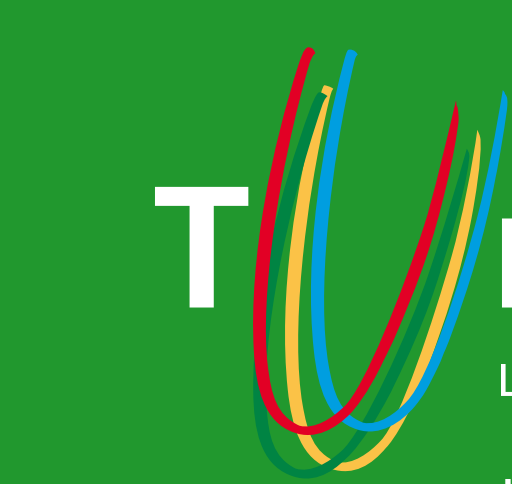

Tuning

Latin America

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

Luz Angélica Muñoz González (ed.)

Higher Education in Latin America: reflections and perspectives on Nursing

Tuning Latin America Project

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Luz Angélica Muñoz González (ed.)

Authors:
Luz Angélica Muñoz González (Chile), Ramón Arístides Álvarez (Argentina), Silvia Cárcamo (Argentina), Silvia Espinoza (Mexico), Ana Guzmán Aguilar (Costa Rica), Viviana Morales Poppe (Bolivia), María Elisa Moreno Fergusson (Colombia), Ellen Marcia Pérez (Brazil), Jesús Yubagni Rezabala Villao (Ecuador) and Ruth Esther Seminario Rivas (Peru)

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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 Nursing 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*

Nursing is one of the eight disciplines included in Phase III of the Tuning Europe Project which are considered to be of great relevance for vocational training purposes. The relevance of nursing in this project lies in its being considered as a discipline that brings together different levels within the framework of higher education (Puga et al., 2007).

A summary of the work carried out is provided in this document. This includes an introduction to the area of nursing, a background to education in nursing in Latin America, the construction and contrasting process of the meta-profile, specific agreed competences according to the key elements of the meta-profile, the latter's relationship with generic competences, validation of competences, future scenarios for the profession, teaching-learning strategies and the Latin American Reference Credit (CLAR).

1

Introduction to the Area of Nursing

The historical development of nursing in Latin America (LA) has truly reflected the diversity of cultures and changes in the development models co-existing there (Celma, 2007). Nursing, as a professional discipline, has responded and adapted to each country's socio-political and economic changes, giving rise to cutting-edge innovations that have allowed them to keep up-to-date and enjoy acknowledged leadership. Its aim is to promote human wellbeing through healthcare management from a holistic, ethical and interpersonal dimension (López, 2003).

Nursing requires the right action in order to respond to the needs of individuals and human groups via healthcare management. Healthcare management involves the constant building of a specific language and its positioning in social and health organisations. It also involves a communicative function requiring scientific and technological knowledge of the cultural context where the subjects being nursed live, relax and fall ill (ALA-DEFE, 2003).

1.1. Education in Nursing

Education and training for nursing in Latin America (LA) is structured at different technical and university levels with a wide range of qualifications in the different countries (Malvarez et al., 2005).

6 to 18-month technical, non-university healthcare auxiliary or technical staff programmes became popular in the 1990s, probably in

connection with the initial processes involving educational reform and lack of regulation in Latin American countries (UNESCO, 2006). These programmes are geared towards developing competences for offering basic nursing care, and focus on practical «know-how».

In Latin American universities, nursing as a university degree began in the 1930s and programmes vary in duration between 4 and 5 years. In 1980, the PAHO/WHO stated that 52% of programmes were undertaken at Latin American universities and 47% at other establishments such as the Ministry of Education, 21%; Ministry of Health, 19%; and others, 7% (Castrillón, C. 2006). University programmes aim to train professionals who are able to spearhead nursing care for individuals, families and communities in the different areas of professional practice (CINDA, 2000).

The basic content of the curriculum is made up of human sciences, biology, professional sciences, ethics and bioethics, and sciences related to the specific disciplinary field of training nursing students to offer high-quality nursing care. The optional component includes areas of specialisation and other courses that enable students to complement their full training in the fields of science and the arts.

The disciplinary field concerns conceptual frameworks including one or two theoretical nursing models: Orem, Roy, Peplau, Travelbee, Henderson, Pender, King, and Watson, among others. These theoretical elements help students acknowledge, via their preparation, the contributions made by such theories to develop the discipline, and health of the population (Behn, V., Jara, P. 2002).

As for post-graduate development, syllabuses began in Latin America in the 1980s with specialisation, Master's degrees and PhD qualifications. Specialisation courses linked to Ministries of Education and Health were set up in some countries, while others formed part of nursing programmes at universities. This professional standard aims to strengthen expertise in a field of knowledge in order to solve issues concerning professional practice (Jaramillo, 2009).

There can be two types of Master's degree programmes: Master's degree in specialisation, whose aim is to develop advanced competences in professionals for nursing practice, and Master's degree in research, which have disciplinary emphasis and seek to prove theory to solve issues arising from professional practice, via research. The

latter are offered at faculties and schools with significant research development (González et al., 2011).

Research development into healthcare fuelled the launching of PhD programmes in the 1980s in Brazil (Rodríguez, 2008), and this trend continued in Argentina, Venezuela, Chile, Mexico, Peru, Colombia and Panama. These programmes intend to develop autonomous researchers who are able to generate knowledge in a specific disciplinary field and so contribute to the development of nursing expertise and improve scientifically-based healthcare practices (Orellana, 2007).

In conclusion, it can be said that professional education at different levels encourages performance in different functional roles, such as care management, research, education, participation in the development of public health policies and drawing up national and regional plans. It also promotes autonomy, leadership, teamwork and a critical and ethical attitude in professional practice. The research competences students acquire in programmes with advanced qualifications enable them to turn their attention away from nursing services and take part in political decision making to the benefit of population (Malvarez et al., 2005).

2

Construction and contrasting process of the meta-profile for Nursing in Latin America

The meta-profile, defined as the representation of the structure of a subject area and the combination of competences that give it identity, enables conceptualisation and debate about a wider core - not only the elements but also their importance, their nature and their interaction. It helps to draw comparisons between areas, and analyse and study the region's categorisations and cultural features.

The Latin American context was taken into consideration, as was the Mercosur Regional Nursing Commission's (CREM) proposal, the WHO Global Standards for the Initial Education of Professional Nurses and Midwives and PAHO Guidelines for the Initial Education of Professional Nurses in the Americas: towards 2020 (OPS, 2007).

2.1. Meta-profile prepared

Graduates in nursing are professionals offering holistic care with a critical and thoughtful attitude towards individuals, families and groups in the community, at their different evolutionary stages. This care is based on knowledge of the discipline and other human, social and health sciences; it observes ethical principles and cultural diversity, and the professional's ability to use a second language in the course of their work.

Care also includes resource management, education and research into the development and application of knowledge in practice.

Professional nurses perform their role with leadership and social responsibility in the interests of fairness and solidarity, within the context of quality of life and a safe environment.

They work in public and private health, business, political, administrative, educational and research establishments, interacting with interdisciplinary and multi-sectorial teams within a globalised environment requiring command of a second language and information and communications technologies. Equally, their work may be independent of their professional practice.

2.2. Identifying key elements of the Nursing meta-profile

As an outcome of the construction process of the meta-profile for nursing graduates, the working group considered it important to include the following dimensions as key elements of the meta-profile for nursing:

1. *Scientific and technical expertise*

Professional nurses receive a preparation with solid scientific and technical knowledge that ensures they have the ability to provide quality care that is holistic and safe to each individual they care for at the different levels of care. Hence, they are provided with methodological tools enabling them to obtain the necessary evidence to direct the care process in line with the diversity of social and cultural contexts of individuals, families and communities (Maquilón, 2011).

2. *Creativity and innovation*

Professional nurses should regard keeping up-to-date and generating knowledge and ideas as a constant process that gives them autonomy in terms of the innovation of models and safe care as the basis for making clinical and administrative decisions. The above provides an essential convergence of quality practice based on critical and reflective analysis of systematic research and clinical evidence, which encourages a culture of change, modernisation and justified innovation.

3. *Competence and quality of care for individual people*

Professional nurses, as those in charge of care management, must take action aimed at seeking new resources and adding value to the processes training them to guarantee the quality of care in the health service systems that aim to meet society's needs. Quality has become an essential element of health services and assuring it involves social and ethical commitment from the nursing profession.

4. *Readiness to work autonomously in multi- and interdisciplinary groups*

Professional nurses possess the ability to carry out professional practice autonomously and as part of interdisciplinary teams, focusing their work on the provision of comprehensive services within a range of social contexts.

5. *Public awareness*

Professional nurses base their work on respect for the human rights of individuals, families and communities, especially the most vulnerable groups. Their social commitment and responsibility is based on detailed knowledge of the rights guaranteed by the respective law, ethical principles, values and knowledge stated in the nursing Code of Ethics. Consequently, they develop the ability to promote care strategies within the framework of the needs perceived by the public, providing incentives for public engagement in the interests of fairness and solidarity.

6. *Ability to respond to changes in the national and international environment*

Professional nurses should have a good command of generic, basic and specific competences in order to carry out a single function by applying skills, expertise and processes within different contexts. Professional nurses' civic awareness facilitates their responsiveness to changes in the national and international environment, determined by public health policies in the current and future professional nursing environment.

2.3. Specific agreed competences, according to the key elements of the Nursing meta-profile

In accordance with the definition of specific competences developed in Phase I of the project, these were classified according to the key elements of the meta-profile defined for graduates in nursing. A review of the relevance and validation given to the specific competences by the different actors (academics, graduates, students and employers) was then conducted by means of the self-report on answers to the questions raised in questionnaires that had been previously handed out, table 1:

Table 1
Relevance and validation of the specific[1] competences according to the actors involved in the process

Actors	Level of importance of competences						
	I	II	III	IV	V	VI	VII
Academics	SC5	SC10	SC21	SC11	SC20	SC17	
Graduates	SC5	SC10	SC21		SC20	SC17	SC16
Students	SC5	SC10	SC21	SC11	SC20	SC17	
Employers		SC10	SC21	SC11	SC20	SC17	SC16

Source: *Reflections and perspectives on Higher Education in Latin America*. Final Report – Tuning-Latin America. 2004-2007.

