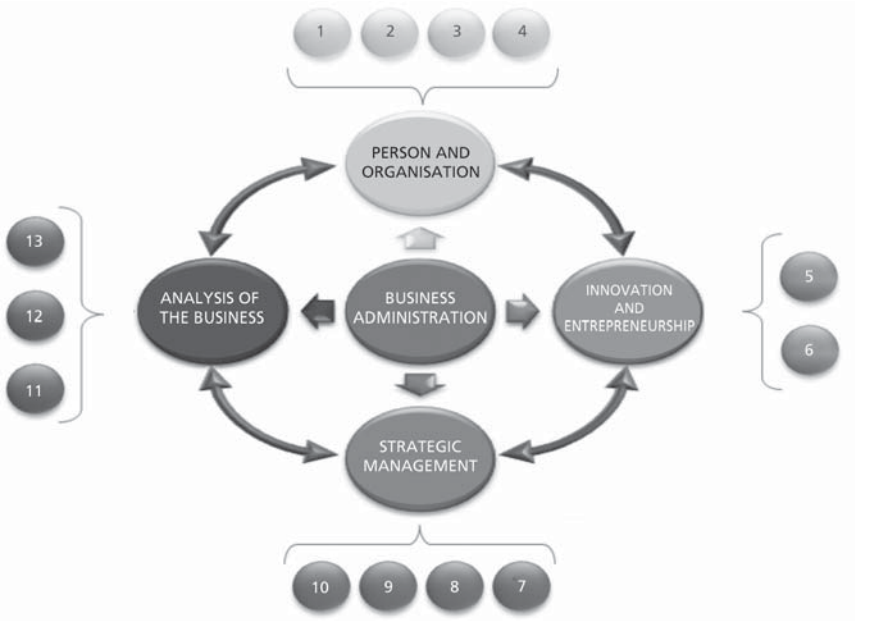

Figure 1
Categories of Business Administration
and their relation to the final macro competences

Table 8
Definition of categories

Categories	Definitions
Person and organisation	This encompasses the concept of indivisibility of the person and the organisation, in the sense that human talent is important for the development of the organisation, as the organisation is for the professional advancement of the person. This means establishing a commitment of mutual benefit.
Innovation and entrepreneurship	This category emphasizes the use of innovation and the practice of entrepreneurship as driving forces behind developmental processes and business transformation that focuses on a view of business that is committed to value creation and improvement of the milieu.
Strategic management	The basic proposal of this category focuses on developing administrative processes that are aligned to the organisational mission and outlook, channelling efforts and resources into achieving strategic objectives.
Analysis of the business	This considers the application of methodologies and tools to optimise processes and operations that make decision-making possible, in order to ensure that the organisation remains in business and grows within a competitive, uncertain and changing environment.

Once the categories had been specified, the macro competences were then reviewed. There was evidence in the observations made by the academics interviewed that, rather than enlarge some macro competences, it was essential to adjust their definitions for three reasons: 1) the need to be precise with the language owing to the different interpretations given for some terms in the different countries; 2) the rigorous nature of the language required in the academic field; 3) the exact scope that macro competences should have, as they can make the difference between the profile of a specialist and that of a user.

These reasons resulted in the drafting of the thirteen macro competences being modified. Other changes taken into consideration were made in the drafting of two macro competences that had been observed (see Table 6), to have a lack of clarity in terms of their scope

and to the fact that they were rated the lowest in consultations carried out in the different countries. Thus, Assess the impact of the legal framework in the management of organisations, with a scope approximating more the profile of a lawyer, was changed to Assess the impact of commercial, labour and tax regulations, and Formulate and use information systems for management was changed to Define and use the information systems required for management.

Table 9
Final categories and macro competences

Categories		Macro competences
1	Person and organisation	Is ethically and socially responsible
2		Exercises leadership in order to achieve the organisation's goals
3		Is capable of learning how to learn
4		Communicates effectively and works in teams
5	Innovation and entrepreneurship	Detects opportunities for embarking on business ventures
6		Effectively formulates, assesses and administers business projects in different types of organisation
7	Strategic management	Develops a strategic, tactical and operative approach in different scenarios
8		Optimises the administrative and business process
9		Identifies and manages business risks in organisations
10		Defines and uses information systems required for management
11	Analysis of the business	Analyses accounting, financial and marketing information for decision-making purposes
12		Assesses the impact of commercial, labour and tax regulations on the management of the organisation
13		Optimises the human, physical, financial and other resources of the organisation

1.5. Reflections

One should reiterate that this was not an exhaustive study of each of the ten countries, or of the region in general. Rather, it involved an initial construction made by the Administration Group of the Tuning-Latin America Project which was done using information from documents and academic peers.

Taking into consideration that the general rating given to the thirteen macro competences was 3.6 which, in accordance with the rating scale means from relevant to totally relevant, it can be stated that they constitute the core for degree courses in Administration and are a valuable basis for subsequent studies.

Additional validation was made possible via the definition of categories, in order to corroborate the fact that the 13 macro competences covered the core themes of administration. The global rating was high: between 3.19 and 3.62.

In the course of the qualitative validation carried out via comments and observations that were requested of academic peers about the meta competences, the recommendation was made not to either increase or reduce their number. Rather, it was suggested that the scope of some of them be specified.

