Higher Education, Sciences and Technology

Francisco Sánchez y Rosana Hernández Nieto
(Compilers y editors)

Institutional and regulatory foundations for the establishment of the European, Latin American and Caribbean Area for Higher Education, Science, Technology and Innovation

instituto de iberoamérica
universidad de salamanca

FLACSO
ESPAÑA

EU-LAC FOUNDATION, 2017
Hagedornstraße 22
20149 Hamburg, Germany
www.eulacfoundation.org

AUTHORS:
Report written within the framework of the collaboration agreement between the **European Union-Latin America and the Caribbean Foundation (EU-LAC Foundation)**, the **Latin American Faculty of Social Sciences in Spain (FLACSO Spain)** and the **University of Salamanca**. The chapters of this report were drafted by Alexia Cachazo Vasallo, Rosana Hernández Nieto, Francisco José Rebordinos Hernando and Francisco Sánchez, based on the information provided by the consultants in each country.

LIST OF COLLABORATORS:

María Cecilia Andrade. Ecuador.
Elcio Cecchetti. Brazil.
Alexia Cachazo Vasallo. Coordinator. University of Salamanca.
Jorge Domínguez. Cuba.
Wendy Cuellar Arrecis. Guatemala.
Adolfo González. Chile.
Valentina Isabel González. Chile.
Héctor Grenni. El Salvador.
Margarita Heinzen. Uruguay.
Rosana Hernández Nieto. Researcher and editor. FLACSO-España.
Gerald Lerebours. Haiti.
Pablo Loarte Mauricio. Peru.
Christine Marrett. Jamaica
David Rampersad. Trinidad y Tobago
José Mario Méndez. Costa Rica.
José Marcial Méndez Soto. Honduras.
Osvaldo Moreira. Paraguay.
Abdón Pari Condori. Bolivia.
Gabriel Ramírez. Venezuela.
Francisco José Rebordinos Hernando. Researcher. University of Salamanca.
Lily Rodríguez González. Dominican Republic.
Guillermo Ruiz. Argentina.
Juan Camilo Salas Cardona. Panama.
María Eugenia Salinas Muñoz. Colombia.
Francisco Sánchez López. Supervisor. FLACSO-España.
Agustín Sosa. Mexico.
José Luis Sosa. Mexico.
Mercedes Tinoco Espinoza. Nicaragua.

GRAPHIC DESIGN: Ileana Angulo Ascanio / Soluciones y desarrollo REIMPULSA
PRINTING: Scharlau GmbH

ISBN: 978-84-697-3125-3
DOI: 10.12858/0617EN

Note: This study was financed by the EU-LAC Foundation, and by the Ministry for Foreign Affairs and Cooperation of the Government of Spain. The EU-LAC Foundation is financed by its Member states and by the European Union. The content of this publication is the sole responsibility of the authors and may not be considered as representing the views of the EU-LAC Foundation, of its Member states or of the European Union.

This book was published in 2017.

TABLE OF CONTENTS

Index of tables

LIST OF ABBREVIATIONS

ACCINET: Cooperation Network between Higher Education Institutions.

ACTI: Association of Caribbean Tertiary Institutions *(Asociación de Instituciones Terciarias Caribeñas).*

ACTT: The Accreditation Council of Trinidad and Tobago *(Consejo de Acreditación de Trinidad y Tobago).*

AE: Special Admission *(Admisión Especial - Bolivia).*

AECID: Spanish Cooperation Agency for Development *(Agencia Española de Cooperación para el Desarrollo).*

LAC: Latin America and the Caribbean *(América Latina y Caribe*).

ALCUE-NET: Latin America, Caribbean and European Union Network for Research and Innovation (*Red de Investigación e Innovación de América Latina y Caribe y la Unión Europea).*

ANEAES: Paraguayan National Agency of Higher Education Assessment and Accreditation *(Agencia Nacional de Evaluación y Acreditación de la Educación Superior).*

ANII: Uruguayan National Agency of Research and Innovation *(Agencia Nacional de Investigación e Innovación).*

ANUIES: Mexican National Association of Universities and Higher Education Institutions *(Asociación Nacional de Universidades e Instituciones de Educación Superior).*

APEASU: Bolivian Plurinational Agency for Assessment and Accreditation of Higher Education *(Agencia Plurinacional de Evaluación y Acreditación de la Educación Superior).*

AUGM: Montivideo Group University Association (*Asociación de Universidades del Grupo Montevideo*).

AUPRICA: Association of Private Universities in Central America *(Asociación de Universidades Privadas de Centroamérica).*

AUSJAL: Association of Universities Entrusted to the Society of Jesus in Latin America *(Asociación de Universidades confiadas a la Compañía de Jesús en América Latina).*

CAPE: Caribbean Advanced Proficiency Examination.

CAPES: Brazilian Coordination of Higher Level Personnel Improvement *(Coordenação de Aperfeiçoamento de Pessoal de Nível Superior).*

CARICOM: Caribbean Community *(Comunidad del Caribe).*

CARPIMS: Caribbean-Pacific Island Mobility Scheme.

CCA: Central American Higher Education Accreditation Council *(Consejo Centroamericano de Acreditación de la Educación Superior).*

CdA: Salvadoran Commission for Higher Education Quality Accreditation *(Comisión de Acreditación de la Calidad de la Educación Superior).*

CEAACES: Ecuadoran Council for Assessment, Accreditation and Quality Assurance of Higher Education *(Consejo de Evaluación, Acreditación y Aseguramiento de la Calidad de la Educación Superior).*

CELAC: Community of Latin American and Caribbean States *(Comunidad de Estados Latinoamericanos y Caribeños).*

CENEVAL: Mexican National Assessment Centre *(Centro Nacional de Evaluación).*

CEPS: Guatemalan Council of Private Higher Education *(Consejo de la Enseñanza Privada Superior).*

CES: Ecuadoran Council of Higher Education *(Consejo de Educación Superior).*

CESU: Colombian National Council of Higher Education *(Consejo Nacional de Educación Superior).*

CEUB: Executive Committee of the Bolivian University *(Comité Ejecutivo de la Universidad Boliviana).*

CIDESCO: Council for the Integration and Development of Education in South-West Colombia *(Corporación para la Integración y el Desarrollo de la Educación en el Sur Occidente Colombiano).*

CIDFAE: Ecuadoran Air Force Research Centre (*Centro de Investigación de la Fuerza Aérea*).

CIEES: Mexican Inter-institutional Committees for the Assessment of Higher Education (*Comités Interinstitucionales para la Evaluación de la Educación Superior*).

CICYT: Argentinian Inter-institutional Council of Science and Technology *(Consejo Interinstitucional de Ciencia y Tecnología).*

CITMA: Cuban Ministry of Science, Technology and the Environment *(Ministerio de Ciencia, Tecnología y Medio Ambiente).*

CKLN: The Caribbean Knowledge and Learning Network.

CNA: Chilean National Accreditation Commission *(Comisión Nacional de Acreditación).*

CNA: Colombian National Accreditation Council *(Consejo Nacional de Acreditación).*

CNE: Brazilian National Council for Education.

CNE: Nicaraguan National Council for Education *(Consejo Nacional de Educación).*

CNEA: Nicaraguan National Council for Assessment and Accreditation *(Consejo Nacional de Evaluación y Acreditación).*

CNCyT: Colombian National Council for Science and Technology *(Consejo Nacional de Ciencia y Tecnología).*

CNPq: Brazilian National Council for Scientific and Technological Development *(Conselho Nacional de Desenvolvimento Científico e Tecnológico).*

CNU: Nicaraguan National Council of Universities *(Consejo Nacional de Universidades).*

CNU: Venezuelan National Council of Universities *(Consejo Nacional de Universidades).*

CODECYT: Venezuelan Council for Scientific and Technological Development *(Corporación para el Desarrollo Científico y Tecnológico).*

COFECYT: Argentinian Federal Council for Science, Technology and Innovation *(Consejo Federal de Ciencia, Tecnología e Innovación).*

COLCIENCIAS: Colombian Administrative Department for Science, Technology and Innovation *(Departamento Administrativo de Ciencia, Tecnología e Innovación).*

CONACES: Colombian National Commission for Quality Assurance in Higher Education *(Comisión Nacional de Aseguramiento de la Calidad de la Educación Superior).*

CONALMEX: Mexican Commission for UNESCO Cooperation *(Comisión Mexicana de Cooperación con la UNESCO).*

CONACYT: Bolivian National Council for Science and Technology *(Consejo Nacional de Ciencia y Tecnología).*

CONACYT: Mexican National Council for Science and Technology *(Consejo Nacional de Ciencia y Tecnología).*

CONACYT: Salvadoran National Council for Science and Technology *(Consejo Nacional de Ciencia y Tecnología).*

CONACYT: Paraguayan National Council for Science and Technology *(Consejo Nacional de Ciencia y Tecnología).*

CONAES: Brazilian National Commission for Higher Education Assessment *(Comissão Nacional de Avaliação da Educação Superior).*

CONARE: Costa Rican National Council of Deans *(Consejo Nacional de Rectores).*

CONARES: Salvadoran National Council of Deans *(Consejo Nacional de Rectores).*

CONES: Paraguayan National Council for Higher Education *(Consejo Nacional de Educación Superior).*

CONCYT: Guatemalan National Council for Science and Technology *(Consejo Nacional de Ciencia y Tecnología).*

CONCYTEC: Peruvian National Council for Science and Technology *(Concejo Nacional de Ciencia y Tecnología).*

CONEAU: Argentinian National Commission for University Quality Assessment and Accreditation *(Comisión Nacional de Evaluación y Acreditación de la Calidad* Universitaria).

CONEAUPA: Panamanian National Council of University Assessment and Accreditation *(Consejo Nacional de Evaluación y Acreditación Universitaria).*

CONES: Paraguayan National Council for Higher Education (Consejo Nacional de Educación Superior).