[1] Competences: SC5: Respect for culture and human rights in nursing interventions in the field of health. SC10: Ability to plan, organise, carry out and assess disease prevention and recovery activities with quality criteria. SC11: Ability to work within the context of the profession's ethical, regulatory and legal codes. SC16: Knowledge of the different functions, responsibilities and roles that professional nurses must take on. SC17: Knowledge in applying the principles of safety and quality in nursing care in practice . SC20: Ability to defend human dignity and the right to life in interdisciplinary healthcare. SC21. Ability to administer drugs safely, and other therapies, so as to provide quality nursing care.

It can be seen that the competences of greatest importance to academics, graduates and students are those related to respect for culture and human rights in nursing interventions in the field of health followed, in second and third place, in the four groups, by the ability to manage disease prevention and recovery activities, along with ethical criteria and quality care.

2.4. Relationship of the meta-profile with specific competences

The following table shows the relationship between the graduate profile in nursing and specific competences:

Table 2
Relationship of the meta-profile for nursing with specific competences

Meta-profile	Specific competences
Ability to offer holistic and comprehensive care with a critical and thoughtful attitude to individuals, families and community groups at the different stages of their life cycle.	SC1. Applying expertise in the holistic care for individuals, families and communities while considering the different phases of the life cycle in health-illness processes. SC2. Applying nursing process methodology and the discipline's theories that organise the intervention, ensuring an assistance-based relationship.
Knowledge as the disciplinary foundation of nursing care, and other human and health sciences.	SC3. Ability to plan, organise and assess promotion, prevention and recovery activities in the health-illness process, with quality criteria.

Meta-profile	Specific competences
Scientific, technical, ethical, humanistic, legal, social, political and cultural competences. Leadership in healthcare management, and the health promotion, prevention, healing, rehabilitation and social reinsertion of people in an autonomous way and in collaboration with other professionals.	SC4. Ability to use information and communications technologies in order to make assertive decisions and manage healthcare resources. SC8. Ability to deal with health issues by using research into nursing practice. SC9. Ability to participate actively in the development of health policies, whilst respecting cultural diversity. SC11. Ability to work within the profession's ethical codes, regulations and legal context. SC14. Skill and ability to promote a constant learning process with individuals, groups and communities that encourages self-care and healthy lifestyles with regard to their environment. SC19. Ability to participate actively on ethics committees regarding nursing practice and bioethics. SC27. Ability to manage new nursing services autonomously. SC13 Ability to participate in multidisciplinary and transdisciplinary teams in order to design educational projects. SC18. Knowledge and ability to use the instruments inherent in human care procedures. SC6. Ability to interact in interdisciplinary and multisectorial teams with response capacity in order to meet priority, emerging and special health needs.
Resource and health service management at different levels of care in order to improve people's quality of life, whilst fostering a safe environment.	SC25. Ability to promote and take action that stimulates social engagement and community development in their area of health competence. SC26. Showing solidarity in situations such as disasters, catastrophes and epidemics.
Proposing development and innovation strategies concerning healthcare, community, politics, education and research.	SC7. Ability to design and manage research projects connected with nursing and healthcare. SC8. Ability to deal with health issues by using research into nursing practice. SC9. Ability to participate actively in the development of health policies, whilst respecting cultural diversity.

Source: Tuning Latin America Project: Educational and Social Innovation. Second General Meeting Report, Nursing Group. Guatemala, 16th to 18th November 2011.

2.5. Contrasting key elements of the meta-profile that coincide with the profiles of participant countries

An analysis was conducted using the reports issued by the participant establishments in order to identify the key concepts and elements coinciding in graduate profiles at the nursing faculties and schools in the countries represented in the second phase of the Tuning Project. The key concepts identified were: person, care, quality of life, knowledge and fields of activity. These concepts are conceived from the dimension of the individual, family and community, which represent the care subjects (table 3).

Table 3
Comparison of the key concepts identified in graduate profiles for nursing

Concept	Dimensions		
Person	Individual	Family	Community
Care	Holistic/comprehensive	Based on scientific and disciplinary knowledge	Ethical, humanistic, holistic, based on evidence.
Quality of life	Promoting human dignity	Risk detection	Rehabilitation and social reintegration, palliative care
Knowledge	Theories and nursing process	From other health sciences	From other disciplines
Fields of activity	Public and private health establishments at the 3 levels of care.	Other social organisations	

Source: Tuning Latin America Project: Educational and Social Innovation, Second General Meeting Report, Nursing Group. Guatemala, 16th to 18th November 2011.

Having identified key concepts and their elements of the meta-profile, related generic competences were then identified, as were the specific competences professional nurses need to develop in order to practise, with emphasis placed on those deemed most important or substantive (table 4).

Table 4
Convergence of generic and specific competences

Generic Competences	Specific competences
GC2 Disciplinary expertise/Practice	SC1 Applying knowledge to a person's holistic care.
GC5 Social responsibility and civic commitment	SC25 Ability to promote and take action that tends to stimulate social engagement and community development in their area of health competence.
GC7 Second language	SC3. Ability to document and convey full and detailed information on a person, family and community so as to provide continuity and safety in terms of care.
GC8 Use of ICTs	SC4. Ability to use information and communications technologies in order to make assertive decisions and manage healthcare resources. SC15 Knowledge and ability to apply technology and IT in order to research into nursing and health.
GC9 Research	SC7 Ability to design and manage research projects connected with nursing and healthcare.
GC17 Teamwork	SC6 Ability to interact in interdisciplinary and multi-sectorial teams with response capacity in order to meet priority, emerging and special health needs.
GC26 Ethical commitment	SC11 Ability to work within the profession's ethical codes, regulations and legal context. SC19 Ability to participate actively on ethics committees regarding nursing practice and bioethics.

Source: Tuning Latin America Project: Educational and Social Innovation, Second General Meeting Report, Nursing Group. Guatemala, 16th to 18th November 2011.

2.6. Contrasting process of the Nursing meta-profile

The Tuning Project nursing group carried out the proposed meta-profile comparison process by analysing all the graduate profiles referred to in the participant universities' education projects and other leading establishments in the different Latin American countries.

Each country's representatives used different strategies to obtain and compare the meta-profile of training establishments for nurses in their respective countries, the most notable of which involved:

1. Comparing the professional profiles published on the websites of the different programmes and associations in the Latin American countries participating in Tuning.

2. Consulting members of the federations and associations of professional nursing schools and faculties.

3. Consulting deans, directors, programme coordinators, teaching staff and students from nursing faculties and schools.

4. Consulting documents belonging to international organisations such as Mercosur, ALADEFE (Latin American Association of Nursing Faculties), ICN (International Council of Nurses) and Ministries of Health and Education.

5. Consulting nurses linked to the health service network.

Table 5

Comparison of the meta-profile in different countries: converging and diverging elements of the meta-profile

Tuning meta-profile dimensions	CONVERGENCES							DIVERGENCES
	Chile	Colombia	Costa Rica	Mexico	Peru	Ecuador	Argentina Mercosur	
Holistic care[2]	Professionals with a profound sense of value for human beings in all their dimensions, which determines respectful nursing care centred on the patient and their family. Ability to provide well-timed, quality nursing care effectively from a holistic perspective and at all stages of the human life cycle.	Identifying care as the essence of professional action. The concept of holistic care is not explicit. Caring for the health and life of individuals, families and communities. Cognitive and procedural proficiency to address human responses to health issues, at the different stages of the human life cycle within numerous fields of activity.	Applying the conception of health to the individual as a holistic being in conjunction with other members.	Holistic care for the individual, family and community. Quality, holistic nursing care for the individual and family at the different stages of the life cycle. Ethical values and socio-cultural context.	Comprehensive nursing care. Human beings with perspectives of unity, totality and diversity in their socio-economic and political environment.	Dealing with human beings in all their dimensions: physical, intellectual, psychological, social and spiritual. Committed to comprehensive, quality care for healthy or unwell individuals, families and communities	Ability to offer nursing care that is holistic, comprehensive, well-timed and safe. The CREM[3], ICN[4] and FEPPEN[5] state that: Nurses care for unwell individuals, families and communities with an overall vision and perspective, taking into account individual and collective needs and the numerous determining factors regarding health. Taking decisions in order to guarantee the continuity and comprehensiveness of care at all levels of the system's complexity.	

[2] In all the countries, the professional profiles for nursing allude to holistic care, explaining its meaning but not always mentioning the word itself.

[3] CREM: Regional Nursing Commission of Mercosur.

[4] ICN: International Council of Nurses.

[5] FEPPEN: Pan-American Federation of Nursing.

Tuning meta-profile dimensions	CONVERGENCES							DIVERGENCES
	Chile	Colombia	Costa Rica	Mexico	Peru	Ecuador	Argentina Mercosur	
Critical and reflective attitude	Ability to integrate the key competences of critical thinking and scientific questioning with ethical principles as the basis for making professional judgements.	Critical and reflective thinking are used as a tool for leadership.	Capacity for analysis of decision making.	Development of critical and reflective thinking skills. Decision making. Critical and analytical attitude. Development of logical, analytical thinking to solve problems Competent, creative and innovative.	Critical, creative and change-seeking view. Care with a critical and reflective attitude.	Application of critical, reflective thinking. Creation of spaces for joint action, and work is performed increasingly conscientiously.	Care for individuals, families and community groups with a reflective and critical attitude, at all stages of the life cycle.	None.
Ethical principles and cultural diversity	Ability to direct the supportive and ethical care required by health responsibly. Respect for the client's entitlement to informed and active participation in decisions concerning their healthcare. Respect and consideration for the cultural, social, racial, religious and political diversity and gender of individual people and groups.	Action will be defined by respect for life, human dignity and the truth, and the virtues of prudence, justice, freedom and solidarity will be put into practice. Knowledgeable and respectful towards different beliefs, customs and values in the perception and improvement of one's own health and the health of the family and community.	Respect for human rights. Broad-mindedness with regard to human relations.	Respect for values, customs and beliefs. Respect for cultural diversity, universal values and human rights. Ethical values and socio-cultural context. Providing care whilst respecting the population's rights and opportunities. Respectful attitude towards the recipients of care.	Application of the principles of ethics and bioethics in different cultures, beliefs and religions. Ethical principles and values. Respect for cultural diversity.	Respect for life, human dignity, the truth, prudence, solidarity and the law. Care management according to life cycles and responding to actual and potential needs, minimising risks and adverse events. Based on respect for human rights.	Respecting ethical and legal principles, and cultural diversity.	None.