The results are also positive according to country, with ratings ranging from 2.42 to 3.85 in the validation of macro competences. However, the sample was very small for the purpose of making generalisations about trends, with emphasis placed on the different countries with regard to categories.

One of the fruits of this study has been the definitions of categories which, with the feedback received by academics, were improved on in terms of their scope and accuracy.

2

Future scenarios for the Area of Administration

2.1. Background

With the aim of envisaging future scenarios regarding new professions and emerging competences for the area of administration, thirty well-known people were interviewed across the eleven countries. These individuals gave their thoughts about the near future, taking a scope of twenty years as a reference point.

The following are provided based on an analysis of these interviews: a brief description of the interviewees, the professions predicted and the competences identified as being necessary for such future professions.

2.2. Brief description of interviewees

The thirty interviews conducted were arranged as follows: eight countries with two interviews each, Venezuela with three, Uruguay with five and Brazil with six.

93.4% of those interviewed were men and 6.6% women.

As for the academic background of those interviewed: 33.33% work in administration, 13.3% in commercial engineering, 10% in administration and accounting, 6.6% in mechanical engineering, 6.6% in information technology, 6.6% in sociology and the remainder —i.e. 23.57%— in areas of law, communication, economics and psychology.

63.33% hold MA qualifications and 36.66% PhDs. Around 10% of those interviewed obtained their MA or PhD qualifications abroad.

36.3% are teachers and over 80% have experience in top managerial posts in public and private firms. Among them are a former Vice-President of the Republic, two state ministers and three rectors. Around 30% of the total are university deans. Most have over ten years' experience.

2.3. Characterisation of future scenarios taken into consideration

From the interviews conducted, two possible scenarios were highlighted for the near future which can be described as two opposite pavements of the street along which humanity is travelling by humanity, with the street narrowing and widening in relation to the nature of the pavements.

The two scenarios are greatly influenced by technological and scientific advances that will change individual, family and society behaviour and can be distinguished by the level of human awareness that will become the hallmark of people's relations with their fellows, technology, culture and nature.

The ALPHA scenario: this is characterised by a high level of awareness on the part of individuals in terms of their human relations, the damage they do to the planet, the dangers of technology and their social responsibility. It is scenario of a more democratic and diverse world that includes the vast majority, with better access to information, education and culture. It is also fairer and more transparent and provides opportunities for both individual and group action, in the search for a better quality of life aided by technology and human values.

The BETA scenario: this is characterised by increasingly radical dehumanisation —a loss of meaning and human contact— in a world in which the gap between social groups is growing as a result of the advantage of some regarding clearly identified factors as follows: access to top quality education, an understanding of the new dynamics of growth based on knowledge, research, innovation and new job opportunities and pay. Privileged groups will gain a solid education

and major access to information technologies, enjoying high levels of quality of life over the majority with low levels of education and great economic, social and political exigencies.

Nonetheless and as we stated previously, humanity will probably pass through the GAMMA scenario, i.e. the dynamic alternative that moves between the ALPHA and BETA scenarios.

Below are some characteristics which, according to those interviewed, will be attached to humanity in the near future:

- Society will continue its change and transformation process, drawing closer to new frontiers based on knowledge, innovation and communication, facing transitions, adding those dimensions demanded by change, and adjusting and adapting types of behaviour such as a better understanding of psychosocial processes, culture and values, protection of the environment and respect for diversity.

- Changes will be continuous and accelerated. Society will undergo a major transformation with the use of technology that will have a significant impact on the quality of life and negative effects on inter-personal relations owing to the intense use of technological tools that will make people more isolated – paradoxically so within the context of a world that has greatly developed specialist social networks.

- Advances in technology in all areas of society will significantly transform our way of life. Everyday habits and lifestyles will continue to change. Innovation will be the key to development. From robotization processes to smart electrical household appliances, human ingeniousness and innovation will make use of technology to develop new products, production systems, means of communication and information and services which will either simplify or transform daily life.

- Globalisation will take deeper root and there will be greater human mobility and in terms of products, services and capital, and also a great diversity of people and realities working together.

- Citizens will become more involved in political and social decision-making in their countries.

- With regard to the population, a concentrated demographic increase is expected in certain groups of humans, among other factors owing to an increase in life expectancy – it is expected that children born after 2030 will live for an average 130 years; the middle class will also increase, and the population over 65 will grow significantly – and these changes will take place above all in Asia.

- The significant increase in life expectancy will be sustained by advances in genetic engineering that will develop the physical and intellectual dimensions of human beings; by regenerative, personalised medicine according to the genome; by contributions made by nanotechnology in diagnoses and cures; and by efforts made in private medicine.

- The major challenge facing the future of humanity will be to deal with the climate crisis, as energy needs will double over the next 20 years. This will result in a greater number of and more powerful natural disasters such as floods, hurricanes, drought, limited fresh water supply and more living species dying out. A crucial point in this challenge will be to obtain political will worldwide to ensure that all efforts made to provide cleaner and cheaper sources of energy; recycling and environmental care will become ways of life for the planet.

- From the economic leadership point of view, two groups of countries can be made out. The first will be made up of the leading economic powers led by China, followed by the United States and then India – the country with the highest growth rate. The other block will comprise the countries that follow the above three but at a considerable distance: Germany, Brazil, Russia, the United Kingdom and France. A greater role can be expected from Latin America in the world economy, together with the Asian countries.