CONESCyT: Dominican National Council for Higher Education, Science and Technology *(Consejo Nacional de Educación Superior, Ciencia y Tecnología).*

CONESUP: Costa Rican National Council for Private Higher Education *(Consejo Nacional de Enseñanza Superior Privada).*

CONICYT: Chilean National Commission for Scientific and Technological Research *(Comisión Nacional de Investigación Científica y Tecnológica).*

CONICYT: Costa Rican National Council for Scientific and Technological Research *(Consejo Nacional para Investigaciones Científicas y Tecnológicas).*

CONICYT: Nicaraguan Council for Sciences and Technology *(Consejo Nicaragüense de Ciencias y Tecnología).*

COPAES: Mexican Council for the Accreditation of Higher Education *(Consejo para la Acreditación de la Educación Superior).*

COSUP: Costa Rican Higher Council of Private Universities *(Consejo Superior de Universidades Privadas).*

COSUP: Nicaraguan Higher Council of Private Universities *(Consejo Superior de Universidades Privadas).*

CPU: University Foundation Course *(Curso Preuniversitario, Bolivia).*

CRUCH: Chilean Council of Deans *(Consejo de Rectores).*

CSUCA: Higher Council of Central American Universities *(Consejo Superior Universitario Centroamericano).*

CSEC: Caribbean Secondary Education Certificate.

CSF: Sciences Without Borders *(Brazil).*

CUIB: Ibero-American University Council *(Consejo Universitario Iberoamericano).*

CUMex: Consortium of Mexican Universities *(Consorcio de Universidades Mexicanas).*

DAAD: German Academic Exchange Service.

EACEA: Education, Audiovisual and Culture Executive Agency of the European Commission.

ECTS: European Credit Transfer and Accumulation System.

EHEA: European Higher Education Area.

EALL: European Area of Lifelong Learning.

ERA: European Research Area.

ELAP: The Emerging Leaders in the Americas Programme.

ENEM: Brazilian National Secondary Education Exam *(Examen Nacional de Ensino Médio).*

ENES: Ecuadoran National Exam for Higher Education *(Examen Nacional para la Educación Superior).*

ENQA: European Association for Quality Assurance in Higher Education.

ERC: European Research Council.

ESU: European Students Union.

EUA: The European University Association.

EURASHE: European Associations of Institutions of Higher Education.

FAPERJ: Fundação Carlos Chagas Filho de Amparo à Pesquisa do Estado do Rio de Janeiro *(Brazil).*

FENUP: Nicaraguan National Federation of Private Universities *(Federación Nacional de Universidades Privadas).*

FEPADE: Salvadoran Business Foundation for Educational Development *(Fundación Empresarial para el Desarrollo Educativo).*

FINEP: Brazilian Studies and Projects Funder.

FONACIT: Venezuelan National Fund for Science, Technology and Innovation *(Fondo Nacional para la Ciencia, Tecnología e Innovación).*

GAR: High Performance Groups *(Grupos de Alto Rendimiento).*

GRE: Graduate Record Examination.

IBICT: Brazilian Institute for Information in Science and Technology.

ICETEX: Colombian Institute for Educational Credit and Technical Studies Abroad *(Instituto Colombiano de Crédito Educativo y Estudios Técnicos en el Exterior).*

ICFES: Colombian Institute for the Assessment of Education *(Instituto Colombiano para la Evaluación de la Educación).*

HEI: Higher Education Institution.

IESALC: UNESCO International Institute for Higher Education in Latin America and the Caribbean *(Instituto Internacional de la UNESCO para la Educación Superior en América Latina y el Caribe).*

IFARHU: Institute for the Training and Use of Human Resources *(Instituto para la Formación y Aprovechamiento de Recursos Humanos, Panama).*

IHCIETI: Honduran Institute for Science, Technology and Innovation *(Instituto Hondureño de Ciencia, Tecnología y la Innovación).*

INEP: Brazilian Anísio Teixeira National Institute for Teaching Studies *(Instituto Nacional de Estudos e Pesquisas Educacionais Anísio Teixeira).*

IVIC: Venezuelan Institute of Scientific Research *(Instituto Venezolano de Investigaciones Científicas).*

JAN: Cuban National Accreditation Council *(Junta de Acreditación Nacional).*

JIRI: Joint Initiative for Research and Innovation.

J-TEC: Jamaica Tertiary Education Commission.

MAPES: Colombian Academic Missions for the Promotion of Higher Education *(Misiones Académicas de Promoción de la Educación Superior).*

MESCyT: Dominican Ministry of Higher Education, Science and Technology *(Ministerio de Educación Superior, Ciencia y Tecnología).*

MPPEUCT: Venezuelan Ministry of the People's Power for University Education, Science and Technology *(Ministerio del Poder Popular para la Educación Universitaria, Ciencia y Tecnología).*

OBSMAC: Observatory for Academic and Scientific Mobility *(Observatorio sobre Movilidades Académicas y Científicas).*

OAS: Organisation of American States.

OEI: Organisation of Ibero-American States for Science, Technology and Culture *(Organización de Estados Iberoamericanos para la Ciencia, la Tecnología y la Cultura).*

UN: United Nations

OPSU: Venezuelan Planning Office for the University Sector *(Oficina de Planificación del Sector Universitario de Venezuela).*

OUI: Inter-American University Organisation *(Organización Universitaria Interamericana).*

PAA: Guatemalan Academic Aptitude Test *(Prueba de Aptitud Académica).*

PAEC: Programme of Alliances for Education and Training *(Programa de Alianzas para la Educación y la Capacitación, OEA and Coimbra Group).*

PADES: Mexican Support Programme for Higher Education Development *(Programa de Apoyo al Desarrollo de la Educación Superior).*

PASEM: Support Programme for the Educational Sector in the Mercosur *(Programa de Apoyo al Sector Educativo del Mercosur).*

PECITI: Panamanian Special Programme for Science, Technology and Innovation *(Programa Especial de Ciencia, Tecnología e Innovación).*

PNPC: Mexican National Programme for Quality Postgraduate Courses *(Programa Nacional de Posgrados de Calidad).*

POMA: Academic Orientation and Mediation Test *(Prueba de Orientación y Medición Académica, Dominican Republic).*

PRODEP: Mexican Programme for the Professional Development of Lecturers *(Programa para el Desarrollo Profesional Docente).*

PRONABEC: Peruvian National Scholarship Programme *(Programa Nacional de Becas).*

PSA: Academic Proficiency Test *(Prueba de Suficiencia Académica, Bolivia).*

PSU: University Admissions Test *(Prueba de Selección Universitaria, Chile).*

RAICES: Salvadoran Advanced Network for Science and Education Research *(Red Avanzada de Investigación en Ciencia y Educación Salvadoreña).*

RCI: Colombian Network for the Internationalisation of Higher Education *(Red Colombiana para la Internacionalización de la Educación Superior).*

REDISAL: El Salvador National Registry of Researchers *(Registro Nacional de Investigadores de El Salvador).*

RICYT: Ibero-American and Inter-American Network of Science and Technology Indicators *(Red de Indicadores de Ciencia y Tecnología Iberoamericana e Interamericana).*

RLCU: Latin American University Cooperation Network *(Red Latinoamericana de Cooperación Universitaria).*

RPU: Peruvian University Network *(Red Peruana de Universidades).*

SACES: Colombian Higher Educatio Quality Assurance System *(Sistema de Aseguramiento de la Calidad de la Educación Superior).*

SDSN: Sustainable Development Solutions Network.

SEA-CU: Cuban University Course Assessment and Accreditation System *(Sistema de Evaluación y Acreditación de Carreras Universitarias).*

SEA-D: Cuban Doctorate Assessment and Accreditation System *(Sistema de Evaluación y Acreditación de Doctorados).*

SEA-M: Cuban Master's Programme Assessment and Accreditation System *(Sistema de Evaluación y Acreditación de Maestrías).*

SEGEPLAN: Costa Rican Secretariat of Planning of the Presidency (*Secretaría de Planificación de la Presidencia).*

SEGIB: Ibero-American Secretary General *(Secretaría General Iberoamericana).*

SENACYT: Honduran National Secretariat of Science, Technology and Innovation *(Secretaría Nacional de Ciencia, Tecnología y la Innovación).*

SENACYT: Guatemalan National Secretariat of Science and Technology *(Secretaría Nacional de Ciencia y Tecnología).*

SENACYT: Panamanian National Secretariat of Science and Technology *(Secretaría Nacional de Ciencia y Tecnología).*

SENESCYT: Ecuadoran National Secretariat of Higher Education, Science, Technology and Innovation *(Secretaría Nacional de Educación Superior, Ciencia, Tecnología e Innovación).*

SEP: Mexican Secretariat of Public Education *(Secretaría de Educación Pública).*

SESA: Venezuelan Assessment, Monitoring and Accreditation System *(Sistema de Evaluación, Seguimiento y Acreditación).*

SESu: Department of Higher Education of the Brazilian Ministry of Education.

EDS: European Diploma Supplement.

SHACES: Honduran System of Higher Education Quality Accreditation *(Sistema Hondureño de Acreditación de la Calidad de la Educación Superior).*

SICEVAES: Central American System of Higher Education Assessment and Accreditation *(Sistema Centroamericano de Evaluación y Acreditación de la Educación Superior).*

SINACYT: Peruvian National Science and Technology System *(Sistema Nacional de Ciencia y Tecnología).*

SINAES: Costa Rican National Higher Education Accreditation System *(Sistema Nacional de Acreditación de la Educación Superior).*

SINAES: Brazilian National Higher Education Assessment System *(Sistema Nacional de Avaliação da Educação Superior).*

SINEACE: Peruvian National System for Assessment, Accreditation and Certification of Educational Quality *(Sistema Nacional de Evaluación, Acreditación y Certificación de la Calidad Educativa).*

SNA: Colombian National Accreditation System *(Sistema Nacional de Acreditación).*

SNEA: Bolivian National Secretariat of Assessment and Accreditation *(Secretaría Nacional de Evaluación y Acreditación).*

SNI: Mexican National System of Researchers *(Sistema Nacional de Investigadores).*

SOM: Senior Officials Meeting.