Tuning meta-profile dimensions	CONVERGENCES							DIVERGENCES
	Chile	Colombia	Costa Rica	Mexico	Peru	Ecuador	Argentina Mercosur	
Resource management and leadership	Responsible leadership of the supportive and ethical care required by health. Professionals with outstanding performance in care management, characterised by the pursuit of professional excellence and human fulfilment. Ability to establish priorities and manage the use of human resources, time and materials according to the requirements of the individual, family and community.	Leadership in the pursuit of solutions and designing projects aimed at improving the quality of life of individuals, families or community groups. Development of original programmes at the first level of care as well as the other levels. Participation in the design, execution and assessment of intersectorial and interdisciplinary projects. Exercising leadership in the administration and management of health services and nursing care.	Analysing and being familiar with the national, regional and local health situation, in addition to care priorities. They will be able to operate in a range of fields, developing leadership skills and inter and multidisciplinary work.	Developing leadership action. Change-seeking management and leadership. Management and leadership when conducting supervision of an individual, carers, family and community groups. Developing a collaborative attitude in different committees and managing proposals for new working schemes in nursing care and the area of health. Coordinating the nursing team.	Service management in nursing and health at the different levels of care, making use of innovative methodology and technologies. Directing and assessing programmes and activities relating to prevention, promotion, treatment and rehabilitation. Managing preventive and promotional programmes.	They form part of the planning, intervention and assessment of the nursing process, taking into consideration the continuous improvement of process quality. Developing clinical and administrative management strategies with democratic leadership. Ability to consider and deal with problems. Launching actions to find solutions.	Competences for nursing care management in the promotion of health, prevention, healing and rehabilitation in collaboration with other professionals. Participating in the administration and management of resources and health services.	None.

Tuning meta-profile dimensions	CONVERGENCES							DIVERGENCES
	Chile	Colombia	Costa Rica	Mexico	Peru	Ecuador	Argentina Mercosur	
Social responsibility[6]	Spirit of service, social sensitivity and commitment to equity in the population's healthcare.	Interpreting health issues encountered within the context and preparing proposals to change the context in which there is interaction. Interpreting the national health situation, its organisation, plans, programmes and strategies. Being familiar with the nationwide situation and interpreting the relationship between social, economic and political factors and health. Commitment to the social, economic and political context by influencing the health sector with regard to the provision of nursing care.	Participating in the dynamics of health as social production by developing projects, and research and education programmes.	Responding to social needs. Social responsibility. Acting with social solidarity. Providing care with an open view of the social context.	Directing and assessing programmes and activities concerning prevention, promotion, treatment and rehabilitation.	Valuing human talent, optimising resources and preparing proposals for change. Civic commitment. Recognising issues regarding the context.	...person with social sensitivity. Administering and conducting scientific research. ...playing their role...for the benefit of... solidarity and social responsibility.	None.

[6] The term social responsibility fails to be clearly explained in the professional profiles for nursing in the different countries but is reflected in other concepts alluding to this term, regarded as being relatively recent.

Tuning meta-profile dimensions	CONVERGENCES							DIVERGENCES
	Chile	Colombia	Costa Rica	Mexico	Peru	Ecuador	Argentina Mercosur	
Research	Solid grounding with a view to carrying out research in order to contribute to the improvement of care management. Professional and social responsibility within all contexts involved.	Showing interest in the constant pursuit and insight into the discipline's knowledge, enabling innovation and participation in research projects. Conducting research applied to nursing care. Understanding and researching nursing as a science of care that brings important benefits to the health sector.	Conducting research on aspects related to health issues and their alternative solution both at institutional and community level.	Using research into nursing as a tool to study phenomena related to care. Developing abilities and skills for scientific production and participating in disciplinary and multidisciplinary research. Collaborating and conducting descriptive research. Employing different research theories, by applying scientific thinking through research.	Research and development. Research and the use of innovative methodologies.	Helping to solve problems via projects, providing services to organised human groups and vulnerable groups. Encouraging processes in order to improve research.	Administering and conducting scientific and epidemiological research. Working in the field of research.	None.
Quality of life and safe environment	Professionals offering safe and up-to-date nursing care based on scientific evidence and marked by a view of the individual as a whole. Ability to create and maintain therapeutic environments around individuals, families and communities for their care, from a perspective of intercultural health.	Designing projects aimed at improving the quality of life of individuals, families or groups. Building processes that generate quality of life, with skills for promoting and fostering health and well-being, and caring for life processes.		Providing quality care in nursing. Quality and safety of individuals, families and communities receiving care.		Proposing and participating to help solve problems.	Participating in.... to improve people's quality of life.	«Care is based on... environmental conservation».

Tuning meta-profile dimensions	CONVERGENCES							DIVERGENCES
	Chile	Colombia	Costa Rica	Mexico	Peru	Ecuador	Argentina Mercosur	
Education	Owing to their area of action at the three levels of care, professional nurses develop scientific-humanist competences in the role's four areas enabling the provision of care, considering promotion, prevention and participation in the recovery and rehabilitation of individuals, families and communities throughout their life cycle and adapted to the country's context and culture.	Participating in education programmes aimed at health promotion and disease prevention. Developing health education programmes.	Guiding and orienting the population so that they may assume their care responsibilities.	Designing, putting into practice and assessing health education programmes and applying teacher training and nursing resource training. Participating in health education processes and human resource training in nursing. Educating/advising individuals and groups in relation to healthcare. Using education as a strategy for addressing health issues. Participating in the training and instruction of personnel in the area of health, placing emphasis on the disciplinary area.	Management of training and instruction programmes for professional, technical and assistant nursing personnel. Designing and developing health education programmes. Educational approach to dealing with health issues.	Applying elements of Didactics and Pedagogy. Fostering understanding and effective communication and applying new technologies.	Participating in the field of formal, continuous and constant education in order to... Administering and conducting research ...into pedagogy aimed at solving issues concerning health, education... Implementing mechanisms allowing abilities, skills and technologies to be updated. Working in the field of ...teaching...	None.

Source: Tuning Latin America Project: Educational and Social Innovation, Second General Meeting Report, Nursing Group. Guatemala, 16th to 18th November 2011.

The proposed meta-profile enabled the participant universities to develop a pool of information on educating graduates in nursing in order to respond to the challenges facing the profession in the 21st century. It can be seen in the table above that there are different converging elements in all the countries with regard to the abilities professional nurses should display, although not all the programmes have undergone curricular modifications that focus on competences.

Nursing is a profession based on human contact as a way of approaching individuals who need healthcare throughout the entire life cycle. Hence, the definition of the graduate meta-profile for nursing represents the response to future challenges, where the harmonisation of programmes and consolidation of transferable credits are key issues.

Proficiency in a second language is a key competence in order to document and communicate full and detailed information on an individual, family and community so as to provide continuity and safety in care, and make feasible and viable the standardisation of a transferable credit system, mobility and the internationalisation of professionals, academics and students, and opportunities to perfect post-graduate programmes.

Analysis of the information generated enabled the generic and specific competences to be identified and agreed upon, within which new competences emerged that complement those already existing.

There are coinciding elements in all the countries regarding professional education for nursing. Thus, the proposed meta-profile is widely agreed upon and accepted by all those concerned.

3

Future scenarios in Nursing

3.1. Brief description of interviewees

The 10 interviewees are acknowledged experts in the subject area of nursing. They have worked in the academic field as lecturers, school principals and deans of faculties at under- and post-graduate level. They hold specialist Master's degree and PhD qualifications in nursing, education and health and social sciences. They are experts in areas of higher education accreditation and quality assessment, strategic planning, human resources and public policy making. Many of them have held senior positions in government administration and management agencies and national ministries or as consultants in regional branches of international health organisations, and science societies and study centres in the area of public health and nursing.

3.2. Characterisation of future scenarios

The interviews have predicted or foreseen important or dramatic changes in the next 20 years in social, economic, technological, demographic, epidemiological and environmental areas.

There is consensus that in the social and economic area, a more globalised society is foreseen, in which emerging countries will play an increasingly important role within the framework of the global economy - a global economy characterised by the intensification of migratory flows, which will encourage free circulation of highly qualified professionals while creating systemic barriers for the less qualified emigrants looking for opportunities beyond their national

borders because of growing inequality and the lack of opportunities in their native countries. Economic globalisation will bring about new patterns of labour mobility, recruitment and social foresight regarding human resources, with more and better opportunities for those with the most solid and highly specialised educational backgrounds. The outcome of these processes will be the emergence of national societies with broader cultural, ethnic and linguistic diversity.

Another characteristic of the society on which there seems to be agreement among the interviewees is that the technological changes in the area of information technology and communications are creating an unprecedented scenario of wider accessibility and free circulation of information. This globalised society of information technology is characterised as a society of restless people who seize knowledge that empowers them with regard to the problems affecting them, where decision making was hitherto confined to specialists and politicians. In this sense, it is a society with greater awareness of civil rights and duties on a local and global scale but, paradoxically, also a troubled society and potentially more violent insofar as its concerns and issues fail to be satisfactorily resolved. Another paradox mentioned in relation to information technologies and social networks and their virtual environments is the potential impoverishment and dehumanisation of communication and interpersonal relations which an atomised and fragmented society may cause.