- In addition, it is thought that the economic gap existing between countries will get smaller, although it will increase among citizens within countries.

- Scientific and technological developments will take place above all in the areas of information technology, nanotechnology, new materials and biotechnology. Advances will be made in the study of the genome, synthetic biology aligned to low-cost fuel production, bioenergy and sustainability: water, energy and foodstuffs. Just as

matter was able to be handled on a micro level in the sixties, so will this be consolidated on a nano level in the future, i.e. on an atomic, molecular and cellular level.

- As regards information technology, greater levels of automation are expected in industry, digital manufacturing with three-dimensional printers, and mass use of robots and the electronic conversion of the media via the Internet. Computers will also be far more powerful and connect the whole planet, and intensive use will be made of specialist social networks and knowledge creation via Wiki mechanisms. One of the major ethical dilemmas for the future will be the presence of autonomous smart machines.

- Companies will become virtual and above all hybrid. Transactions and purchases will be conducted online worldwide, and most orders will be placed via electronic catalogues with personalised options available. There will be a tendency for companies to integrate components manufactured in different parts of the world. Personnel will be highly-specialised and there will be growing thirdization regarding support processes. Generally speaking, company structure will be very light.

- All information about any economic type of activity, country or industrial sector will be completely available online and real and effective inter-business real contacts will be possible virtually without wasting time or money on the physical travel that was previously deemed essential.

- Society will demand high quality, environmentally-friendly services.

- People will be better informed and have more chances to buy and sell in any part of the world.

- There will be growth in international SMEs thanks to technological development.

- Access will be gained to non-traditional financial markets, where small financial cooperative systems will be created based on the development of micro enterprises.

- Inclusive business will be developed, which will include the pyramid base in their value chain that will be incorporated into their different links.

- There will be increasing respect for the environment and the preservation of natural resources will give rise to future scenarios, thus making it possible to create new business models.

- Competition will intensity as a result of globalisation and firms' competitive advantages will no longer derive from traditional sources such as capital technology or marketing, but from innovation, creativity and information networks.

- Firms will become more developed in terms of services than other economic activities.

- Strategic alliances will be formed on all levels involving between suppliers and customers, between customers and firms and between firms of the same type.

- Goods and services will be in increasingly short cycles.

- The concept of quality of life of individuals in organisations will intensify.

- The focus on unidisciplinary-based professions will give way to an emphasis on competences and transdisciplinary professions.

- Virtual education will grow very rapidly and the trend will be for it not to depend on the degree programme, but rather, according to the needs of each subject.

- There will be an increasingly marked separation in the business labour area between competent personnel who are skilled in developing activities in the company and those who carry out orders. 20 years down the line, processes will have become more mechatronic and increasingly fewer workers will therefore required. The difference between the pay earned by skilled and non-skilled people will increase.

- There will be comprehensive education and training, albeit at the same time with high levels of specialisation.

- Working from home will become more common in many jobs.

2.4. Professions that can be envisaged in the future

It is thought that the current concept of profession will steadily lose ground, with a move towards occupational requirements being made clear in terms of competences, and people will also need to be certified to take up posts. Nonetheless, professions are described below which those interviewed think will be related to the area of administration, some of which already exist:

Data analyst

A person within the company who is in charge of analysing the huge amount of data possessed by the organisation (data mining), in order to predict and identify certain types of behaviour, such as that of customers.

Community manager

Professionals who have already started to emerge, who are responsible for managing the different communities in which the company takes part (social networks).

It is thought that a new expert psychologist will also be needed to persuade and influence new media, and a new anthropologist who is able to analyse customers from different cultures, also connected to social networks.

Business prospector/researcher

Someone who is familiar with the digital world and that of international legislation will be a professional who is able to create new business models and new opportunities within this inter-connected world. A specialist area might be non-traditional international financial markets or fair trading.

Organiser and enabler of leisure events

There will be professional experts to organise and enable leisure-related activities owing to the greater amount of free time people will

be expected to have, e.g. experts in psychology, tastes, preferences and care for elderly people who will be in charge of organising leisure events for this increasingly large sector of the population.

Eco manager

A specialist who is in charge of planning, organising and implementing processes that incorporate the environmental factor as a substantial part of company work.

Supplier of relevant information

An expert in filtering information and providing organisations with relevant information. Those interviewed foresee this person as being a professional who provides an external service, thus saving company time and effort.

Organiser of collective intelligence

Responsible for systematising all company know-how so as to then convert it into a smart business that takes decision according to duly processed information, previous experiences and successful practices pursued in other organisations.

Learning expert

A professional who trains companies who, in addition to being familiar with all cognitive and motivational processes, knows how to use them in virtual environments.

2.5. Competences that will be required by new professions

Administrator features will be: a conceptually solid professional who applies management standards and certifies company processes, products and services, and builds a smart organisation that learns from itself via systematised processes and good practices.

Creativity, innovation and entrepreneurship

This refers to the capacity to enable creative ideas to be enhanced via new products, processes, services, business models and initiatives, and companies and businesses to be consolidated.

Teamwork

The ability to work collectively and synergically develop human talent.

Managing change

The ability to understand change processes and successfully manage them.

Applying know-how in practice

Theoretical training that enables one to move easily within different scenarios is essential. This will need to be complemented by suitable techniques and tools so as to be able to find viable and reliable solutions.