SUNEDU: Peruvian National Superintendence of Education *(Superintendencia Nacional de Educación).*

UCJ: The University Council of Jamaica.

EU: European Union.

UE-ALC: European Union,-Latin America and the Caribbean.

UNAH: National Autonomous University of Honduras *(Universidad Nacional Autónoma de Honduras).*

UNAM: National Autonomous University of Mexico *(Universidad Nacional Autónoma de Mexico).*

UNESCO: United Nations Education, Science and Culture Organisation.

UNICA: Association of Caribbean Universities and Research Institutes.

UTEC: Technological University of Uruguay *(Universidad Tecnológica de Uruguay).*

UWI: University of the West Indies.

EXECUTIVE REPORT

The report, Institutional and regulatory foundations for the establishment of the Euro-Latin American and Caribbean Area for Higher Education, Science, Technology and Innovation is the result of collaboration between the European Union-Latin America and Caribbean Foundation (EU-LAC Foundation) and the Latin American Faculty of Social Sciences in Spain (FLACSO España - University of Salamanca), with the support of the Spanish Government, and with the goal of systematising empirical evidence concerning the factors which promote integration of a bi-regional area for Higher Education, Research, Science and Technology.

The study includes a total of 22 countries across Latin America and the Caribbean, all members of the Community of Latin American and Caribbean States (CELAC) and each with over a million inhabitants. The information arising from the case studies carried out by experts for each of the States has been processed and structured so as to identify commonalities and divergences between the different systems of Higher Education, Science and Technology, in addition to being supplemented with legislative and bibliographic sources. This information is presented and focuses on the subject matter of the study. Additionally, a chapter has been added about the situation of all these subjects in the European Higher Education Area (EHEA).

Drawing on this analysis, the report will incorporate a series of appraisals of the work carried out thus far to progress towards a common bi-regional space and a compilation of recommendations concerning possible future courses of action; these appraisals originate from the team coordinating the production of the report and do not compromise the institutional position of the organisations participating in the process directly or indirectly. It is a question of suggestions derived from the conviction that the implementation of a common bi-regional space will be beneficial for both regions when the time comes for generating human resources and confronting the challenges of global society.

It is necessary for the multiple existing initiatives relating to the implementation of a common bi-regional space to find common ground allowing them to harness their potential. Until now, with the heterogeneity of the publications arising from the various gatherings or projects, we generally do not see any connection, but we do occasionally see sparse concrete plans on how to proceed.

To begin making progress on the task before us, it is a priority that we establish some objectives. The primary aim of a shared bi-regional space must be the elimination of obstacles to the mobility of students, researchers and the administrative staff of higher education institutions, to improve and enrich education and to create research and institutional networks allowing progress to be made in the development of knowledge and skills. When it comes to planning any activity, therefore, the end goal should be borne in mind.

Representatives of the public organisations from the implicated countries need to involve themselves in the process. In progressing towards a common bi-regional space it will be necessary to enact reforms to varying extents in the regulatory corpora (see Chapter 1), and as such it is necessary that official representatives of the States be involved in decision-making, given that it falls on them to determine the success or failure of the process. It would be advisable to educate people about the implementation of the common bi-regional space in the various countries with the aim of having them incorporate into their legislation provisions that facilitate progress; for example, allowing joint degrees with institutions in other States or at least not impeding them. It should be highlighted that this entire process should be carried out within a context of broad university autonomy, providing each university wide scope for decisions.

Another reason that political will is so important is because Latin America and the Caribbean do not have at their disposal a common legislature or an institutional structure at the regional level upon which to base the creation of the bi-regional space, in contrast with the starting point for the European Higher Education Area (EHEA) at the close of the 20th Century. Thus, the states must involve themselves in the creation of these measures. Nonetheless, despite the need for their participation in the project, the design process of the bi-regional space must include the higher education institutions and the affected organisations and collectives.

Two of the most important obstacles to mobility are: lack of trust, and lack of information. The former became evident through the difficulties in implementing the Regional Convention on the Recognition of Studies, Diplomas, and Degrees in Higher Education in Latin America and the Caribbean of 1974 (see Chapter 7). The latter, lack of information, is behind the majority of the points covered in the other chapters and also features in the EHEA's subsequent evaluative reports. As will be seen, a good deal of the recommendations of the text focuses, fundamentally, on seeking to resolve or minimise these two problems.

In this sense, quality accreditation (Chapter 2) is a key point in the creation of a future, common bi-regional space, since it is essential for the involved parties (from the States to the lecturers and students, and the higher education institutions) to be able to rely on compliance with certain standards in all countries and in all the universities, so that studies undertaken in any given location may be recognised in other countries. Hence, the accreditation and evaluation processes based on common ground will prove to be of great help in promoting mobility initiatives and in subsequent recognition of the training or qualifications received. Practically all of the States have implemented quality accreditation and evaluation systems, some of them very recently. Though notable differences certainly exist between countries in Latin America and the Caribbean and those in the EHEA, shared tendencies and points of contact are also evident.

One element in which great variance is seen is the duration of higher education studies, whether undergraduate or post-graduate (Chapter 3). Duration varies between four and six years for undergraduate studies (with an extended duration in Medical studies) and between two and thee years for Master's. Although the variance is once again significant, it can be seen that some countries have begun implementing credit systems as means of organising academic activity. Establishing such a system with common characteristics or for which, at the very least, equivalencies can be determined, will be a beneficial step towards the construction of the common bi-regional space, given that it would facilitate establishing recognition of studies and qualifications between States.

The common bi-regional space would also contribute, by means of cooperation between countries and regions, towards improving the average training of lecturers in Latin America and the Caribbean. The report reflects the forgotten role of lecturers in most of these systems (Chapter 4). Notwithstanding that doctorate training is a process that requires a significant investment of resources; grant programs, mobility or residence programs can prove beneficial, also in promoting the research work of the lecturers, which is generally portrayed as being of little relevance.

Public and private grants to study in other national centres or in other countries are generally focused on postgraduate studies and are far less numerous for undergraduate studies (Chapter 5). Initiatives classifiable as private are plentiful and there is a clear absence of national grant systems in a significant number of cases. The majority of grants do not consider the income level of the applicant. Similarly with student and lecturer mobility initiatives characterised by significant diversity (Chapter 6). And, once again, it is notable that there are a limited number of national programs to promote mobility, whether at a national or international level. Mobility depends, in the majority of cases, on private agreements between institutions, although it is worth noting the existence of a number of networks of universities working on programs for their member institutions. There is also a significant presence from international organisations and companies financing these sorts of programs.

Thus, where grants and mobility assistance programs are concerned, it will not be a question of starting from scratch. There are interesting program experiences and networks of universities or research centres (see chapters 6 and 8) that can serve as inspiration, in addition to clarifying the challenges that a Erasmus-type generalised grant system will face.

Due to the specific dynamic of this process, the most well-established and elitist institutions will initially profit more from the benefits offered by a common bi-regional space, and it is therefore advisable to establish mechanisms preventing any increase in the gap between the educational centres of the various countries. It is a question of preventing a repetition of circumstances that currently exist, such as the absence of national mobility grants, that only allows people and institutions with sufficient finances to participate in foreign exchange programs that introduces a significant element of unequal opportunities. In the same vein, it is important that construction of the common bi-regional space have the requisite economic resources to ensure that parties with fewer means are able to participate in the different initiatives, thus avoiding what is seen in some mobility grant systems, which are used by universities or students who have the means available to finance their residencies abroad.

A final point upon which a common bi-regional space must necessarily act is the recognition of qualifications obtained in other countries (Chapter 7). Currently, this functions by means of bilateral agreements between states and constitutes a long and tedious process. In some cases, there are not even any rules at the national level. The UNESCO 1974 Regional Convention was never implemented, and it would therefore be interesting to plan out a system that can overcome the deficiencies of that instrument and allow facilitation of the procedures. It is a matter of the utmost importance for the fostering of both student and workforce mobility that, once again, would be supported by the implementation of an organisational system of academic activity that enables the establishment of equivalencies or simple comparison between qualifications.

In the construction of the common bi-regional space, the process applied in Europe to implement the EHEA, its innovations, its successful policies and also those that have not yielded the desired results should constitute a valuable experience upon which to draw. It is not a question of a model to be reproduced; as noted, the starting points are very different. However, it is a developed project that may offer possibilities and, simultaneously, be enriched by bi-regional cooperation.

Lastly, institutions like the United Nations Education Science and Culture Organisation (UNESCO), the Organisation of Ibero-American States for Education, Science and Culture (OEI) or the Ibero-American Secretary-General (SEGIB), among others, may prove useful as points of contact between the various institutional actors of Latin America. The heterogeneity of systems for Higher Education, Science, Technology and Innovation of the countries in the two regions to be integrated is at once one of the weaknesses and one of the strengths of the process. The constitution of forums in which the distinct situations can be brought together and exchange experiences and common established standards is fundamental in areas such as the accreditation and evaluation of the quality of institutions and mobility and bursary programs.

When the work began concerning the implementation of the EHEA, many predicted that it would fail as a result of the large differences between the educative and research systems for which current harmonisation is being done. Now it is a reality. The common bi-regional space should be a project that countries should be able to join voluntarily when they consider it appropriate and with the degree of commitment that suits them. It is obvious, however, that the strength of the project will increase as more States participate in it. It is however essential that, if they wish to benefit from the gateway to improved education and research that will be opened up to all implicated countries by the Euro-Latin American and Caribbean Area for Higher Education, Science, Technology and Innovation, that they demonstrate a strong will to participate in the process and begin establishing clear objectives and concrete measures to be under-taken.

INTRODUCTION

The report *Institutional and regulatory foundations for the establishment of the European, Latin American and Caribbean Area for Higher Education, Science, Technology and Innovation* is the result of collaboration between the European Union - Latin America and Caribbean Foundation (EU-LAC Foundation) and the Latin American Faculty of Social Sciences in Spain (FLACSO España-University of Salamanca), with the support of the Spanish Government, to systematise the empirical evidence concerning the factors which promote integration of a bi-regional area for Higher Education, Research, Science and Technology.