Nevertheless, globalisation and the rapid development of information and communications technology open up scenarios to cultural changes and changes in values that are extremely complex to interpret from the public health point of view. Significant changes in the field of science and technology, particularly robotics, nanotechnology and human genome intervention will have a positive impact on health in that they will provide highly effective mechanisms and procedures for detecting and treating diseases. This promising situation, in part, tempers the difficult and complex scenario public health systems will have to face, taking into consideration the demographic and epidemiological changes in the next 20 years mentioned by the interviewees. But, what are these changes in the making?

At a demographic level, the interviewees agree that there will be a considerable increase in life expectancy as a result of technological advances in the field of health.

However, the ageing of the world population is also predicted - an important demographic change with a decrease in the proportion of young people and increase in the elderly. A decrease in the economically productive population, an increase in the number of dependents and a fall in birth rates are also envisaged. From the epidemiological point of view, a considerable number of elderly adults with health issues is foreseen, as is the spread of unhealthy ways and lifestyles that will have repercussions on the epidemiological profile, such as sedentariness, increased stress, economic and cultural barriers blocking access to healthy food, and economic barriers blocking access to medicine required to treat catastrophic diseases. It is also foreseen that there will be a resurgence of chronic, non-communicable diseases, mental illness, cardiovascular and sexually-transmitted diseases, with effects on productivity and demand and a rise in the costs of access to health and its provision. If global climate change is added to this, which will increase the frequency and intensity of natural disasters and the impact of migration on national and regional epidemiological profiles, it is clear that health systems and services will be the object of inescapable changes. In this respect, the interviewees foresee, among other things, a rise in the cost of access to health, an increase in the range of private healthcare services for the elderly and the development of health systems based on new models and policies to respond to the population's needs. What are the implications involved for training, professional practices and professional approaches in nursing?

3.3. Professions envisaged in each scenario

There is agreement among the interviewees that the coming epidemiological changes involve the development of a new professional approach in nursing that helps to make public health systems sustainable in the long term. In this respect, it is pointed out that there is a need for a care model with emphasis on prevention and promotion that not only acts on the causes of disease but also on the social determinants of health. This requires promoting education for nursing aimed at working with people over cold media such as laboratories and simulators - an approach geared towards working in renewed primary care that reinforces direct intervention in health areas concerning the family, work, school and community.

The efficiency and time saved by new technologies need to be put to good use in the field of health in order to boost nursing capacities in the areas of education, research, planning and public policy.

This new approach does not mean it is not necessary to carry on developing a command of procedural aspects of highly technical complexity. Indeed, given the epidemiological and demographic changes, further curricular insight and development of specialisation in care for the elderly and obstetrics are needed. However, this should be done without neglecting the aspect of sensitive and humane care that traditionally defines nursing as a profession. If care as the basic principle is upheld, what are the competences required in this new approach to nursing?

3.4. Competences that will be required

Within a context of broader access to information and more empowered users, the competence of searching for, selecting, analysing and applying information according to the relevant environment and specific circumstances becomes more central. This type of basic communication competence, which is educational or pedagogic, is needed to guide the system users' or general public's decision making in disease prevention intervention, health promotion and care management. This competence not only represents a guarantee of quality but also economic gain for the health system.

Within these health systems of high organisational and technological complexity, another key ability is that of taking clinical decisions —critically and independently— on issues concerning care management and nursing services, which are not only confined to activities deriving from medical diagnosis and treatment. This means decisions based on logical evidence, critical thinking and clinical judgement. In order to do so, it is necessary to have a solid scientific-technical basis from which to act in the health-illness process in different scenarios and phases of the life cycle.

Broad ethical competence in care management and responsible leadership in the service of the community are needed for a model of nursing that places emphasis on primary care – with the management skills needed to work in teams and intercultural contexts using knowledge of national or regional health policies and the ability to identify, analyse and put forward solutions to social issues relating to health. Moreover, given the epidemiological changes outlined above, the ability to manage, administer and market businesses geared towards care for the elderly will also be important, merging ethical competence with social and corporative responsibility.

3.5. Comments about the future

In the future nursing will need increasing numbers of specialists, not generalists, owing to the epidemiological, demographic and social complexity already outlined regarding future scenarios. In the future, a huge number of potentialities arising from technological advances in care will be used. In this respect, the potential in the field of promotion is enormous. It is, nonetheless, no more than potential, since it is also highly unlikely that it will become the norm for professional nurses to take part actively and assertively in public health policy through multidisciplinary, horizontal work with other health professions, and they will determine the type, characteristics, distribution and training of human resources in nursing independently.

3.6. Analytical reports and summary of interviews according to country

3.6.1. *Chile*

Characterisation of future scenarios taken into consideration

From the social point of view, a description is given of a globalised society of restless people who seize knowledge and issues hitherto confined to specialists and politicians - a global society that is troubled and violent in that its concerns are not satisfactorily solved, a society of new information and communications technologies with broader public access to information and empowerment, which guides its decision making in relation to a number of fields, including public health regulations and policies in terms of their impact on individual and community health.

There will be prevalence of a society tending towards economism and running the risk of dehumanisation in communication and social atomisation - an informed society but not, however, a cultured one, in which economics overrides culture and humaneness.

From the demographic and epidemiological point of view, epidemiological changes are foreseen on a global scale, with an increase in life expectancy, a resurgence of chronic, non-communicable diseases, mental illness, and cardiovascular and sexually-transmitted diseases, with health affecting the population's productivity, effects on

demand and a rise in the costs of access to health and its provision. In such a scenario, there will be a need for health policies aimed at extending the quality of life into old age.

Professions envisaged in each scenario

Nursing is envisaged that focuses on: a) the continuum of life, rather than on the old approach, which was segmented into different stages of human development, b) greater depth and breadth of knowledge that goes beyond the purely technical in order to encompass social, cultural and political dimensions of public health.

Nursing will exist with a model of care that places emphasis on prevention and promotion, and works on the social determinants of health and not simply the causes of illnesses, leaving in-hospital emphasis behind and explaining and acting on the causes of inequalities in health. Following this logic, nurses will play the role of vitally important communicators and educators in the scenarios considered since there will be the need to: a) educate and give advice on individual and community health decisions from a more holistic perspective with regard to immunisation and sexual and reproductive health; b) inform, educate and offer prevention in the area of feeding children and mothers; c) encourage healthy diets in an economic context where unhealthy diets prevail worldwide and there are economic obstacles to accessing healthy food; d) inform, educate and empower chronic and elderly patients in order to manage care for their illnesses and extend their productivity. This approach entails a huge challenge within the context of a society with wider access to information which is more empowered via new means of communication: a) How can this information be processed? b) How can it be applied in practice and in care management?

New responsibilities are envisaged for nurses, as they are currently being underused worldwide despite their training and capabilities. These include greater responsibility in handling and discerning the referral criteria of chronic patients. It is also foreseen that nutritionists will become increasingly important in the promotion of healthy diets and kinesiologists in the area of the functionality and mobility of the elderly, given the demographic profile outlined above.

Competences required by these professions

The basic competences are communication, self-learning, and continuous learning. Intercultural competence is the key to the future within a globalised context with the growing migration and ethnic diversification of the population, including linguistic competence in a second and third language. Competence regarding teamwork is also highlighted, which translates into a broader ability to take decisions that goes beyond activities deriving from medical diagnosis and treatment and encompasses care management and nursing services. Broad, in-depth knowledge in order to convey and educate on issues concerning health will enable: a) the development of management where care is immersed in each patient's specific social reality; b) the patient's ability to be ascertained in order to take decisions regarding self-care and their family environment and; c) the patient to be educated according to their social context.

Education is highlighted as a distinctive competence in relation to other professions in the sector. The role of nurses goes beyond merely providing a service or applying a previously marked-out clinical, therapeutic or sanitary guide. Nurses: a) explain causes, risks, processes, time periods, results, costs; b) spread disciplinary knowledge and highly complex information using simple or metaphorical language according to the patient's social and cultural determinants and their linguistic competence; c) increase patients' own understanding of themselves and their condition in the health-illness continuum; d) inform them of alternatives, and the associated risks and benefits; e) participate in organising and prioritising work, taking into account the limitations on resources and specific needs of each case. Educational and communication competences are a guarantee of quality, fairness and safety in healthcare and patient management and represent a economic gain for the public health system. This educational competence is associated with the broad ethical competence that surpasses care management and includes the ability to take on responsible leadership at the community's service.

Other relevant comments concerning the future

Within a context of growing complexity in the organisation of health service management levels, the nursing profession is highly unlikely to disappear. Nonetheless, it is felt there will be a distancing between nurses

and patients and that the former will more involved in administrative tasks rather than care management. Relatives, friends, assistants and even technicians will be increasingly responsible for care management.

Nevertheless, the interviewees are optimistic about the future of the profession. In this respect, the key element identified is specialisation since, on the basis of the epidemiological, demographic and social complexity previously outlined in the future scenario, nursing is going to require increasing numbers of specialists, rather than generalists - specialists with capacity for intervention who are able to offer safe care with expertise in specific areas of development. In the area of primary care, the roles of communicator and community leader are identified as being key to developing nursing competence.

If this specialisation fails to take place, there is the risk that activities deriving from medical diagnosis and treatment continue to be developed. That is why it is essential to promote among nurses: a) the benefits of specialisation in its differing forms (contact, distance and online learning); b) the importance of continuous education and professional development throughout their productive life.

3.6.2. *Colombia*

Characterisation of future scenarios taken into consideration

Both interviewees foresee a society undergoing enormous technological development with a profound impact on socialisation patterns and interpersonal relations, access to information, decision making for public policy and aspects related to biology (bioethics).

A society is foreseen with higher levels of education and a new, radically different approach to education - less geared towards content and more open to developing logical, mathematical and critical thinking in the handling and analysis of virtual information and environments. A more globalised society is foreseen with greater diversity due to migration, a loss of cultural identities and emphasis on linguistic proficiency in second or third languages. Greater worldwide awareness of civic rights and duties is foreseen.