Self-learning

The ability for one to be able to learn by oneself and keep permanently up-to-date is necessary within the framework of a changing scenario.

Adaptive thought

This is the ability to think up and find new creative solutions to vaguely structured problems.

Social intelligence

The capacity to relate to other human beings both face to face and via virtual media and social networks.

Cross-cultural competences

The capacity to understand cultural diversity, different languages and ways of acting.

Cross-disciplinary competences

The capacity to understand different disciplines and their relations.

Capacity for communication in new media

Not only in terms of format, but also of an interactive nature and a willingness to engage in virtual collaboration.

Social commitment and commitment to the environment

The future professional will need to be a leading player in terms of their participation as a citizen, and also be up-to-date with everything that the climate crisis means and know what type of behaviour to pursue.

Assessment of and respect for the elderly

Above all, Western professionals will need to assess and respect elderly people whose numbers will be increasing and who will be integrated in a great number of social activities.

Design and content-oriented mentality

Owing to the great development of information technology, future administrators will need to be able to efficiently use such tools and independently incorporate content and design.

The main competences identified for future professions are linked to social relationships, organisations, society and the environment, knowledge management, communication, handling technologies, future management, and the capacity for entrepreneurship and leadership.

With regard to the above, it can be appreciated that those interviewed placed major emphasis on those generic competences that can be related to different professions and disciplinary areas. Interviewees seemed to give priority to those capacities that enable that knowledge to be accessed and be applied within a framework involving care in terms of inter-personal relations and the environment, rather than stressing the specific know-how attached to each profession.

3

Estimating student workload

3.1. Introduction

Consistent with plan for this study, the next step was to estimate student workload in order to ascertain the time perceived to be available to them to develop the competences defined above by attaining learning results over each course, subject or academic period – thus making it possible to plan and give priority to certain activities that enable the most significant and relevant competences to be acquired.

This definition of graduate profiles according to competences implicitly means a curriculum that focuses on the student and learning, thus reducing the traditional role of the teacher and teaching.

From the traditional approach that focuses on teaching as a way of conveying information and content, things change to learning as a process that is aroused in each student, who adds the development of skills and values to their acquiring of knowledge. For this reason, activities need to be designed to enable students to learn not only on a face-to-face basis but also independently, precisely to provide them with time and space within curricular planning to reflect on and internalise what they have learned.

It is true that the development of competences as defined for different professions is very important. However, given the uncertainty and constant change in the modern world in which know-how rapidly becomes obsolete in certain areas, and professions are created or die out, the ability to learn how to learn competences is essential for the

purpose of incorporating the ability to permanently keep up-to-date and re-assess oneself and adhere to the new paradigms indicated by UNESCO: learning to learn for life and throughout life.

To enable the real total workload that a student needs to pass subjects over a specific academic period to be estimated in hours, a survey aimed at teachers and students was designed for the 15 discipline areas of the project. 10,086 questionnaires were processed in total which were answered by teachers and students from 189 academic units in institutions taking part in the project.

In the area of administration, which is of interest in this study, 919 responses were obtained of which 87 were from teachers of the subjects selected and 832 from students, who belong to the twelve universities from the eleven countries taking part in this area. [3]

The survey was conducted on students who had passed some or all of the subjects planned over the academic period corresponding to 50% of the degree course (in terms of subjects or credits). It was recommended that the sample include a similar number of students who had passed the subject with a very good, average or poor mark. The survey, which was conducted according to subject, was applied to at least ten students for each of the subjects offered over the defined period, and in the case of teachers, these were those who taught the subjects over the academic period selected.

3.2. Results of the consultation

Although it is true to say that the survey was answered by both teaching staff and students, the results will be provided separately when the relevant datum merits this – otherwise, a total result will be provided.

Twelve degree courses of 4 years' duration (one case) and 4.5 years' duration (five cases), giving a weighted average of degree cases of 4.7 years' duration. were identified for the survey.

In accordance with the plans proposed by educational establishments for students to complete their degree courses within the time stipulated, the number of subjects that students needed to approve over the academic period selected was as follows: six subjects in seven

cases, five in three cases and four in two cases. This gave a weighted average of 5.4 subjects per academic period.

With regard to the type of academic period, ten out of the twelve degree courses opted for a weekly period, one for an annual period and one for a nine-month cycle.

The average number of minutes per academic hour was 51.8, with a minimum value of 45 and maximum 60.

The average number of face-to-face contact teaching hours per week per subject was 3.78 in the case of students and 3.82 in the case of teachers.