The analysis performed aims to become a tool which allows deeper understanding between both regions in this domain and to contribute both to the specialisation of research and to the design of the implementation of interdisciplinary cooperation programs between institutions in the long and short term, thereby favouring implementation of the said common area. For this purpose, a project has been undertaken gathering and structuring information relating to the institutional and legal aspects of Higher Education and of the different state systems for Science, Technology and Innovation.

The Latin American and Caribbean countries included in this study are, in alphabetical order, Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Ecuador, El Salvador, Guatemala, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Dominican Republic, Trinidad and Tobago, Uruguay and Venezuela. In total, 22 States are included, all members of the Community of Latin American and Caribbean States (CELAC) and each with over one million inhabitants; the remaining countries, all of which are smaller in size, have not been taken into consideration due to the limited budget of the project. A special section has been added to this dedicated to examining the same points in the European Higher Education Area (EHEA). The better part of the report corresponds, therefore, to the analysis of systems of Higher Education and Science and Technology in the Latin American and Caribbean States. The European countries have been working on preparatory unification of the components of their systems since 1999. The result, the EHEA, is what is presented here.

In order to collect the material corresponding to each of the States analysed, a questionnaire was designed, structured by different items upon which information was required and which correspond to each of the chapters of this document. With this structure as their starting point, 22 collaborators constructed case studies describing the systems of Higher Education, Science, Technology and Innovation in each of their countries. The selection of these collaborators by FLACSO España-University of Salamanca, took into account the fact that these should be professionals native to the States or who had been resident in

these same for a long period, so as to ensure a closeness and awareness of the situation in the areas under analysis. Based on these reports work began on systematisation of the information provided, such that similarities and differences might be established between the existing systems with the aim of identifying strengths and weaknesses with regards to the implementation of a common bi-regional area.

The document that follows is structured in nine chapters which describe the different constituent parts of the systems of higher education, science, technology and innovation in the 22 countries of the Latin American and Caribbean region and which conclude with a series of remarks or recommendations concerning each of the points aimed at progressing towards the said bi-regional area. The tenth chapter adds to the preceding information an overview of the status of these same aspects in the EHEA.

The first of the chapters, "Regulatory corpus governing Higher Education, Science, Technology and Innovation" conducts a review of the extant bodies of law relating to the subject matter in the 22 States covered. The second, "System of government institutions responsible for Higher Education, Science, , Technology and Innovation", covers the subsidiary bodies of the Executive Branch with powers in these matters, as well as the public agencies not dependent on the State. Additionally, it analyses the agencies for accrediting universities or studies and/or assessment of the teaching staff and qualifications.

The third section, "Analysis of the structure of Higher Education qualifications", proves a key piece of the report. First of all, it offers a description of the primary characteristics of higher education studies by level: undergraduate and postgraduate, and, independently, doctorate studies. It goes on to present a review of the organisational arrangements of academic activity for these studies in the various countries, focusing in particular on credit systems in cases where these have been implemented.

In the fourth chapter, "Regulation of University Teaching", we cover the circumstances of teaching staff in higher education institutions (IES) both public and private, addressing aspects such as required criteria for practice as a lecturer, types of contract and their characteristics or the categories and promotion systems within these same. Grants for the pursuit of studies abroad are the object of analysis in the fifth section, "Public and private scholarship systems for the furtherance of studies abroad", which is complemented by the information contained in the sixth chapter, "Mobility and exchange initiatives for teachers and students at the national and international level".

The seventh chapter, "Description of the system of professional activity of university graduates", includes some of the aspects most relevant to planning the structuring of a common bi-regional area for Higher Education, Science, Technology and Innovation. Thus, on the one hand, we review the requirement of certain criteria to practice certain professions in the various countries; and on the other, the conditions and procedures for recognition and validation of studies pursued abroad.

The eighth chapter focuses on "Analysis of the public and/or private R&D&I financing systems", and the ninth on, "Successful internationalisation experiences in the field of Higher Education, Science, Technology and Innovation", and presents some initiatives or best practices undertaken in each of the countries of the Latin American and Caribbean region. Lastly, the tenth chapter, "The European Higher Education Area", covers the

situation of each of the said points within the EHEA, noting the evolution of this last and its current situation.

As previously indicated, each of the sections involved working with the information derived from the reports created by the experts of each of the 22 States under analysis, subjected to a systematisation and comparison process with the aim of identifying common elements which could serve as a starting point in the drive towards a common area. The sources used throughout the report are, first of all, the 22 reports corresponding to the 22 countries analysed, plus the report dedicated to the EHEA. Secondly, where necessary, we have turned to legislation or to official documents (quality accreditation manuals, reports, etc.) to clarify or define information. Lastly, the bibliographic references employed are indicated at the end of the document.

European Union, Latin America and Caribbean Strategic Association Framework

The implementation of a European, Latin American and Caribbean Area for Higher Education, Science, Technology and Innovation is a necessity recognised years previously and which has made its way onto the agendas of various organisations, governments and institutions. Since the end of the 20th Century, there have been many speeches attempting to spur the various countries towards creating a common area of work and expertise.

In 1999 the Strategic Association between the European Union and the Community of Latin American and Caribbean States was created in the context of the UE-ALC Summit of Heads of State and Government held on the 28th and 29th of June in Rio de Janeiro (Brazil). The Declaration of Rio de Janeiro under item 63, lists as one of the main commitments:[1]

> "To consider the strengthening of educative cooperation as a particular challenge, with particular emphasis on basic education, on professional training and on cooperation between higher education institutions, including universities and distance learning and taking into account the specific needs of our societies. In this context we recollect the successful existing cooperation programs".

From this point onwards, various programs and initiatives were conceived and implemented (ALFA, AlBan, Erasmus Mundus[2]…) specifically aimed at strengthening this cooperation and through which attempts have been made to establish common ground allowing the European Union and Latin America and the Caribbean to move towards joint undertakings, such as the creation of a Common Higher Education Area and the construction of an Area of Expertise in Science, Technology and Innovation.

The 1999 Summit in Rio de Janeiro was followed by those of May 2002 in Madrid (Spain);

1 For more information, see https://eulacfoundation.org/es/documentos/declaraci %C3 %B3n-de-r %C3 %ADo-1999

2 The creation of Erasmus Mundus (formerly Erasmus World) predates 1999. It now forms part of Erasmus + along with other programs.

May 2004 in Guadalajara (Mexico); February 2006 in Vienna (Austria); the summit in Lima (Peru) in 2008; Santiago de Chile (Chile) at the beginning of 2013, and, lastly, the summit held in Brussels (Belgium) in June 2015.

All these meetings have contributed to beginning the process, identifying strengths and weaknesses of the current situations in each of the countries and in each of the regions. After more than 15 years of meetings, the clearest of these strengths is the desire to create a cooperation area; by contrast, the most obvious weakness is the divide between a desire for integration and the diverse and constantly changing situations in reality; thus, it will prove necessary to coordinate concrete mechanisms for coordination and cooperation if the Euro-Latin American and Caribbean Area is to become something tangible. In this great dream, political will is a key factor for the implementation of the required reforms in legislation and institutions.

When 1998 saw the beginning of what was known as the Bologna Process, which would culminate in the creation of the EHEA, many doubted the viability of the project, given that it was starting from very different structures in the Higher Education systems of the countries involved, totally dissimilar teaching policies, or grant systems with no resemblance to one another. Less than two decades later, criteria and common principles have been successfully established allowing, in addition to the creation of the EHEA, the implementation of a European Area of Lifelong Learning (EALL) and a European Research Area (ERA).

The Bologna Process entailed the design of a roadmap for the construction of a EHEA centred on certain principles (quality, mobility, diversity and competitiveness) in order to accomplish two fundamental objectives. The first, was an increase in employment rates across all territories of the European Union, especially in those most afflicted with unemployment. The second, closely linked to the first, was the presentation of the European Higher Education System as something attractive to students and teachers in other parts of the world.

The work undertaken to accomplish these objectives has included the adoption of a structure of similar educational cycles in the various countries and the implementation of a credit system, the European credit transfer and accumulation system (ECTS), which encouraged student mobility between the different EU countries.. To do this, special effort was put into eliminating obstacles that teachers, students and administrative staff may encounter upon transferring to other EU universities.

The process undertaken in Europe may serve as a starting point for the design of convergence projects between the higher education systems of different parts of the world. Given that one of the two regions involved, Europe, is equipped with a Higher Education area, it would seem logical to look to this same when attempting to construct a common bi-regional area, not as a model which must be reproduced, but rather as an already developed process which can bring to the table possibilities and deficiencies, and which can enrich this project while also enriching itself. This was the stance of Raúl Allard (Pontificia Universidad Católica de Valparaíso) in his statement at the First Academic Community Summit of the States of Latin America and The Caribbean - European Union, held in Santiago de Chile in 2013, when he noted that "There is no doubt that Europe, with its evolution towards integration, the European Union, the Bologna Process, and the

creation of basic definitions concerning the university and credit transfer system, is far ahead of Latin America and should be a source of cooperation" (Leiva Lavalle, ed., 2013: 116-117).

A common EU-LAC area presents an even greater challenge, with a large number of countries involved and different ways of understanding education and working within it. For example, we can see the presence of different designs influenced by the past colonists of the States. However, at the same time, it is clear that more and more countries are developing policies in the knowledge that there is a tendency towards unification of criteria, which brings them closer to the starting requirements for a possible common framework, and to vital contact points for the coordination of a joint future.

The implementation of the Bologna Process has demonstrated that an unfavourable starting state can be overcome. Precisely because of the disparate and fragmented situation of higher education in Latin America and the Caribbean, it is vital to identify all elements enabling the adoption of measures geared towards the construction of a common area and, at the same time, to be aware of those which present an obstacle both to the configuration of a common Latin American and Caribbean higher education system and to moving towards implementation of a bi-regional area.