From the demographic point of view, a sharpening in the modification of the demographic pyramid is foreseen due to the ageing of the population

and a trend towards sedentariness. Important changes of an environmental nature are also observed. As a result of these environmental and demographic changes, chronic diseases are foreseen as being an extremely heavy burden on health systems. Huge changes are also foreseen in terms of the prevalence of certain illnesses due to technological progress in the field of health. The need is foreseen to train professionals to work with elderly people and promote healthy lifestyles and self-care.

It is foreseen that the above-mentioned social, demographic and epidemiological changes will have an impact on the shape of national and regional health systems. They will change from their current design aimed at groups deemed vulnerable towards users and patients who are far more informed and demanding of the control of their own health. A scenario is foreseen with highly sophisticated health systems with higher quality information in order to respond, in levels of primary care, to this new, more empowered type of user.

Professions envisaged in each scenario

There are several implications for the professional area of nursing arising from these changes. It is initially acknowledged that, as a result of the stagnation of health services and despite attempts to change preparation for nursing, this profession continues to be exceedingly traditional. It is essential to acknowledge the strengths and weaknesses in order to modify training strategies and reinforce the area of outpatient care, fostering training in nursing to work with people rather than cold media such as laboratories and simulators – in other words, nursing that is sensitive to people's problems and needs. Professional nursing practice should be guided by the theory that aims to develop more autonomous nursing with evidence-based capacities for research and action. As a result of the scenario mentioned in the section above, a professional and specialist approach envisaged is for handling elderly population groups and groups at the extremes of life's stages - a profession attentive to population trends and health systems and the responsible use and command of information technology.

Competences required by the profession

Nursing requires the integration of highly sophisticated competences: primarily and key to all other competences is competence to search

for, select, analyse and apply information according to the specific environment and circumstances. Deriving from this competence there is: a) the ability to take clinical decisions critically and independently so as to strengthen nurses' autonomy in health services; b) technological skill required to face the challenges of a well-informed society and complex health systems from a technological point of view; c) early development of the cultural competence of care during undergraduate education; d) a deepening understanding of the ability to offer culturally competent and sensitive care in the course of professional practice; e) development of bilingual and trilingual proficiency for an increasingly diverse public; and f) ability to work in interdisciplinary, multidisciplinary and inter-sectorial teams.

The integration of informative, technological, cultural and decision-making competences based on research and evidence will take nursing to higher levels of professionalism, referred to as clinical expertise.

Relevant comments concerning the future

Nursing is highly unlikely to disappear despite the trend in health services towards creating other kinds of human resources or professions as a strategy to make up for certain structural needs. This is unlikely owing to the fact that these new professions are highly specific, technical and exact, as in the case of gerontologists. Nurses are the product of a social need and will probably continue adapting to the needs of contexts. Nurses may potentially be replaceable insofar as they see themselves confined to a merely administrative role of assistant or secretary. However, this is unlikely because the professional identity of nurses consists of offering care with a holistic approach (of understanding your fellow human being).

The disappearance of the profession is also unlikely because numerically and structurally, nurses and assistants are those who perform and provide most functions in hospitals and health services in terms of healthcare and service coordination. There is also a large amount of underused potentiality and this could be exploited in the future through technological advances in hospital care. In this respect, potential in the area of promotion is huge. The role of nurses is irreplaceable given their unique preparation.

3.6.3. *Costa Rica*

Characterisation of future scenarios taken into consideration

Both interviewees coincide that in the next 20 years society will face an important change in the shape of the population pyramid, with a fall in the number of young people and rise in the number of elderly people - a product of technological advances that enable many diseases to be identified, prevented or treated earlier, causing life expectancy to be prolonged.

The effects of climate change are also envisaged, and how nursing should prepare itself in order to respond to such needs by participating in political agenda, designing projects to mitigate damage, and creating care networks involving professionals nationwide in order to assist swiftly and appropriately those populations affected.

Similarly, in the next 20 years they foresee a growing increase in health tourism and range of private health services, which will entail less solidarity in contributions by public sector insurance holders and greater recruitment of technical nursing personnel in order to cut costs.

Lastly, an increase in the migrant population is envisaged due to processes of inequality and the lack of job opportunities for inhabitants of neighbouring countries which, once again, means increased demand for health services.

Professions envisaged in each scenario

The possible scenarios that may arise in the future according to the colleagues interviewed refer to nursing practice based on the use of technological advances, which will enable wider coverage of people in their homes so that they have no need to travel - mainly elderly people, who will receive guidance or education on specific subjects such as medicine or basic care.

Professionals should also take advantage of technological progress to offer a better service, since the time technology saves in techniques and procedures should be invested in improving other aspects of care such as education and research.

They also coincide in that nursing should project itself more on the community and in primary care scenarios, since this is where most need will be created - streamlining community care by working in an inter-sectorial and interdisciplinary way.

Another scenario that should also be created is the area of business, involving setting up nursing companies selling private services.

Moreover, the use of technology will allow nurses to maximise their working hours, be more critical, act scientifically and pursue research.

Competences required by these professions

According to the responses provided, the competences envisaged include:

- Working in networks in order to offer care in disasters resulting from climate change.
- Teamwork - another basic competence to be developed.
- Command of a second language and information and communications technology in order to deal with health tourism.
- Encouraging high standard nursing services by means of accreditation from training establishments.
- Advising users on the sale of nursing services.
- Managing care in the community via knowledge of the country's health policies.
- Command of information and communications technologies in order to apply them to the care for individuals.
- Command of political strategies in order to negotiate with public and political institutions involved in the field of health.
- Command of research and, more specifically, research action, in order to find solutions to the health issues currently facing society.

Other relevant comments concerning the future

The implications for the professional area in these scenarios are identified as nurses working in teams with strong leadership skills resulting from their education, keeping themselves active, learning and in constant contact with the needs of the context.

3.6.4. *Mexico*

Characterisation of future scenarios taken into consideration

The interviewees foresee important changes at a demographic level, such as a wide population pyramid for adults, a significant increase in the elderly population, with the subsequent decrease in the economically productive population, an increase in the number of dependants and a fall in birth rates. The demographic change is closely linked to general and mental health issues, and to changes in diet and physical activity patterns.

From the social point of view, an increasingly globalised society is envisaged where emerging countries play a progressively important role in the framework of the global economy. Economic globalisation will bring new patterns of labour mobility, recruitment and forecasting. However, globalisation opens scenarios that go beyond demographics and economics and cause cultural changes and changes in values that are highly complex to interpret from the public health point of view. At a social level, a more troubled society is also foreseen, with an increase in violence, lack of opportunities, and basic deficiencies.

Important changes are foreseen relating to technological development. Information technologies will have an impact on cultural exchange, access to information, innovation, worldwide human resource flow and education. The latter will tend towards internationalisation, distance learning and constant professional development.

All these changes, due to their complexity, pose a challenge to the efficient functioning of health systems that understand care as something merely technical and completely unrelated to social determinants of health. Several scenarios emerge.

In demographic and labour terms, growing worldwide mobility of qualified human resources is foreseen, and barriers blocking the

mobility of those less highly qualified. There will be a young population tending towards competitiveness and individualised work. An economic scenario is envisaged that will have a strong impact on certain segments of the population, which will also put great pressure on disadvantaged groups with regard to their problems.

From the epidemiological point of view, a considerable number of elderly adults with health issues is envisaged. The spread of unhealthy ways of life and lifestyles is also foreseen, which will have repercussions on the epidemiological profile, such as the increase in stress and economic and cultural barriers blocking access to healthy food, economic barriers blocking access to medicine for catastrophic diseases, and an increase in chronic, mental, cardiovascular and sexually-transmitted illnesses.

Nonetheless, new ways of more effective and rapid treatment for new and old pathologies are also foreseen, with the development of vaccines and administering and managing public health systems with trends towards single systems. Technological change will also allow access to knowledge and information almost instantly and will have an impact on health worldwide. In this scenario, with wider public access to information, highly specialised and qualified professionals will have the advantage over generalists. Consequently, individuals are foreseen as having greater awareness and empowerment in relation to the area of health.

Professions envisaged in each scenario

The implications for nursing deriving from the scenarios outlined above are the incorporation of evidence-based multidisciplinary content and knowledge, developing a broad view with regard to the role and impact of nursing and health in development and productivity, and understanding how social, political and economic systems condition community and individual health (the political economics of health and its social determinants).

Hence, the need to rethink the approach to promotion, disease and risk prevention is foreseen; an approach that goes beyond individuals and considers their responsibilities within the social context regarding healthy living options and access to a healthy public space; an approach that takes environmental variables into consideration in health policies, and concentrates on the decision-making process in relation to models of family and community health.

The scenarios outlined above entail implications from the point of view of employment quality and resource availability in health services. In this respect, there will be a need for employment with: a) more and better opportunities for those who are most highly qualified and have post-graduate studies; b) new mechanisms to obtain social security and welfare benefits and recruit human resources; c) health promotion implemented via information technology and; d) transformations in nursing care administration and the treatment of new pathologies.

This requires: a) competitive professionals who are technically and scientifically qualified according to specific and contingent demands; b) professionals with an all-round approach to human beings, working in teams to solve social issues relating to their area of competence, without, however, losing their professional identity centred on the prime objective of human care and; c) professionals with new responsibilities related to the impacts of climate, demographic and epidemiological changes.

Competences required by these professions

The competences identified are: a) ability to identify, analyse and propose solutions to social issues concerning health; b) ability to shift the paradigms of practice after prior assessment; c) capacity for intercultural teamwork; d) having scientific and technical bases to act in the health-illness process in the different phases of the life cycle; e) using scientific methodology systematically as an everyday working tool; f) applying the ethical and legal principles ensuring dignified and humanitarian treatment in all professional action, within the legal framework; g) ability to identify the constant education needs which enable systematic updating and appropriate certification; h) ability to participate in the implementation of policies connected with the health-illness process in specific situations; I) ability to take part in human resource assessment and planning in nursing in scenarios concerning practice and education.