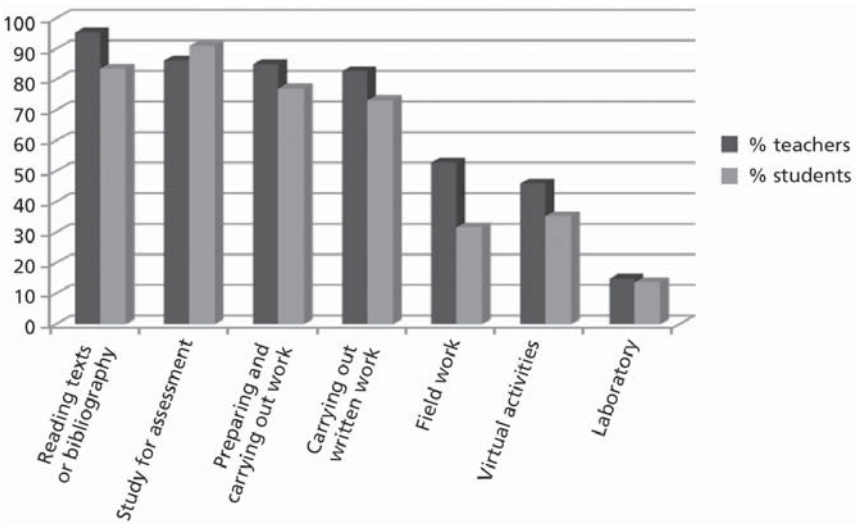

Figure 2
Percentage of teachers and students who stated which non-face-to-face activities they used to attain learning results

Figure 2 shows percentages obtained ordered from greater to lesser, according to teachers, and the non-face-to-face activities they used to promote independent work by students and to attain learning results. The non-face-to-face activity used involved the reading of texts and bibliography with 95.4% on the part of teachers and 83.5% on the part of students, whereas the lowest percentage obtained referred

to the use of laboratories without the presence of a tutor, which accounted for barely 14% of teachers and 13.7% of students.

When asking interviewees about the number of hours per week that students set aside for face-to-face and non-face-to-face activities in order to pass a subject, their response was an average 7.1 hours per week, and 8.4% in the case of teachers.

Table 10
Some data showing the academic load of a business administration student

Duration of the degree course	4.7 years
Number of subjects per academic period (semester)	5.4
Number of total weekly face-to-face hours	20.5
Number of total weekly hours (face-to-face and non-face-to-face)	41.9
Ratio of total hours with face-face-to-face hours	2.0
Duration of an academic semester in weeks	17.0
Total number of hours of study per year	1,423

In Table 10 it can be seen that one hour of independent or non-face-to-face activities is planned for students for each hour of face-to-face classes.

The 1,423 hours of student workload per year, including both face-to-face and independent activities divided by 60, which is the standard rule for the Latin American Reference Credit (CLAR), gives a credit value of 1:24 hours. Broadly speaking, this evidences compatibility with the CLAR, as it is between the 24 and 33 hour range.

78.2% of teachers stated that they take into account the number of non-face-to-face hours that students require to carry out their activities in their planning. However, in the case of students, only 24.5% included their independent hours in their planning. Conversely, 41.4% of teachers interviewed pointed out that they compared their estimation of non-face-to-face hours with students, but when students were asked the same question, 20.1% answered that they did compare this with the teacher.

Estimating students' workload in developing the competences referred to in the graduate profile and obtaining the learning results expected in subjects and academic periods is a difficult task. However, it needs to be done and by gradually adjusting this estimation better, the amount of time a student has available can be determined and prioritised and put to more effective and efficient use in performing their tasks. The dispersion and variability of responses was marked in this exercise. This may be because the number of hours required to obtain learning results depends on several factors, such as students' individual capacities, teachers' professional development and experience, and the methods, tools and equipment used in the teaching-learning process, among others. Nonetheless, the results provided show a trend and offer initial data for curricular planning by way of reference.

4

Teaching, learning and assessment strategies

4.1. Methodology used

The methodology used focuses on identifying competences and their relationship to student achievement. Global learning results were defined for each competence and two levels of disaggregation for each global result.

Bloom's taxonomy revised by Anderson and Krathwohl (2001) in humans was used to define the levels of development of the competence, disaggregation and the definition of learning results on a subject level.

Competences were grouped into four basic categories in order to achieve a better understanding of the graduate profile in the area of administration:

- *Person and organisation:* encompasses the concept of indivisibility of the person and organisation, in the sense that human talent is important for the development of the organisation, as the organisation stands for the professional advancement of the person. This means establishing a commitment of mutual benefit.

- *Innovation and entrepreneurship:* this category stresses the use of innovation and the pursuit of entrepreneurship as driving forces behind developmental processes and company transformation,

focusing on a committed view of business via value creation and improvement of its milieu.

- *Strategic management:* the basic proposal put forward by this category focuses on developing administrative processes that are aligned to the organisational view and mission – by channelling efforts and resources towards achieving the organisation's strategic objectives.

- *Business analysis:* considers the application of methodologies and tools to help optimise those processes and operations that make decision-making possible, in order to ensure that the organisation continues to grow within a competitive, uncertain and changing environment.

The thirteen macro competences that define the meta-profile of an administrator within the current world were validated using these categories, in accordance with the methodology referred to in chapter II above, Study of the graduate meta-profile of an administrator.

After carrying out an analysis in which the presence of the macro competences in the subjects contained in the syllabuses of participant institutions was reviewed in order to exemplify some aspects both of the teaching-learning process and diagnostic, formative and summative assessment, the Administration Group then decided to set a holistic construction process in motion for this report.

Below are described two macro competences defined in the meta-profile, which were selected taking into account the fact that they appear in all syllabuses within the area of administration, particularly in those institutions taking part in this project.

a) Competence: communicates effectively and carries out teamwork.

b) Competence: analyses accounting and financial information for managerial decision-making purposes.