It should be emphasised, however, that the starting conditions in Latin America and the Caribbean are very different to those of the countries that initiated the Bologna Process in 1998. In the various countries of the integration process, the European Union had been equipping itself with an institutional structure that simplified making progress and lending continuity to a project with the nature and scope of the European Higher Education Area. Despite the multitude of initiatives in Latin America and the Caribbean, or perhaps precisely because of them, no institutional structure exists at the regional level to facilitate progress towards a future common area.

Since the Rio de Janeiro Summit, a series of high level meetings have been held between the member countries: On one hand are the Summits of Heads of State and of Government, which are held approximately every two years and which deal with matters related to Higher Education in particular and with the Action Plan in general; on the other, the Ministerial Summits or Meetings (Education Ministers), focused specifically on Higher Education, which are no longer held in the bi-regional context.

One of these meetings, the Ministerial Council of the EU-LAC countries in Paris in 2000, highlighted the need to establish cooperation mechanisms to foster a convergence process which would culminate in a Common Higher Education Area. It was in this meeting that certain specific engagements were established aimed at achieving this goal. Notable among them is the bid made to encourage mobility of students, researchers, teaching staff and administrative personnel, as well as the establishment of mechanisms ensuring recognition of training received abroad. Similarly, the idea was proposed of sharing and publishing successful experiences relating to direction, management, and assessment of Higher Education systems and, additionally, of analysing the educative processes and their relation to the employability of graduates so as to meet the needs of both the labour market and the studenAnother of the agreements reached in this Ministerial Conference consisted of promoting creation of centres of European studies in Latin America and the Caribbean, and of centres Latin American and Caribbean studies in the European

Union. With the aim of monitoring the development of the aforementioned agreements, a monitoring committee was formed with representatives from Europe (Spain and France), Latin America (Brazil and Mexico) and the Caribbean (St Kitts and Nevis), which would also be responsible for preparing an Action Plan for the next biennium.

At the II Summit of EU-LAC Heads of State and of Government, in May 2002, the agreements of the previous summit were ratified and two new objectives were defined to continue progressing towards the common area. The first of these is fostering mobility, an element which was already present at the Paris meeting; the relevance of this was now emphasised, be it intra- or inter-regional, as well as the need to outline some minimum requirements. Secondly, aspects mentioned in the 2000 Conference were reiterated and extended. Bringing together the exchange of experiences and the importance of systems for assessing Higher Education, the need for encouraging and fostering mutual understanding of the different national assessment systems was raised, and for identifying best practices which might serve as a model for implementing effective processes to assess the quality of the systems of Higher Education, Science, Technology and Innovation of the countries involved.

The next meeting, III Summit of EU-LAC Heads of State and of Government in Guadalajara (Mexico) in May 2004, gave rise to two important documents. The first of these is the Declaration of Guadalajara,[3] which asserts the intention to extend the Action Plan by a further four years to create the European, Latin American and Caribbean Common Area for Higher Education, also stating the need to prioritise work on extension of bi-regional mobility to improve the quality of higher education and the social development of all the territories. The second document is the Report on EU-LAC Cooperation, in which a review is made of the accomplishments achieved to date since the Conference of Madrid in the field of cooperation. Moreover, 2005 saw the II Ministerial Conference held in Mexico.

The IV Summit of Heads of State and of Government held in Vienna (Austria) in 2006 saw ratification of the previously adopted engagements and confirmation of the clear commitment to creation of a common area. One year later, the meeting of Education Ministers held in Madrid evaluated the progress made and ratified the agreements of the Vienna meeting.

In 2008, the V Summit, held in Lima (Peru), gave rise to the Declaration of Lima,[4] signed under the rubric "Addressing our peoples' priorities together". Almost ten years after the beginning of the meetings, the signatories ensured that this summit and this declaration gave new impetus to the bi-regional strategic association formed in 1999. The 2010 Madrid Summit or 2013 Santiago de Chile Summit are two new meetings which gave rise to other agreements in favour of cooperation and strengthening of bi-regional relationships.

The VIII Bi-regional Meeting or II UE-CELAC Summit, held in Brussels on the 10th and 11the of June 2015, produced three relevant documents. The first of these documents is the policy declaration "A partnership for the next generation",[5] which reiterated the

3 For more information, see https://eulacfoundation.org/es/documentos/declaraci%C3%B3n-de-guadalajara-2004

4 For more information, see https://eulacfoundation.org/es/documentos/declaraci%C3%B3n-de-lima-2008

5 For more information, see http://www.europarl.europa.eu/intcoop/eurolat/key_documents/summits_eu_alc/2_celac_eu_2015/political_declaration_es.pdf

importance of establishing agreements between the regions and of improving their partnership, "based on historical, cultural and human ties, on International Law, on full respect for human rights, on common values and on mutual interests". The second document is the Declaration of Brussels, whose title "Shaping our common future: working for prosperous, cohesive and sustainable societies for our citizens"[6] offers an image that reaffirms, on one hand, the links between both regions and their inhabitants, and, on the other, the intention to create a shared future to address common problems and coordinate solutions to them.

The third document in the "Action Plan" resulting from this meeting,[7] which contains initiatives and agreements reached in previous meetings, as well as identifying methods and activities whose results may prove positive for developing capacities and responsibilities between the countries. The Plan indicates ten areas where action is needed: science, research, innovation and technology; sustainable development, environment, climate change, biodiversity, energy; regional integration and interconnectivity to foster integration and social cohesion; migration; education and employment to foster social integration and cohesion; the global drug problem; gender issues; investments and entrepreneurship in pursuit of sustainable development; higher education and citizen security.

As can be seen, three out of the 10 areas are directly related to education. Moreover, "science, research, innovation and technology" boasts its own action area, in which it is apparent that the primary objective is the development of an Area of Expertise that includes all the EU and LAC countries. The means of achieving this is the improvement of cooperation mechanisms in research and innovation, in order to create an area in which knowledge is shared and which leaves room for innovation and for traditional knowledge, which must go hand in hand with the creation, maintenance and review of scientific and technological infrastructures and of methods seeking to bridge the digital gap and which tackle exclusion.

With regards to cooperation in the field of science, technology and innovation it should be noted that the dialogue between the two regions has not followed the same path as established for all areas related to higher education. At no point have ministerial meetings been established, although in recent years Senior Officials Meetings (SOM) have been held which have culminated in the Joint Initiative for Research and Innovation (JIRI), an initiative which brings together work groups for which the following main priorities have been set: Bioeconomics, Communication and Information Technologies, Biodiversity and Climate Change, Renewable Energies and Health, along with a group dedicate to subjects of an interdisciplinary nature.

In the V Meeting of Senior Officials in Science and Technology (the aforementioned SOM), held in March 2016 in Brussels (Belgium), the countries present recognised the efforts made thus far in the framework of the initiative and, in turn, declared the need to continue making progress, through a strategic regional alliance, towards an UE-CELAC Common Research Area resting on three pillars: researcher mobility, international propagation of research infrastructures and cooperation on specific topics to address global problems.

---

6 For more information, see https://eulacfoundation.org/es/content/declaraci %C3 %B3n-de-bruselas-segunda-cumbre-ue-celac-10-11-de-junio-de-2015

7 For more information, see http://www.consilium.europa.eu/es/press/press-releases/2015/06/11-eu-celac-summit-brussels-declaration/

With regard to "Education and employment to foster social integration and cohesion", it should be emphasised that the concept of lifelong education/learning, which includes professional training and skills for daily life and work, is at the heart of this rubric. This sort of approach must be accompanied by bi-regional policies aimed to promote job creation with some minimum requirements, to allow progress to be made towards the goal of eliminating poverty, already recognised in the United Nations (UN)[8] Millennium Development Goals in 2000 and again identified as a top priority in the Sustainable Development Goals of 2015.[9]

Finally, the area of "Higher Education" seeks to give new impetus to cooperative relations between European, Latin American and Caribbean states, in order that mobility of students, researchers, lecturers and administrative staff becomes a reality and thus leads to a real exchange of expertise and technology. This is in fact one of the main contributions of the Brussels Summit: incorporation of higher education as a separate chapter in the Action Plan, since prior to this it was included in the section dedicated to "Education and employment to foster social integration and cohesion".

It is not yet possible to carry out an evaluation of this Action Plan, although it is possible to note that, with regard to the various summits and meetings, despite reiteration of the intention to proceed with the creation of this Area for Higher Education, Science, Technology and Innovation bringing together the various national education systems of the European, Latin American and Caribbean countries, there is a large gap between the political discourse and the actions taken to investigate whether or not the proposals are feasible, to investigate the viewpoints of the agents involved or to discover the requirements in the field of higher education in each of the countries.

The starting point for the convergence of the Latin American and Caribbean States is uneven: there are countries whose higher education and teaching quality assessment systems at this level have undergone changes since the 1990s, while in other States these expansion and diversification processes are currently still in their infancy or have not begun. Without a doubt, the consecutive meetings have proved crucial when it came to encouraging these changes enacted in some of the States.

The existence of these significant differences, which clearly represent an element that must be worked on in the convergence project, makes it necessary to identify the actual situation of each of the countries and of their systems of Higher Education, Science, Technology and Innovation. This task will allow discovery of the possibilities and obstacles involved in the construction of a common Higher Education area, bearing in mind that the common heritage and the ties between the two regions represent an advantage when it comes to overcoming the differences. The agreements and action plans emanating from the various meetings held in recent years must be reconsidered and reformulated based on the assessment of the real situation and the relations established between the countries must ensure the implementation of effective and realistic policies.

As of now, some studies have been performed comparing indicators of Higher Education, Science, Technology and Innovation for the various countries, but none of the scope

8 For more information, see http://www.un.org/es/millenniumgoals/poverty.shtml
9 For more information, see http://www.un.org/sustainabledevelopment/es/poverty/

presented here, both in the number of States included and in the topics covered. Among these may be cited Malo's (2005) work on the Bologna Process and Latin America; the various UNESCO-IESALC reports (2004, 2005, 2006, 2008 y 2014) on different aspects related to Higher Education in the region (from more general reports to specific documents on accreditation and quality assessment). Other analyses are those by Cassasus (2000) on education management in Latin America or the study compiled by Luchilo (2010) on postgraduate education.