Other relevant comments concerning the future

It is possible, although unlikely, that it will become the norm for autonomous professionals to plan the type, characteristics, distribution

and training of human resources in nursing, and that they participate actively and assertively in public health policies through horizontal, multidisciplinary work with other health professionals. Training would not be based on competences in order to analyse and put forward strategies and policies that are contextualised to public health issues. This explains the role of training in nursing in Mexico where 3-year private programmes are prevalent, and where there is no training scheme that transcends the current structure of services (80% receive care from assistant nurses). It is more likely that a lack of aspiration and low salaries will prevail.

3.6.5. *Peru*

Characterisation of future scenarios taken into consideration

Distance medicine, where people will have access to medicine via computers, may result in dehumanisation and a lack of care. Nonetheless, spaces in the field of nursing can be safeguarded for face-to-face encounters between nurses and patients, which will continue to prevail as nurses are the people who professionalise and specify care, although information technology and sometimes robotics will be used in procedural actions that do not require interaction with patients.

Intervention in the human genome will bring about significant changes in disease prevention and treatment.

Changes in lifestyles will inescapably take place due to advances in science and technology, communications, economic development, education and the humanisation of human actions, or dehumanisation.

Increased physical dependence of the elderly without access to health and other services, often left in total neglect.

Greater birth control as a result of lifestyles and the fact that women have to go out to work.

Health systems will look for new models to address the population's needs and issues, and policies allowing improved performance.

Professions envisaged in each scenario

Further development of nursing techniques in order to use a growing number of increasingly complex technologies: increasingly specialised nursing technicians in larger numbers will be needed for this.

Nurses with training in primary healthcare (primary care), health promotion and disease prevention, working with families and the community:

- Generally speaking, a merging between obstetrics and nursing is also envisaged; in many countries obstetrics is a specialisation of master's in nursing. It should be a speciality or post-graduate course.

- Specialist Nurse in Geriatrics and Gerontology, for all-round care for the elderly, participating and working in teams with psychologists, nutritionists, doctors, social workers, qualified nursing technicians, the whole team led by a Specialist Nurse.

- Nursing technicians trained or qualified in comprehensive care for the elderly.

Competences required by these professions

For nursing technicians: command of treatment technologies and specialist machinery. Supporting nurses in patient care, for instance, fixing an occupied patient bed, bed baths and patient mobilisation, among other tasks, for which they must have command of technology both for carrying out the specific procedure and using the equipment. Technical personnel should communicate fluently and constantly with nurses and the health team.

Nursing technicians qualified in care for the elderly to provide care in basic needs required by such people, providing health education and working with relatives of the elderly.

As qualified nurses in Obstetrics, they should be capable of foreseeing all-round care for a patient and family, care at all stages of the life cycle including women during pregnancy and the puerperium; specialist child care and being alert to the patient's and family's needs so as to offer all-round care to mother, child and family.

Specialist Nurses in Geriatrics and Gerontology should develop strategic programmes regarding care for the elderly, working in teams to solve elderly people's problems and needs, offering care, creating and running centres and rest homes/residences or care centres for the elderly, providing comprehensive, interactive and humane care for individuals, families and communities with respect for their culture and values, and exercising effective leadership based on ethical principles and values.

Other relevant comments concerning the future

Care/nurses will always be safeguarded from all advances and technology because «it is built on the encounter between nurse and patient».

Teamwork becomes imperative with regard to health personnel: psychologists, social workers, medical technologists, nutritionists, sociologists, doctors, educators and all kinds of professional and non-professional personnel working in health.

Nurses with management expertise in health institutions for the purpose of managing nursing and health services autonomously.

Knowledge of information technology, robotics, and the human genome, which will favour disease prevention and healing.

Nurses qualified in crafting social policies who can reach political office and decision making at such levels.

Greater emphasis on preventative/promotional family care and new approaches to primary healthcare, in which nurses have a broad field of action.

Spearheading nursing that encourages innovative changes in services and care management.

4

Teaching, learning and assessment strategies for generic and specific competences: summary of the different institutional perspectives

This report shows the results of the analysis conducted of the teaching-learning and assessment strategies that are used to achieve generic and specific competences. The analysis deals with two competences: as a generic competence, oral and written communication, and as a specific competence, care management developed in the programmes of professional nurses in five countries participating in the Tuning Latin America Nursing: Argentina, Chile, Colombia, Mexico and Peru.

4.1. Definition and description of the specific competence: *Care Management*

Care management is thought of as a dynamic process in decision making that refers to people's health and wellbeing, taking into consideration the use and distribution of resources in a quality environment, which demands the application of professional criteria in order to respond to the population's needs.

It is also argued that care management is exercised not only according to administrative theory but also relates to actual conceptions of the

nursing discipline, it being considered that a person's care is at the centre of nursing services.

It can therefore be said that the elements of care management are defined by the nursing discipline framework. Therefore, the knowledge, method and context of care define the being, doing and savoir-faire of nursing care, which make up the determinants of nursing care management.

Indicators:

1. Ability to care for individuals, families and community groups comprehensively and humanely.

2. Ability to perform care management in order to promote the health of individuals, families and community groups.

3. Ability to perform care management in the disease prevention of individuals, families and community groups.

4. Ability to perform care management in the autonomous healing, rehabilitation and social reinsertion of people, in collaboration with other professionals.

5. Ability to perform palliative care management and provide support for the family.

6. Ability to perform care management for the person's dignified death and provide support for the family.

a) *Level of competence development in the programme*

Criteria to define the Development Levels of the specific competence in the programme:

- **Basic Level:** Programmes mentioning the specific competence in its most elementary forms. There are associated methodologies and the learning results display the most basic cognitive levels of memory

and understanding. Competence in the performance of a limited range of activities, mostly simple and with predictable results.

- **Intermediate Level:** Programmes explicitly mentioning the specific competence. There are associated methodologies and the learning results display up to the cognitive level of application in the performance of a wider range of activities. Students have little autonomy since they receive a high degree of supervision, but are allowed to develop sufficiently.

- **High Level:** Programmes explicitly mentioning the competence as being central to training. There are associated methodologies and the learning results displayed include the cognitive level of analysis and application in the performance of a wide range of activities within a variety of contexts. Students act with greater autonomy and take on responsibility for their performance.

b) *List of the learning results identified*

Learning results	Competence development level
1. Knowing the basic disciplinary and professional principles of nursing care. 2. Knowing the professional role of nurses and the ethical and legal aspects of nursing care. 3. Knowing the concepts relating to nursing care management. 4. Using the nursing process as a tool that enables care to be made operational. 5. Initially applying the nursing process with emphasis on the assessment stage so as to determine care needs.	Basic

Learning results	Competence development level
1. Performing care management in promoting health of individuals, families and community groups. 2. Performing care management in the disease prevention of individuals, families and community groups. 3. Identifying inter-sectorial and interdisciplinary teams and community organisations, considering the anticipatory promotion approach to care management. 4. Offering comprehensive and humanised care in adult and elderly care management. 5. Employing management and administration tools in care management. 6. Developing technical abilities and skills to perform care activities deriving from medical diagnosis and treatment.	Intermediate
1. Exercising a certain degree of autonomy in care management. 2. Ability to take decisions in care management based on scientific evidence. 3. Demonstrating skill in the handling of human and economic resources in the service or unit. 4. Assuring and encouraging the quality of care and safety of the people they are responsible for. 5. Demonstrating the technical ability to perform care activities deriving from medical diagnosis and treatment. 6. Coordinating between support units and other services during care management. 7. Managing and coordinating with inter-sectorial and interdisciplinary teams, and community organisations, considering the anticipatory promotion approach to care management.	High

c) *Teaching-learning strategies*

Different teaching strategies and methods can be placed in a continuum. In accordance with this criteria of classifying different methods, on the one extreme there are lectures or master classes where student participation is minimal and on the other extreme, autonomous

student work, where the lecturer's participation and control is usually minimal. Between the extremes of this continuum there are a variety of strategies.

Some of the strategies most used in training nurses are shown below.

Teaching-learning strategies used in the education of professional nurses

Teaching-learning strategies	Description
Master class or lecture	Organised presentation of information (lecturer-student). Looking to spark motivation and cognitive processes.
Cooperative learning	Students work divided into small learning activity groups and are assessed according to the group's productivity.
Case study	This is a technique whereby students analyse professional situations presented by the lecturer in order to gain an experimental conceptualisation and conduct a search for effective solutions.
Simulation	This provides students with a framework in which to learn interactively through an experience similar to reality, either through simulated patients or scenarios. It allows students to express their feelings with regard to learning and experiment with new ideas and procedures.
Project-oriented learning	The product of the learning process is a project or professional intervention programme, around which all the training activities are articulated.

d) *Conclusions regarding the teaching-learning strategies for the specific competence of care management*

In general, the methodological strategies used allow learning achievement, and their use is consistent from master classes through to project learning, which is consistent with the competence development level. For example, master classes and cooperative learning are used in the first levels, case study and simulation in the intermediate levels and project-oriented learning on the more advanced courses.

e) *Assessment Strategies for Learning Results*

The assessment strategies used gather together processing and product information. They aim to demonstrate the competence and the level achieved. Several instruments are used that enable both lecturers and students to issue and obtain a value judgement of their work performance or completed assignment[7]:

Assessment strategies for the learning results	Type of activity
Producing texts or written reports. Assessment of speeches and oral presentations.	Production Oral tests involving the presentation of a topic and examination of understanding and the ability to apply and explain what has been learnt.
Assessment of the audiovisual didactic resources produced.	Production
Design, principles and application of solutions to clinical issues.	Practical tests aimed at testing a wide range of professional skills.
Demonstrating procedures and handling language in their analogical and digital dimensions.	Production
Showing a range of complex skills in the analysis of case studies in the final examination. Assessment of project aimed at solving problems related to care management.	Argumentation and understanding Analysis and Problem solving
Demonstrating technique and procedures. Design, rationale and solution to conflicts.	Implementation Implementation

[7] An example of a rubric used in a family study can be found in the annexes.

4.2. Definition and description of the generic competence: *Oral and written communication*

This is defined as the ability to express opinions, thoughts and experiences clearly, coherently and assertively according to the communicative intention and situation; listening and conversing to establish healthy relationships with others.