4.2. Definition and description of the macro competences selected

a) *Communicates effectively and carries out teamwork*

One of the main intended outcomes of this competence is to develop skills for communicational organisation, i.e. that type of inter-personal or group communication that takes place within the environment of organisations.

Another aspect of this competence is that of developing teamwork in students, i.e. the commitment to the goals set out within their team.

b) *Analyses accounting and financial information for managerial decision-making purposes*

This competence seeks to develop the use and application of tools and methodologies by the student that provide support for the optimisation of processes and operations that makes it possible to take decisions – and thus ensure that the organisation continues to grow within a competitive, uncertain and changing environment.

4.3. Level of development of competences and list of the learning outcomes identified

Bearing in mind that it is possible to identify the level of development of a competence via students' learning outcomes in situations under the teacher's control, this section shows the level of development expected for each of the competences selected. This serves as a reference point for identifying their presence in the programmes of each of the universities taking part in the project. By way of an example, the names of some of the subjects mentioned are listed as being the most appropriate for the purpose of measuring the level of progress or command attained in developing the competence in question: language and communication, analysis and verbal expression, organisational behaviour and end-of-degree course work.

Table 11
Disaggregation of the competence
Communicates effectively and carries out teamwork

Global learning outcomes	Disaggregation level 1	Disaggregation level 2
1 Identifies interpersonal, group, organisational and teamwork-based communication concepts	1.1. Recognises the importance of effective communication.	1.1.1. Identifies verbal, written, gestural and digital communication processes and components.
		1.1.2. Identifies the specific elements of technical communication.
	1.2. Recognises the importance of teamwork.	1.2.1. Recognises the components and processes involved in teamwork.
		1.2.2. Relates effective communication to teamwork.
2 Understands the impact of effective communication and teamwork on the organisation	2.1. Understands the impact of communication on human and organisational processes.	2.1.1. Explains the role of effective communication.
	2.2. Understands the importance of teamwork in developing the organisation.	2.2.1. Sets out and provides examples of the importance of communication and teamwork in developing organisations.
		2.2.2. Correctly uses the key elements that organisations need to use for teamwork.
3 Uses communication and teamwork to achieve organisational objectives	3.1. Communicates effectively.	3.1.1. Correctly uses digital communication in the organisational sphere of activity.
		3.1.2. Correctly applies the elements of effective organisational communication and argues their points of view using technical criteria.
	3.2. Applies teamwork as a mechanism for achieving company objectives.	3.1.1. Correctly uses the key elements that organisations need to use for teamwork.

Table 12
Disaggregation of the competence
Analyses accounting and financial information
for managerial decision-making purposes

Global learning outcomes	Disaggregation level 1	Disaggregation level 2
1 Identifies the components of the company's accounting and financial structure	1.1. Is familiar with basic accounting and financial principles.	1.1.1. Identifies basic accounting and financial principles.
		1.1.2. Understands generally-accepted principles of accounting.
		1.1.3. Is familiar with the different types of accounting (financial, cost, tax and managerial).
	1.2. Identifies the structure of financial states.	1.2.1. Is familiar with basic financial states.
		1.2.2. Establishes the inter-relationship between the different financial states.
2 Interprets information via financial indicators	2.1. Is familiar with financial analytical techniques.	2.1.1. Establishes differences between financial analytical techniques.
		2.1.2. Establishes relationships between financial analytical techniques.
	2.2. Uses financial analytical techniques for decision-making purposes.	2.2.1. Carries out both a vertical and horizontal analysis.
		2.2.2. Carries out an analysis of trends.
		2.2.3. Interprets the results obtained from the analysis.
3 Takes managerial decisions based on accounting and financial information	3.1. Identifies problems.	3.1.1. Carries out financial diagnosis
		3.1.2. Identifies, characteriszes and prioritiszes problems according to context.
	3.2. Proposes options for a solution, assesses them and takes the decision.	3.2.1. Assesses the impact of the different options.
		3.2.2. Chooses and stands by the option selected.

As in the case of the previous competence shown in Table 11, the levels of development established in this competence (Table 12) are also present in those subjects that make up the syllabus of each of the participant institutions. The names of the subjects mentioned as being the most appropriate for the purpose of gauging progress made in developing this competence were: Financial Accounting, Financial Mathematics, Costs, Finance and Project Assessment.

4.4. Teaching-learning strategies to produce the learning results identified and strategies suggested for assessment of learning results

4.4.1. *Teaching-learning strategies*

The following teaching and learning strategies were identified in the design of activities to produce the intended learning outcomes in the case of the area of administration:

Exposé in the form of dialogue

In the case of this strategy, students' participation during explanations by teachers involves analyzing, interpreting and summarising the teacher's explanation and, in some cases, leads to the formulation of questions or participation in a small discussion.

Case study

What teachers pursue using this methodology is for students to be able to face both real and simulated situations that enable them to become engaged in decision-making, assess strategies and action and give value judgements.

Role play

This consists basically of a game in which students perform a specific role or take on a personality.

Project development

Students plan, evaluate and Implement a project that meets the needs raised in a specific situation or organisation, either in small teams or individually.

Professional internships

These are placements in organisations that enable the student to apply their knowledge or gain new knowledge in a real situation.

Simulation

This develops student learning via decision-making in simulated situations using different scenarios.

Group dynamics

This develops skills involving inter-personal relationships and leadership that enable the student to manage better and prepares them for teamwork.