This report seeks to complete the projects carried out thus far through an analysis of the similarities and differences in the circumstances of the 22 countries studied, so as to allow identification both of common ground which can serve as a starting point, and of relevant discrepancies requiring action to prevent them from becoming obstacles to progress towards a common framework which respects unique characteristics while still contributing to the development of improvements in higher education.

General points

Along with identifying the elements that can serve as starting points for progress towards a common bi-regional area, this report adds a series of appraisals of the steps taken thus far and some suggestions of the work remaining to be done. In all cases, it is a question of evaluations from the report coordination and preparation team; these opinions do not adversely affect the institutional positions of the organisations that, directly or indirectly, have participated in this process. The recommendations stem from the conviction that the implementation of a European, Latin American Area of Higher Education, Science, Technology and Innovation is a project that will be purely beneficial for the two regions.

The primary goal of this project must be to coordinate a bi-regional area in which we see the maximum possible reduction of factors impeding mobility of students, lecturers, researchers and administrative personnel of the IES in order to attain better education and generation of networks between groups and institutions to make progress in the creation of expertise and of capabilities in the search for solutions to the challenges facing modern society. The objectives stemming from this main goal, must necessarily be geared towards attaining it. The agents of this process must identify, therefore, the elements on which action is needed to encourage and facilitate mobility. Certain key elements exist:

- Recognition of studies undertaken abroad. For everything from the subjects taken as part of a mobility program to the qualifications issued, the countries included in this process must formulate a recognition mechanism involving as many states as possible and facilitating these procedures. As will be seen in the report, some failed experiments have already indicated where the main obstacles lie and those for which work will be required.

- Standardisation of qualifications. In order that recognition mechanisms might be established, it is first necessary to understand the characteristics of Higher Education studies, their class load, and their study plans. The implementation of a credits-hours system stands out as a tool for facilitating comparisons and

which is required before we can establish equivalencies between institutions and between countries.

- Quality accreditation. Recognition of studies, design of joint qualifications, creations of university networks for coordinating mobility programs, research groups… All of these rely on confidence between the parties. These mechanisms ensure that the accredited institution or studies meet certain minimum requirements. It is important that the various existing agencies in the Latin American and Caribbean countries work on the design of common standards that equalise the meaning of the accreditation in the different States.

- Implementation of mobility programs and fostering of those which already exist. The multiple existing initiatives must be extensively assessed in order to identify their potential. Additionally, they could allow identification of patterns of home and receiving countries and institutions which could be useful in designing new programmes, especially in order to avoid some actors experiencing difficulties with regards to participating in and benefiting from the opportunities offered by a common bi-regional area.

One of the major weaknesses of the coordination process for a common bi-regional area resides in the diversity of the many existing initiatives. Although referring strictly to the field of Science, Technology and Innovation, Vivian Heyl (Universidad Central de Chile) expressed this sentiment in the First Academic Community Summit of the States of Latin American and The Caribbean – European Union when she stated that "(…) we can see that the proliferation of bodies dealing with this subject has a negative effect on the ability of these fora to obtain concrete results" (Leiva Lavalle, ed., 2013: 207). This same heterogeneity can be seen in some of the documents and publications emerging from the fora, commissions, seminars or meetings in which this common area has been discussed, which are sometimes lacking in concrete joint suggestions on how to move the process forward.

On the other hand, it is essential to involve representatives of the public bodies from the various countries involved in a systematic and sustained way, since they are responsible for the political decisions which will determine whether the creation of the said area is successful or not.

Institutions like the Ibero-American Secretary-General (SEGIB), the Organization of Ibero-American States for Education, Science and Culture (OEI), or the United Nations Education, Science and Culture Organisation (UNESCO), among others, may prove useful as points of contact between the various institutional agents of Latin America. In this sense, the countries comprising the European Higher Education Area (EHEA) can count on organisation and coordination authorities allowing a joint effort to exchange experiences and establish common criteria.

The heterogeneity of systems for Higher Education, Science, Technology and Innovation of the countries in the two regions to be integrated, as well as the diversity of the countries themselves, serves as a starting point which presents a challenge for the process and which may also prove to be one of its most interesting possibilities. It is essential to bear in mind

that this will be a process into which the countries and institutions may opt in gradually based on their capabilities and political will. However, mechanisms must be created to encourage the subsequent inclusion of partners.

The main challenge for a future common bi-regional area is in offering the participating State and institutions guarantees that all the studies undertaken by a person in any given country meet certain quality standards, such that these may be recognised by the parties.

Due to the specific dynamic of this process, the most well-established and elitist institutions will profit more, at first, from the benefits offered by a common area, and it is therefore advisable to establish mechanisms preventing any increase in the divide between the educational centres of the various countries. Lastly, it is important to remember that this entire process should be carried out within a context of broad university autonomy, affording each university great latitude for decisions.

It is important that construction of the common bi-regional space have the requisite economic resources to ensure that institutions or countries with fewer means are able to participate. In this sense, it is also crucial that there be a financing system which allows students and teachers to benefit from the various initiatives arising from the process. It is a question of avoiding the occurrence that has already been seen in some mobility systems where, for example, they are being used mainly by universities or students who already possess the wherewithal to cover these costs.

1. Body of legislation governing Higher Education, Science, Technology and innovation

This chapter offers a general overview of legislation concerning Higher Education, Science, Technology and Innovation in each of the Latin American and Caribbean countries (for the complete legislative relationship, see Table 1). We are dealing with 22 legal texts of varying levels of complexity, detail and development, which in many cases have undergone significant reforms in recent years. Steps towards construction of a bi-regional educative area entail the introduction of reforms of greater or lesser scope to these bodies of legislation, as is evident from the events of the creation and development of the EHEA, which required changes in the legislation of the member states in order to construct a common action framework.

A detailed technical study of the 22 legal systems is beyond the scope of this report due to the complexity of the regulations. General laws are in most cases developed through decrees or ordinances that focus on regulating very specific aspects of the education or science and technology systems. As such, what follows is an aggregated analysis of the various bodies of legislation, and is supplemented by Table 1, which details the principal applicable regulations in each of the States. In preparing this section, each collaborator was asked for a description of the legislation regulating Higher Education, Science, Technology and Innovation in their country, along with appropriate references to this last. In addition, the same information was specifically requested in relation to private higher education institutions.

In order to get a clearer picture of the current situation in the States of the Latin American and Caribbean area, it is essential to bear in mind certain elements. One of these, as has been noted, is related to the recent developments introduced in some cases in the systems of Higher Education, Science, Technology and Innovation. These changes are currently in their early stages, characterised by a high degree of vagueness and still awaiting legislative developments to govern the various aspects and the various agents involved, which makes it difficult to evaluate the said changes. Another relates to the distinct forms of territorial organisation in the States: from federal States with a high degree of decentralisation (such as Argentina or Mexico) to unitary States in which responsibilities in the field are centralised. This gives rise to various degrees of complexity in the legislative designs, which must be present when it comes to implementing the reforms that allow progress to be made in standardising the education and research system

1.1. General legislative framework

The legislative bodies of the countries stem, in almost all cases, from the provisions laid out in each State's Constitution which, in one way or another, reflect in their articles points related to education.[10] By way of an example, consider the 1988 Federal Constitution of Brazil; the Political Constitution of the United States of Mexico; the Constitution of the Bolivarian Republic of Venezuela; the Political Constitution of the Republic of Chile; the 1985 Constitution of the Republic of Guatemala; the 1987 Constitution of Haiti (amended in 2011); the Constitution of the Republic of Honduras (chapter VIII, of the section devoted to Education and Culture); the Constitution of the Republic of Costa Rica; the Political Constitution of the Republic of Nicaragua (art. 58 and part II, arts. 116 to 128); the Statutory Political Constitution of Panama (especially chapter V, arts. 91 to 108); or the Constitution of the Republic of Uruguay (chapter II, arts. 202 and 203).

The guiding principle in many of these texts is recognition of the right to education as a fundamental right of citizens and of the State's duties in this regard. In other cases, the constitutions lay down more detailed provisions regarding higher education, as in the example of university autonomy. From this point of origin, a legislative development is produced through which the Higher Education and Science, Technology and Innovation systems are designed and regulated.

Higher education is either regulated through specific laws in the majority of the States, or through the specific provisions included in general education laws (in the cases of Chile and Mexico). In Cuba and Haiti there is no legislation concerning higher education. In Cuba's case, the regulations are established under the subject of employment. Where Haiti is concerned, there is currently a proposal awaiting discussion by the representatives and senators, apart from which all that can be said to exist are some Transitional Measures approved by the heads of the State University in 1997 relating to the functioning of this last. Neither Costa Rica, nor Guatemala nor Uruguay have higher education laws, a subject which will be covered in the following section.

From the higher education laws, where these exist, or, failing which, independently, arise various regulations, rulings or provisions aimed at implementing the directives of the Executive in the sphere of higher education. In the majority of cases, the ministries of Education (irrespective of their specific names), which are generally the competent bodies in these matters, lay down provisions to organise the functioning of the agents and elements involved in the systems of education at this level. Attention should be drawn to the case of Ecuador, a country sporting some of the most abundant and recent legislation, but where this does not emanate from the Ministry of Education, but rather from the Higher Education Council (*Consejo de Educación Superior, CES*), which, through resolutions and regulations, governs aspects ranging from the careers of university lecturers to recognition of studies pursued abroad, and the quality assurance system.

It is essentially on these two levels, that of education laws and of their subsequent regulatory development, that it will be necessary for governments to act as we move towards a bi-regional education area; these changes will allow the construction of the

10 The exceptions are Jamaica and Trinidad and Tobago, where it should be noted that there are common law systems, following the English tradition, with the peculiarities this entails.

common framework through standardisation of the different existing situations. It should not be overlooked, however, that in some States the constitutions include provisions relating to universities which are in some cases highly concrete and upon which it may be necessary to act.