Indicators:

1. Ability to listen actively and understand what others wish to express.
2. Capacity for the efficient oral and written communication of a message.
3. Ability to understand and produce texts.
4. Ability to give clear explanations so that others may understand a range of messages in formal and informal communicative situations in professional life.
5. Skill in the use of information and communications technologies.

a) *Competence development level in the Syllabus*

Criteria to define the generic competence development levels in the Syllabus

- **Basic Level:** Programmes mentioning the specific competence in its most elementary forms. There are associated methodologies and the learning results display the most basic cognitive levels.
- **Intermediate Level:** Programmes explicitly mentioning the specific competence. There are associated methodologies and the learning results display up to the cognitive level of application in the performance of a wider range of activities.

- **High Level:** Programmes explicitly mentioning the competence as being central to the programme. There are associated methodologies and the learning results displayed include the cognitive level of analysis and application in the performance of a wide range of activities within a variety of contexts. Students act with greater autonomy and take on responsibility for their performance.

b) *List of the learning results identified*

Learning results	Competence development level
1. Summarising articles on each of the topics to be dealt with in the subject. 2. Formally displaying the results of a research study. 3. Developing basic oral and written communication skills. 4. Group work to develop joint projects. 5. Being familiar with the main databases of scientific literature. 6. Developing a written research report. 7. Developing skills in the presentation of research projects and their dissemination. 8. Communicating naturally and effectively by using basic structures in oral and written form. 9. Producing narrative texts and oral and written descriptions. 10. Recognising, understanding, using and structuring vocabulary to understand texts in their specialisation. 11. Engaging in everyday, orally communicative situations.	Basic

Learning results	Competence development level
1. Communicating effectively with the person, family or working team requiring healthcare. 2. Knowing the meaning of effective interpersonal relations, developing some communication skills. 3. Developing skills in the use of information and communications technologies. 4. Displaying conduct that favours appropriate interpersonal relations. 5. Carrying out quality digital documentation in order to make their professional work known. 6. Applying some individual and family assessment tools that enable them to carry out diagnoses of the health conditions of adults and the elderly. 7. Showing oral and written communication skills in individual and family care. 8. Communicating effectively through expressive oral and written language, and technical and computer language, in order to exercise the profession. 9. Showing effective communication techniques. 10. Analysing knowledge-building processes and their relationship with the inter-subjective communication process. 11. Analysing the elementary principles in order to develop basic communication skills. 12. Developing social and communication skills for personal growth and professional practice. 13. Simulating conflict resolution through negotiation techniques. 14. Showing abilities to work in groups proactively, assertively and receptiveness to new ideas. 15. Using nursing records of the user's care correctly. 16. Interacting with health teams, users and families in healthcare units. 17. Preparing, performing and assessing an intervention programme aimed at a nursing team or individuals and families they are responsible for. 18. Showing ability to work in multidisciplinary teams. 19. Preparing, performing and assessing an intervention programme aimed at users, their families and/or communities they are responsible for.	Intermediate

Learning results	Competence development level
1. Demonstrating capacities for oral communication by expressing opinions and clear ideas based on the discussion of each content. 2. Developing skills to argue and justify decision making ethically in tasks undertaken by professional nurses. 3. Showing interpersonal skills in teamwork with their peers and health professionals. 4. Using home visits and applying family assessment instruments as tools in order to apply the nursing process to children and their families. 5. Analysing published articles critically. 6. Basing nursing care on conferring medically and/or surgically solvable health issues on adults, the elderly and their families, according to the population's primary needs, and based on the discipline's nursing models and theories. 7. Establishing, developing and determining interpersonal nursing care relationships that enable greater personal development of both the users and they themselves, as professionals. 8. Discussing data analysis, its description and interpretation according to philosophical, theoretical and methodological references. 9. Leading and motivating groups and individuals in the common search for strategies to achieve objectives.	High

c) *Teaching-learning strategies for the generic competence of oral and written communication*

Teaching-learning strategies	Description
Master class or lecture	Organised presentation of (lecturer-student); looking to spark motivation and cognitive processes.
Cooperative learning	Students' work is divided into small learning activity groups and assessed according to the group's productivity.
Problem-based learning	Students learn in small groups, favouring the development of information analysis and summary skills.
Project-oriented learning	The product of the learning process is a project or programme that allows the acquisition of a working methodology, and to learn from experience and develop self-learning and creative thought.

d) *Learning Result Assessment Strategies*

The assessment strategies used gather together processing and product information. They aim to demonstrate the competence and level reached. Several instruments are used that not only allow students to be classified but also their performance to be observed[8].

Learning result assessmentstrategies	Type
Producing written texts or reports. Assessment of speeches and oral presentations.	Production Oral tests involving the presentation of a topic and examination of the understanding and ability to apply and explain what has been learnt.
Assessment of the didactic audiovisual resources produced.	Production Practical tests aimed at testing a wide range of professional skills
Design, principles and application of solutions to clinical issues. Demonstrating procedures and handling language in their analogical and digital dimensions.	Production
Reading tests. Argumentation.	Argumentation and understanding
Demonstrating effective communication techniques and procedures.	Implementation
Design, rationale and conflict resolution using communicative techniques and negotiation methods.	Implementation
Demonstrating procedures.	Implementation

[8] An example of implementation tasks where students must demonstrate effective communication techniques and procedures in professional situations can be seen in the annexes.

4.3. General conclusions about the assessment of competences

The conclusions emerging from the holistic analysis of generic and specific competences, indicated above, are as follows:

1. The competences are worked on in the programme at their different development levels (basic, intermediate and high).

2. The priority development levels are concentrated in intermediate and high levels.

3. Generally speaking, the assessment strategies are relevant and consistent with the learning results expected.

4. The specific competence *Care management* represents the being, doing and savoir-faire of nursing care and, along with the generic competence *Written and Oral Communication,* is present in all the subjects in professional education programmes for nursing.

5. There is progressive development of the specific competence according to the different levels of the programme.

6. The learning results in constant curricular progress ensure that the generic and specific competences are present in the graduate profile.

5

Observations concerning student workload from the nursing perspective

In Latin America, the proposal for an academic credits system is one of the basic aspects of the approach put forward by the Tuning-LA Project. It highlights the importance of taking into account student time, the workload required to achieve certain competences and the weighted and actual distribution of learning activities in the programme, in order to avoid unnecessary prolongations in qualifications, or repetitions[9].

The Latin American Credit Reference (CLAR) is conceived as a unit of value or currency that estimates the workload, measured in hours, required to achieve learning results and pass a subject or period of study[10].

As a general rule, CLAR considers a (academic) year of study as being equivalent to 60 credits of a year's (full-time) work, a semester is equivalent to 30 credits and one term, 20 credits.

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[9] Tuning Latin America, Reflections and Perspectives on Higher Education in Latin America, Final Report —Tuning Latin America Project. 2004-2007—, Universidad de Deusto-Universidad de Groningen (Bilbao: Universidad de Deusto, publications 2007), p. 297.

[10] Latin American Credit Reference (CLAR) TUNING Project: www.ucs.br/portais/cech/documentos/15150/download/

Thus, a 4-year syllabus will stand at 240 credits, 5-year at 300 and a 7-year syllabus at 420 credits[2].

The amount of working time assigned to a CLAR credit is defined by the total time recorded that students devote to learning in one year.

Distribution of weekly hours reported by lecturers and students, semester duration and yearly number of hours in 18 countries

	Lecturer	Student	Diff.	Weeks	Yearly hours
Paraguay	33.00	55.86	22.86	17	1,122
Guatemala	34.92	57.40	22.48	18	1,257
Chile	39.27	43.30	4.03	16	1,256
Peru	39.55	48.53	8.61	16	1,265
Honduras	39.92	48.82	8.90	16	1,277
Nicaragua	40.19	50.91	10.72	15	1,205
Argentina	40.62	50.79	10.17	15	1,218
Uruguay	43.41	41.92	1.49	16	1,389
El Salvador	44.60	61.06	16.46	18	1,586
Brazil	44.93	38.16	6.17	18	1,617
Costa Rica	46.75	58.49	11.74	17	1,589
Panama	47.56	44.95	2.61	17	1,617
Colombia	48.12	49.32	1.20	17	1,636
México	54.99	63.52	8.53	16	1,760
Bolivia	55.20	48.75	6.45	17	1,877
Venezuela	55.38	52.59	2.79	15	1,661
Ecuador	66.43	76.75	10.32	17	2,259
Cuba	70.17	51.37	18.80	16	2,245

Considering the range of weeks of academic work per year (32-38 weeks) and the range of weekly hours of work (45-50 hours), the yearly range of student working hours would be between 1,440 and 2,000 hours[2].

The study «*Estimation of the workload of Latin American students from the perspective of lecturers and students*» was conducted within the context of the Tuning Latin America Project. It was carried out at 189 universities in 18 Latin American countries: Argentina, Bolivia, Brazil, Costa Rica, Colombia, Cuba, Chile, Ecuador, El Salvador, Guatemala, Honduras, Nicaragua, Mexico, Panama, Paraguay, Peru, Venezuela and Uruguay, between November 2011 and March 2012. 10,086 questionnaires were used, with prior signed and informed consent.

The survey measured lecturers' and students' perceptions of the time needed to complete work both in the classroom and the independent work required to achieve learning results. This process provides an estimation of student workload in Latin America.

The duration of semesters, in most of the countries, fluctuates between 15 and 18 weeks. Regarding yearly hours, countries such as Bolivia, Cuba and Ecuador exceed the yearly hours recommended by CLAR by 34 to 35%. In 85% of the countries, the hours devoted to student learning exceed the hours devoted by the lecturer, which is also observed in Chile.

According to the results, the total time needed by students to meet the demands of an academic course, including contact and non-contact hours is, on average, 1,247 hours per academic year. In most Latin American countries, according to what is reported by lecturers, student workload ranges from 1,125 to 2,259 hours per academic year.

The CLAR was calculated for each country using the proposed methodology to compare the academic learning workload according to the recommendations[11], stated by students and lecturers.