Forums

These involve interaction between students and a group on a theme of interest, motivated by a moderator.

Debates and panels

Arguing and defending a stance on a theme of interest.

Essays or written work

Their aim is to motivate students to express their personal or group interpretation in writing about a particular theme or issue.

Presentations and oral exposés

Their aim is to motivate students to express the results of personal or group work or projects orally about a particular theme or issue.

In the case of the competence communicates effectively and carries out teamwork, the teaching-learning strategies that were defined in courses related to the development of this competence in the syllabuses of participant institutions are shown in Table 13.

Table 13
Some teaching-learning strategies identified in developing the competence communicates effectively and carries out teamwork

Teaching-learning strategies	Mexico	Venezuela	El Salvador	Peru	Chile	Colombia	Ecuador	Bolivia	Brasil	Uruguay	Honduras
Master class	x	x	x	x	x	x	x	x	x	x	X
Case study	x	x	x	x	x		x	x	x	x	X
Role play	x	x	x	x	x		x	x	x	x	x
Project development	x	x		x	x			x			x
Professional internships	x		x	x	x	x		x	x		x
Simulation				x	x		x		x		
Group dynamics	x	x	x	x	x	x	x	x	x		x
Forums							x	x	x		x
Debates and panels		x		x	x	x					
Essays or written work	X		x	x	x	x	x	x	x		x
Presentations and oral exposés	x	x	x	x	x	x	x	x	x	x	x

Table 14 shows the teaching-learning strategies that were identified in courses related to the development of the competence analyses accounting and financial information for managerial decision-making purposes in the syllabuses of participant institutions.

Table 14
Some teaching-learning strategies identified in developing the competence analyses accounting and financial information for managerial decision-making purposes

Teaching-learning strategies	Mexico	Venezuela	El Salvador	Peru	Chile	Colombia	Ecuador	Bolivia	Brasil	Uruguay	Honduras
Master class	x	x	x	x	x	x	x	x	x	x	x
Case study	x	x	x	x	x		x	x	x	x	x
Role play		x				x	x	x	x		
Project development	x	x	x	x	x	x	x	x	x	x	x
Professional internships	x		x	x	x	X		x		x	x
Simulation	x	x		x	x	x	x	x	x		
Group dynamics	x	x	x	x	x	x	x	x	x	x	x
Debates and panels/Argument and discussion	x	x	x	x	x	x	x		x	x	x
Essays or written work	x	x	x	x	x	x	x	x	x	x	x
Presentations and oral exposés	x	x	x	x	x	x	x	x	x	x	x

4.4.2. *Assessment strategies*

Assessment strategies are activities whose purpose is to measure the level of development of competences. The following were identified in the case of the area of administration:

Written examinations

The written examination is the best-known and most widespread form of assessment. This method is generally timed and performed in a controlled environment. Teaching staff ask students to answer questions in writing based on the syllabus related to a particular subject.

Direct observation

This strategy focuses on the process involving dealing with, compiling and recording information, for which purpose teaching staff are supported by their senses. This enables student performance to be checked by defining the observation guidelines or similar list based on the results expected.

Written documents

This refers to a written document that becomes a material testimony of performance either by the student or a team of students.

4.5. Reflections

After having analysed the teaching-learning process and the assessment system for the competences selected from the syllabuses of participant universities in the area of administration, the following aspects were then highlighted:

- In the development of competences, a gradual process was noted that corresponds to three levels: low, medium and high.
- Teaching-learning methodologies that favour the development of competences are those in which students provide evidence of the level of progress made in the competence.
- As far as assessment strategies are concerned, it is important to draw attention to the fact that written examinations need to be present, but that this should not be the only strategy used as the assessment strategy in 100% of the subjects analysed.
- Assessment of the development of students' competences enables academic programmes to be improved where appropriate.

5

General reflections

- With regard to the study of the graduate meta-profile of the administrator and given the validations made from within the Group followed by the comparative work in countries from the region, it can be stated that the thirteen macro competences defined constitute the core of undergraduate level study for administration students.

  One of the by-products of this study are the definitions of categories, which were also validated.

- The thirty interviews conducted in eleven Latin American countries with a view to defining future scenarios and the corresponding professions and competences correspond to highly-qualified professionals with a great reputation in this area.

  Two possible scenarios can be made out in the near future. The two scenarios are influenced by technological and scientific advances and differences in human beings' level of awareness.

  The current concept of profession will steadily lose ground, with a move towards occupational requirements being made clear in terms of competences, and people will also need to be certified to take up posts. Nonetheless, interviewees identified professions related to the area of administration, some of which already exist.

  The main competences identified for future professions are linked to social relationships, organisations, society and the environment, knowledge management, communication, handling technologies,

future management, and the capacity for entrepreneurship and leadership. Major emphasis is placed on those generic competences that can be related to different professions and disciplinary areas.

- Estimating students' workload for the purpose of developing the competences stated in the graduate profile and obtaining the learning outcomes expected in subjects and academic periods is a difficult task. However, it must be done by gradually adjusting the estimation as well as possible, as only by being aware of the time available to students can priority be given to activities and we can be more effective and efficient in our tasks. In the course of this exercise, it has been possible to ascertain the dispersion and variability of responses, and this is due to the fact that the number of hours required in order to obtain a learning result depends on several factors such as students' individual capacities, teachers' experience and training, and the methods, tools and equipment used in the teaching-learning process, among others. Nonetheless, the results shown mark a trend and provide initial referential data for curricular planning.