Besides the legislation, it is apparent that in several countries plans exist for education or educational development, and that these outline specific goals and the mean of attaining them. In this respect, we can point to Brazil's National Education Plan for the decade 2014-2024, Bolivia's National Education Plan or Costa Rica's National Plan for State Higher Education in Universities.

1.2. Legislation concerning public universities

Where regulation on public universities is concerned, three scenarios can be seen in the countries analysed. Firstly, that specific regulation exists governing the topic, be this generally, along with other higher education institutions, or separately. The second is that no regulation exists on the topic (this is the case in Haiti, as previously noted, and even in Cuba, which does not dispose of a law on higher education institutions or a law on universities as such).

The third scenario appears in those countries in which only a single public university exists (or a very limited number). In these States, there is no law on public universities, but rather each is regulated by its own law. This is the case in El Salvador (Decree N.º 597, of 1999, *Ley Orgánica* on the University of El Salvador) and Guatemala (Decree N.º 325, of 1947, *Ley Orgánica* on the University of San Carlos de Guatemala). In Uruguay, the *Universidad de la República*, the only public university until 2013, is regulated by *Ley Orgánica* N.º 12.549, of 1958; the *Universidad Tecnológica*, created in 2012, also has its own law (*Ley Orgánica* N.º 19.043). The situation is the same in Costa Rica.

Once again, the level of legislative development is noticeably different between countries: while some, like Argentina, Ecuador or Panama, to cite a few examples, have regulated aspects such as distance learning or the presence of foreign institutions in the country (this last in Argentina), in other States the regulations are sparse, if they even exist (again, see Cuba and Haiti). Likewise, in countries like Argentina, Ecuador, Panama or Venezuela, specific regulations exist related to the characteristics and validity of higher education qualifications. In addition to the aforementioned, we should note the regulations configuring and establishing different governing bodies for the university systems, such as the Council of Universities in Argentina; the Council of Legal Education in Jamaica or the National Institute of Higher Education in Trinidad and Tobago.

It should be noted that in federal countries the higher education systems can be highly complex and fragmented. The higher education system in Argentina combines two types of institutions (universities and non-university higher colleges). The non-university higher colleges are answerable to the 24 jurisdictional States of the country (23 provinces and the Autonomous City of Buenos Aires) without the existence of any common framework

at the federal level. The university institutions, on the other hand, are autonomous. As such, despite the existence of a Law on Higher Education, many authors do not hesitate to classify the Argentinian system as a two-tier system.

It can be seen that some of the States sport legislation related to the creation and functioning of systems for assessing and accrediting the quality both of institutions and of higher education qualifications (very recent in some cases, as will be detailed in chapter 2). This point demonstrates that interest exists, in a fair number of the countries, in implementing these sorts of quality assurance mechanisms, which would prove beneficial to progress towards a common higher education area given that, as will be seen, these sorts of structures are essential to establishing equivalencies and guaranteeing education standards are similar between members of the aforementioned area.

1.3. Legislation concerning private universities

The majority of the countries analysed possess laws regulating private universities, albeit with varying structures in the various cases. In Cuba, these sorts of institutions do not exist and in Haiti, as mentioned previously, no legislative developments exist concerning education beyond what is laid out in the Constitution and in a project awaiting parliamentary debate. In Argentina, Bolivia, Chile and Guatemala specific provisions exist covering this area (refer to Table 1).

In the remaining cases, the general education laws govern both public and private institutions, although there are specific provisions for these types of universities or specific amendments to the regulations. This is the case for Brazil, with its Law on Guidelines and Foundations of National Education (Law N.º 9.394/1996); Colombia, with its Law 30/1992, which organises the public higher education service; o Ecuador, with its Ley Orgánica on Higher Education of 2010. In Mexico, Paraguay, Peru, the Dominican Republic or Venezuela, both public and private universities share the same regulation.

In some Central American countries, there are councils of all the private universities and these councils issue the provisions dealing with this sort of institution. In this respect, Costa Rica has the National Council of Private Higher Education (Consejo Nacional de Educación Superior Privada, CONESUP); Guatemala has the Council of Private Higher Education (Consejo de la Enseñanza Privada Superior); and Nicaragua has the High Council of Private Universities (*Consejo Superior de Universidades Privadas, COSUP*). In others, such as El Salvador and Honduras, the same regulations that govern public universities are applicable to private universities.

1.4. Legislation concerning science and technology

The majority of the countries analysed possess some sort of legal provision relating to Science and Technology. In most cases, these regulations have the force of Laws (Science and Technology laws). In others, there is no law of this nature as such, but rather the law refers specifically to the regulation of bodies with the powers in these areas, which are, in turn, responsible for formulating, directing, managing, coordinating, implementing and deploying the policies of each of the States. This is the case in Chile (with its law governing the functioning of the National Commission of Scientific and Technological Research) and in Uruguay (with its law on the Uruguay National Agency of Research and Innovation), among others.

Haiti has no regulation in this regard. Cuba, contrary to its higher education situation, does possess a decree law geared towards establishing the policy of the countries Science, Technology and Innovation authorities. In the Dominican Republic, regulation of science and technology is included in the same law as higher education, and, lastly, Trinidad and Tobago also has no law on science and technology as such, but rather includes provisions related to this area in multiple laws. In this regard, it bears noting that the science, technology and innovation systems are often affected by laws or regulations issued by ministries or departments such as Economy or Telecommunications, due to the close relationship and the inherent interconnections with the processes of innovation, transfer of expertise, patents, etc.

Table 1.
Legislation concerning Higher Education, Science, Technology and Innovation.

Country	Legislation
ARGENTINA	• Constitution of the Argentine Nation. • Law 24.521 of Higher Education (1995, with two minor amendments in 2003 and 2015). • Decree N.º 499/95. Regulation of the Council of Universities and other provisions. • Decree N.º 576/96. Regulation concerning private university institutions. • Decree N.º 455/97, on the coordination of the higher education system and the state of the university colleges. • Decree N.º 1.276/96, on the national validity of qualifications. • Decree N.º 3/2000, on the national validity of qualifications. • Decree N.º 705/98, modifying Decree N.º 173/96, on the regulation of the National University Assessment and Accreditation Commission. • Decree N.º 81/98. Regulation on distance learning. • Decree N.º 868/98. Organisational structure of the National University Assessment and Accreditation Commission. • Decree N.º 798/98. Regulation on the duties assumed by national universities according to articles 20 and 21 of Law 24.938 (distribution of credits on the basis of agreements between programs). • Decree N.º 276/99, on the authorisation of foreign universities. • Decree N.º 1.047/99, concerning the request to the Ministry of Education that graduate and postgraduate programmes beyond the scope of the Regional Council for Higher Education Planning (Consejo Regional de Planificación de la Educación Superior, CPRES) be treated as belonging to the university institution. • Decree N.º 1.123/99, on the request for exemption from pre-tax contributions for private university institutions. • Decree N.º 1.232/2001, on university colleges. • Law 25.467, on Science, Technology and Innovation (2001).
BOLIVIA	• Political Constitution of the State. • Education Law 070 Avelino Siñani-Elizardo Pérez (2010). • Estatuto Orgánico on the Bolivian University System (2013). • General Regulation on Private Universities (2013). • Decree N.º 1433. General Regulation on Private Universities (2012). • Law 2.209 on the Furtherance of Science and of Technology and Innovation. • Supreme Decree N.º 29.272. National Development Plan. • Law 164, General Law on ICT Telecommunications.

Country	Legislation
BRAZIL	• Federal Constitution of 1988. • Law N.º 9.394/1996, Law on Guidelines and Foundations of National Education (Ley de Directrices y Bases de la Educación Nacional, LDBEN). • Federal Decree N.º 5.773/2006, on performance of the duties of regulation, monitoring and assessment of higher education institutions and of advanced-level degree courses and upwards in the federal education system. • Law N.º 10.861/2004, establishing the National System of Higher Education Assessment (Sistema Nacional de Evaluación de la Educación Superior, SINAES). • Law N.º 13.243/2016, on Science, Technology and Innovation.
CHILE	• Political Constitution of the Republic of Chile. • Law N.º 20.370, General Law on Education. • Law N.º 18.956, restructuring the Ministry of Public Education. • Law N.º 20.129, on Quality Assurance for Higher Education. • Decree with Force of Law N.º2/2009, establishing the regulation for the founding and regulation of private universities. • Decree 491, of 1971, modifying the Organic Statute on the National Commission for Scientific and Technological Research and sets its consolidated wording.
COLOMBIA	• Political Constitution of Colombia. • Law 30/1992, organising the public Higher Education service. • Law 1.286 of 2009, modifying law 29/1990, on Science, Technology and Innovation. • Decree 2.828/2006, on creation of the National Administrative System for Competitiveness. Document CONPES 3.439/2006.
COSTA RICA	• Constitution of the Republic (art. 84-88). • Law N.º 6.693, of 1981, on creation of the National Council for Private University Higher Education (Consejo Nacional de Enseñanza Superior Universitaria Privada, CONESUP). • Law N.º 7.169, of 1990, Law for the Promotion of Scientific and Technological Development.
CUBA	• Decree Law N.º 323/2015 of the Council of State, establishing the policy for Science, Technology and Innovation bodies.