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[11] CLAR = 60 credits per year's work; CLAR = 30 credits per semester; 1 CLAR: total time students devote annually to learning. A year is regarded as 32 to 40 weeks of academic work; Weekly range, 45-50 hours; annual range, 1,440 to 2,000 hours; hour/credit ratio (1,440 hours/year): 60 credits=24 hours/credit.

Distribution of the Latin American Credit Reference (CLAR) for each country according to academic learning workloads reported by lecturers and students

Countries	CLAR Lecturer	CLAR Students
Paraguay	46.8	79.1
Guatemala	52.4	86.1
Chile	52.3	57.7
Peru	52.7	64.7
Honduras	53.2	65.0
Nicaragua	50.2	63.6
Argentina	50.8	63.5
Uruguay	57.9	55.9
Salvador	66.1	91.5
Brazil	67.4	57.2
Costa Rica	66.2	82.9
Panama	67.4	63.6
Colombia	68.2	69.9
Mexico	73.3	84.7
Bolívia	78.2	69.1
Venezuela	69.2	65.7
Ecuador	94.1	108.7
Cuba	93.5	68.5

Most of the countries show differences between the CLAR reported by students and lecturers. Except for Uruguay, Brazil, Panama, Bolivia, Venezuela and Cuba, students reported heavier academic workload in order to achieve learning than that reported by lecturers.

CLAR's recommendation of 60 credits is achieved by countries like Chile, Uruguay and Brazil. However, there are countries that amply exceed the recommendations, such as Guatemala, Ecuador and El Salvador.

The results showed that time devoted by students to independent work, i.e. virtual activities, laboratories, reading texts and preparing written work were not deemed part of their academic workload. As for lecturers, it is felt that preparing study material, checking work/projects/theses, practical work and other activities, as well as assessment in general, are not deemed to be part of their workload.

We feel that countries should follow the CLAR and SCT transferable credit proposals with the aim of making student mobility viable in Latin America and with North American, European, Australian and Asian universities. In doing so, the globalisation of credit transfer between countries will be accomplished.

6

General conclusions

This project enabled the participant universities to develop a pool of knowledge regarding the concept of the graduate meta-profile in nursing that is expected to be formed as a response to the challenges faced by nursing in the 21st century.

The work carried out has provided a space for reflection on the future evolution of the demographic, epidemiological, cultural, political and economic behaviour faced by Latin America in a globalised, interdependent and highly-technologized world.

Nursing is a profession based on nursing care for individuals, families and communities who require healthcare throughout the entire life cycle. Hence, the definition of the graduate meta-profile in nursing represents the response to future challenges, where the key is the harmonisation of curriculums and consolidation of transferable credits.

Analysis of the information created enabled the generic and specific competences to be identified and agreed upon, within which new competences emerged which complemented those already existing.

There are coincident elements in all countries with regard to professional training in nursing. Therefore, the proposed meta-profile is widely agreed upon and accepted by all.

From holistic analysis of the considered generic and specific competences, it can be concluded that:

- The competences are worked on in the syllabus at different development levels (basic, intermediate and high).

- The priority development levels are concentrated in the intermediate and high levels.

- Generally speaking, the assessment strategies are relevant and consistent with the learning results expected.

- The specific competence *Care Management* represents the being, doing and savoir-faire of nursing care and, along with the generic competence *Oral and Written Communication,* is present in the professional training curriculums in nursing in Latin America.

- There is progressive development of the specific competence according to the different curricular training levels.

- The learning results in continuous curricular progress ensure the presence of the generic and specific competence in the graduate profile.

Regarding the study on student workload in nursing, the results showed that the time devoted by students to independent work and preparing written work were not considered to be part of the academic workload. As for lecturers, it is felt that preparing study material, checking work/projects/theses, practical work and other activities, as well as assessment preparation in general, are not deemed part of their workload.

Countries should follow the CLAR and SCT transferable credit proposals with the aim of making student mobility viable in Latin America and with North American, European, Australian and Asian universities. In doing so, the globalisation of credit transfer between countries will be accomplished.

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List of contacts from the Area of Nursing

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

Chile (Luz Angélica Muñoz González)

Universidad Andrés Bello
lmunoz@unab.cl</td></tr>
<tr><td>Argentina
Ramón Aristides Álvarez
Universidad Nacional de Lanús
ralvarez@unla.edu.ar</td><td>Bolivia
Viviana Morales Poppe

Universidad Evangélica Boliviana
vivianamorales@cotas.com.bo
intab@uev.edu.bo</td></tr>
<tr><td>Argentina
Silvia Cárcamo

Universidad Nacional de Lanús

scarcamo0409@gmail.com</td><td>Brazil
Ellen Marcia Peres

Universidade do Estado do Rio de Janeiro
ellenperes@globo.com</td></tr>
<tr><td>Colombia
M.ª Elisa Moreno Fergusson

Universidad de la Sabana mariae.
moreno@unisabana.edu.co</td><td>Costa Rica
Ana Guzmán Aguilar

Universidad de Costa Rica
anaguz2610@yahoo.com</td></tr>
</table>

Ecuador **Jesús Yubagni Rezabala Villao** Universidad Laica Eloy Alfaro de Manabí rezabalay@yahoo.com	**Mexico** **Silvia Espinoza Ortega** Universidad Autónoma de Nuevo León silvia.espinoza@uanl.mx
Peru **Ruth Esther Seminario Rivas** Universidad Nacional Federico Villarreal ruthdelg@hotmail.com	

For further information about Tuning

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

Pablo Beneitone (Director)

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

Annex 1

Example of teaching-learning tools

Family study assessment rubric

Score	4	3	2	1
Category	**Excellent level**	**Very high level**	**High level**	**Low level**
Introduction	The introduction is clear and explains the motivation and purpose of the family study.	The introduction explains the motivation and purpose of the family study.	The introduction partially explains the motivation and purpose of the family study.	The introduction fails to explain the motivation and the purpose is confused.

Score	4	3	2	1
Category	**Excellent level**	**Very high level**	**High level**	**Low level**
Family assessment	The student describes the entire family assessment clearly and fully, carrying out a critical analysis of the family group's health situation, including the following aspects: Uses of assessment tools such as Family Genogram, EcoMap, Family APGAR, Family Circle, risk factors, protection factors. Personal and family health precedents, lifestyles, family health history. Assessment of psychosocial family aspects such as support networks, social participation and family dynamics. Environmental aspects that describe aspects of housing and risk factors.	The student describes the entire family assessment clearly and fully, carrying out a satisfactory analysis of the family group's health situation, including the following aspects: Uses of assessment tools such as Family Genogram, EcoMap, Family APGAR, Family Circle, risk factors, protection factors. Personal and family health precedents, lifestyles, family health history. . Assessment of psychosocial family aspects such as support networks, social participation and family dynamics. Environmental aspects that describe aspects of housing and risk factors.	The student partially manages to carry out a full family assessment, but the analysis presented is deficient.	The student carries out an incomplete assessment and fails to present an analysis of the family health situation.
Diagnoses	The student is able to recognise in full the actual and potential family and individual diagnoses deriving from the assessment carried out. Clearly justifying and prioritising them.	The student is able to recognise in full the actual and potential family and individual diagnoses deriving from the assessment carried out.	The student is able to recognise most of the actual and potential family and individual diagnoses deriving from the assessment carried out.	The student formulates incomplete and deficient diagnoses.

Score	4	3	2	1
Category	**Excellent level**	**Very high level**	**High level**	**Low level**
Planning	The student describes the intervention plan clearly and fully, including: Clear, measurable objectives focused on the family. The intervention plan is aimed at solving the family's problems, and according to their level of competence. The intervention must be solidly grounded and feature performance indicators.	The student describes the intervention plan, including: Measurable objectives focused on the family. The intervention plan is aimed at solving the family's problems, and according to their level of competence. The intervention must feature performance indicators.	The student partially describes the intervention plan, including: Objectives focused on the family. The intervention plan is aimed at solving the family's problems. The intervention must feature performance indicators.	The student gives a deficient description of the intervention plan. The objectives are unclear and imprecise. The intervention vaguely aims to solve the family's problems.
Implementation	The student clearly describes the development of the planned activities and analyses how implementation was carried out.	The student describes the development of the planned activities and partially analyses how implementation was carried out.	The student partially describes the development of the planned activities and analysis is poor.	The student describes the development of the planned activities deficiently and fails to present an analysis.
Assessment	The study assesses objective achievement in detail, analyses the factors facilitating or hindering the intervention and clearly assesses indicator compliance.	The study assesses objective achievement, points out the factors facilitating or hindering the intervention and assesses indicator compliance.	The study partially assesses objective achievement, mentions the factors facilitating or hindering the intervention. The indicator compliance assessment contains deficiencies.	The study presents an incomplete assessment of objective achievement, and fails to point out the factors facilitating or hindering the intervention fully. Indicators are not assessed.

Score	4	3	2	1
Category	Excellent level	Very high level	High level	Low level
General aspects	All the information presented in the study is clear, precise and based on bibliography relating to the topic. Spelling is used correctly and the report shows a command of scientific vocabulary.	The information presented in the study is based on bibliography relating to the topic. Spelling is used correctly and the report shows a command of scientific vocabulary.	The information presented in the study is partially based on bibliography. Spelling is used correctly and the report shows a command of scientific vocabulary.	The information presented in the study is unfounded. The spelling used has important mistakes and there is no use of scientific vocabulary.

Working guidelines to practise and demonstrate effective communication

Written workshop on active listening

Use the active listening technique in the following cases and write your answer:

Professional area:

1. A patient says: «Miss, when do you think I'll be discharged? I've been here for so long. My house must be a mess and my poor pets...who knows how they are!

2. The assistant paramedic says: «I'd love to have a bit of that self-esteem of yours».

3. A close colleague says: «this intra-hospital system is going from bad to worse, I think it's awful having to work with people like these!».

4. A patient in the ICU says: «my children haven't come to see me in over a month...who would've thought? After all I've done for them and now that I'm old and poorly, no-one comes to see me».

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