- After having analysed the teaching-learning process and the assessment system for the competences selected from the programmes of participant universities in the area of administration in the eleven countries, the following common features were then highlighted: in the development of competences, a gradual process was noted that corresponds to three levels: low, medium and high; teaching-learning methodologies that favour the development of competences are those in which students provide evidence of the level of progress made in the competence; as far as assessment strategies is concerned, it is important to draw attention to the fact that written examinations need to be present but that this should not constitute the only strategy used as the assessment strategy in 100% of the subjects analysed; lastly, assessment of the development of competences in students enables academic programmes to be improved where appropriate.

6

Bibliographic references

Anderson, L.W. and Krathwohl, D.R. *et al.* (eds.) (2001). *A Taxonomy for Learning, Teaching, and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives*. Allyn & Bacon. Boston, MA.

Beneitone, P.; Esquetini, C.; Gonzáles, J.; Marty Maleta, M.M.; Siufi, G. & Wagenaar, R. (2007). *Reflexiones y perspectivas de la Educación Superior en América Latina.* Bilbao: University of Deusto.

Chaui, M. (2003). «A Universidade Pública sobre nova perspectiva». Conferência na sessão de abertura da 26ª Reunião Anual da ANPED. Poços de Caldas: *Revista Brasileira de Educação,* No. 24.

European Commission (s.f.). *Higher Education in Europe 2010: the impact of the Bologna process.* Recovered on 10th May 2013 from http://eacea.ec.europa.eu/education/eurydice/documents/thematic_reports/122ES.pdf

Mews, Constant J. and Crossley, John N. (eds). (2011). *Communities of Learning: Networks and the Shaping of Intellectual Identity in Europe, 1100-1500.* Europa Sacra,Turnhout, Belgium.

Postiaux, N. & Romainville, M. (December 2011). *Education & Formation. e-296. Competencias y profesionalización.* Recovered on 8th November 2012 from http://ute3.umh.ac.be/revues/index.php?revue=12&page=3

Proyecto Tuning América Latina (s.f.) (2011-2013). *Innovación Educativa y Social.* Recovered on 5th June 2013 from http://www.tuningal.org/es/publicaciones.

Ruiz, M. (2010). *El proceso curricular por competencias.* Mexico: Trillas.

TOFFLER, Alvin (1984). *The Third Wave.* Bantam.

TOFFLER, Alvin and TOFFLER, Heidi (2007). *Revolutionary Wealth.* Crown Business.

UNESCO (2009). *World Conference on Higher Education - 2009: new dynamics in higher education and research for social change and development.* Recovered on 15th March 2013 from http://www.unesco.org/education/WCHE2009/comunicado_es.pdf

VILLA, A. & MANUEL, P. (2008). *Aprendizaje basado en competencias.* Bilbao: Ediciones Mensajero.

VERSIANI AND VERSIANI, (1998)

7

List of contacts from the Area of Administration

<table>
<tr><td colspan="2">Coordinator of the Area of Administration:

César Esquetini Cáceres

Universidad Tecnológica Equinoccial (Equador)
cesqueti@innovateq.net</td></tr>
<tr><td>Bolivia
Mabel Becerra Urquidi

Universidad Privada Santa Cruz de la Sierra
mabelbecerra@upsa.edu.bo</td><td>Brazil
Guilherme Marback Neto

Centro Universitário Jorge Amado

gmarbackneto@uol.com.br
guilherme.marback@unijorge.edu.br</td></tr>
<tr><td>Chile
Bernardina Cisternas Arapio

Universidad de Tarapacá
bcistern@uta.cl</td><td>Colombia
Ricardo Uribe Marín

EAFIT
ruribe@eafit.edu.co</td></tr>
<tr><td>Colombia
Calixto Mendoza Roca

Fundación Universidad del Norte

cmendoza@uninorte.edu.co</td><td>El Salvador
Adán Vaquerano Amaya

Universidad Centroamericana «José Simeón Cañas»
avaquera@buho.uca.edu.sv</td></tr>
</table>

Honduras **Marcio Sierra Varela** Universidad Nacional Autónoma de Honduras sierra.marcio@hotmail.es	**Mexico** **Bárbara Valle Torres** Instituto Tecnológico y de Estudios Superiores de Monterrey bvalle@itesm.mx
Peru **Sergey Udolkin Dakova** Universidad del Pacífico udolkin_s@up.edu.pe	**Uruguay** **Beatriz Güinovart Firpo** Universidad de La República beatriz@internet.com.uy beatriz@ccee.edu.uy
Venezuela **Gustavo Adolfo Pereda Lecuna** Universidad Católica Andrés Bello gpereda@ucab.edu.ve	

For further information about Tuning

General coordinators of Tuning	
Julia González juliamaria.gonzalez@deusto.es	**Robert Wagenaar** r.wagenaar@rug.nl

Pablo Beneitone (Diretor)

International Tuning Academy
Universidad de Deusto
Avda. de las Universidades, 24
48007
Tel. +34 94 413 9467
Spain
pablo.beneitone@deusto.es

Deusto
University of Deusto

university of groningen

Co-financed by
European Comission