Country	Legislation
ECUADOR	• Constitution of the Republic of Ecuador. • Ley Orgánica on Higher Education (Ley Orgánica de Educación Superior, LOES) of the 12th of October 2010. • General Regulation on the Ley Orgánica on Higher Education of the 26th of July 2012. • Academic Regulation, approved by the Council of Higher Education in 2013. • Regulation of Careers and Hierarchies for Lecturers and Researchers in the Higher Education System, approved by the Council of Higher Education in 2012. • Resolutions and regulations of the Council of Higher Education (Consejo de Educación Superior, CES) governing various matters within the Higher Education system in Ecuador. • Executive Degree N.º 1.603, of 1994, reorganising the National System of Science and Technology in Ecuador and creating the National Department of Science and Technology (Secretaría Nacional de Ciencia y Tecnología, SENACYT).
EL SALVADOR	• Constitution of the Republic. • General Law on Education (Decree N.º 917), of 1996. • Law on Higher Education (Decree N.º 468), of 2004 (modified in 2013). • Law on Scientific and Technological Development (Decree N.º 234), of 2012.
GUATEMALA	• Constitution of the Republic of Guatemala of 1985. • Law on Private Universities (Decree 82/1987). • Regulations of the Law on Private Universities (1989). • Law for the Promotion of Scientific and Technological Development (Decree 63/1991).
HAITI	• Constitution of 1987 (amended in 2011).
HONDURAS	• Constitution of the Republic. • Law on Higher Education (1989). • Regulation of the Law on Higher Education. • Academic Standards for Higher Education. • Law on Private Universities (1978). • Law for the Promotion and Furtherance of Scientific Technological Development and of Innovation (2014). • Regulation of the Law for the Promotion and Furtherance of Scientific Technological Development and of Innovation (2014)

Country	Legislation
JAMAICA	• Council of Legal Education Act (1974, reformed in 1982). • Education Act (1980). • National Council on Education Act (1993). • University Council of Jamaica Act (1995). • University of Technology, Jamaica Act (1995, amended in 1999). • Council of Community Colleges of Jamaica Act (2001). • National Commission on Science and Technology Act (2007). • Scientific Research Council Act (1960, amended in 2007).
MEXICO	• Political Constitution of the United States of Mexico. • General Education Law (1993, last amended in 2016). • Law on Science and Technology (2002).
NICARAGUA	• Political Constitution of the Republic. • Law N.º 582, General Education Law (2006). • Law N.º 89, Law on the Autonomy of Higher Education Institutions (Ley de Autonomía de las Instituciones de Educación Superior, LAIES) (1990). • Decree N.º 5-95, Creation of the Nicaraguan Science and Technology Council (1995, last amended in 2004).
PANAMA	• Polítical Constitution of Panama. • Law 47/1946, Ley Orgánica on Education (subsequent modifications included in the single text of Executive Decree N.º 305/2004). • Law 52/2015, creating the National Assessment and Accreditation System for the Improvement of Quality of University Education in Panama and repealing Law 30/2006. • Resolution 11/2013, of the Council for University Assessment and Accreditation in Panama, establishing how the annual contribution from private universities to the National Assessment and Accreditation System is allocated and used for the universities which benefited from the extension year following the notification regarding the Council's ruling on institutional accreditation. • Resolution 01/2014, of the National Council for University Assessment and Accreditation in Panama, approving the guide for the pursuance of the Plan for Institutional Improvement of Accredited Universities. • Executive Decree 949/2011 of the Ministry of Education, regulating the functioning of universities and institutions of higher education distance-learning and the implementation distance-learning study plans and programs. • Executive Decree 1.065/2012, of the Ministry of Education, regulating the issuance of qualifications, diplomas and credits.

Country	Legislation
PANAMA	• Executive Decree 103/2012, of the Ministry of Education, specifying the obligatory nature of the self-assessment, external assessment and accreditation procedures. • Law 13/1997, establishing the guidelines and mechanisms for the development of science, technology and research and creating the SENACYT. • Law 50/2005, modifying Law 13/1997, establishing the guidelines and mechanisms for the development of science, technology and research and specifies that the SENACYT is an autonomous institution. • Law 65/2009, creating the national authority for government innovation. • Law 60/2011, compiling and elaborating on the standards applied to the Institute for the Training and Use of Human Resources (Instituto para la Formación y Aprovechamiento de Recursos Humanos, IFARHU).
PARAGUAY	• National Constitution. • Law N.º 4.995/2013 on Higher Education. • Law N.º 1.028/1997, General Law on Science and Technology.
PERU	• Political Constitution of Peru. • Law N.º 30.220/2014, Law on Universities. • Law N.º 28.303/2004, Framework Law for Science, Technology and Technological Innovation. • Law N.º 28.613/2005, Law on the National Council for Science, Technology and Innovation (Consejo Nacional de Ciencia, Tecnología e Innovación, CONCYTEC). • Supreme Decree N.º 032/2007-ED, Single Ordered Text of the Framework Law for Science, Technology and Technological Innovation. • Supreme Decree N.º 20/2010-ED, Regulation of the Single Ordered Text of Law N.º 2.803, Framework Law for Science, Technology and Technological Innovation. • Supreme Decree N.º 06/2012-P-PCM, establishing that the CONCYTEC reports to the President of the Council of Ministers. • Presidential Resolution N.º 184/2015-CONCYTEC-P, formalising the approval of the Regulation of the Qualification and Registry of Science and Technology Researchers within the National System for Science, Technology and Technological Research (Sistema Nacional de Ciencia, Tecnología e Innovación Tecnológica, SINACYT). • Law N.º 30.309/2015, promoting scientific research, technological development and technological innovation.

Country	Legislation
DOMINICAN REPUBLIC	• Constitution of the Dominican Republic. • Law N.º 139/2001, creating the National System of Higher Education, Science and Technology. • Decree N.º 463/2004, establishing the Regulation for Higher Education Institutions. • Regulation for the Evaluation and Approval of Undergraduate-Level Courses (2007). • Postgraduate-Level Regulation for Higher Education Institutions (2008). • Regulation of Higher Technical Level Institutions (2008).
TRINIDAD AND TOBAGO	• Education Act (1966; last amended in 2005). • National Institute of Higher Education Act (1984; last amended in 2000). • Institute of Marine Affairs Act (1976; last amended in 1996). • Caribbean Industrial Research Institute Act (1971; last amended in 1981). • Trinidad and Tobago Bureau of Standards Act (1997).
URUGUAY	• Constitution of the Republic. • Law N.º 18.084/2006, on the creation of a National Research and Innovation Agency (Agencia Nacional de Investigación e Innovación, ANII).
VENEZUELA	• Constitution of the Bolivarian Republic of Venezuela. • Ley Orgánica on Education (2009). • Law on Universities (1970). • General Regulations on Postgraduate Studies for universities and institutions duly accredited by the National Council of Universities (2001). • Ley Orgánica on Science, Technology and Innovation (2010). • Partial Regulations for the Ley Orgánica on Science, Technology and Innovation (2011).

Remarks and recommendations

Remark 1.

Practically all of the countries studied recognise education as a constitutional right; in some cases, they also include much more concrete provisions concerning higher education. From this starting point, comes a development of legislation and regulation based on these fundamental premises. We then observe, in a significant number of the States, a characteristic which must be held at the forefront of out minds when constructing the common bi-regional area: fragmentation of regulation. In some cases, we are faced with countries which, due to possessing only one or very few public universities, have no law on higher education or law on universities, but rather a unique ley orgánica (or other legal instrument) governing each institution. In others, like Argentina, the combination of various factors (distribution of competences, types of higher education institution and historical and legislative evolution) make it possible to go as far as labelling the higher education system as a binary system, with one system for universities and another for the various other tertiary-level higher education institutions. Whatever the causes may be, the result is a fragmentation of criteria and modus operandi, even within individual States.

Recommendation.

To implement the common bi-regional area it will prove necessary to adapt existing rules and regulations in the various countries, and as such it is essential that official representatives of these last be involved in the decision-making process. The Declaration of Santiago (2013) already made reference to this point when it proposed implementing the European and Latin American Area of Higher Education, Science, Technology and Innovation by "creating the necessary regulatory and financial conditions".

It is essential that the States recognise that the implementation of the creation process for the common bi-regional area will require that they incorporate into their various legislations provisions facilitating the developments. The reality is that we find ourselves faced with more than twenty national regulatory bodies (which may additionally be internally fragmented) which must in one form or another move towards a standardised legislature. Given that in some countries the legislation covering the matters in question is restrictive, including at constitutional level, it is vital to seek formulas allowing construction of the foundations of the future common bi-regional area. One starting point could be bilateral collaboration between universities. On another note, given the regulatory powers of university councils or of individual universities, these should be an active part of the creation process for the area.

Recommendation.

It is critical to identify which laws or regulations open the door to internationalisation of the higher education system and which may frustrate the process. The situation of joint degrees with other countries is an excellent example of this point. In practically all of the States there exist joint degrees with foreign universities. In a fair number of cases, these are agreements between one university and another, and no explicit regulation exists. However, in cases in which general regulations do exist in this area, approaches can vary wildly.

Paraguay, for example (resolution 166/2015 of the National Council for Higher Education (*Consejo Nacional de Educación Superior, CONES*), regulating Law N.º 4.995/2013 on Higher Education), allows joint degrees between national universities or between national and foreign universities, so long as the CONES itself approves the training programme. The Dominican Republic (Postgraduate-Level Regulation for Higher Education Institutions, 2008) also provides for the possibility of establishing joint degrees with institutions in other countries so long as the programme complies with the requirements of the National Council for Higher Education, Science and Technology. These are two examples which allow progress to be made in the internationalisation process through agreements between universities.

Panama also allows joint degree programmes, but the conditions for initiating them have tightened: prior to Law 52 coming into force in 2015, in order to establish a joint degree, one was only required to sign an agreement between institutions; now, however, the foreign university concerned must register in the country according to the same process as the National Council of Panama for University Assessment and Accreditation required of private universities. This change in conditions can prove to be a disincentive when it comes to attempting to design these joint degrees.

In order to identify what sort of legislation could prove beneficial or detrimental to progress towards the common bi-regional area, consideration could be given to holding a forum or meeting between the policy-makers, advisors and experts of some of the countries in the EHEA. The could reveal, first hand, what a project of this nature entails at the legislative level, what sort of provisions it was necessary to modify, and which ones proved beneficial to the process.

Recommendation.

Although collaborations between universities would serve as a starting point and seem ideal early on, the implementation of a common bi-regional area requires legislative instruments of a regional or sub-regional nature in the medium- and long-term. This is a significant difference between Latin America and the Caribbean and the situation of the countries in the European Union when they undertook construction of the EHEA (the same holds true for the institutional system, as will be seen in the next chapter). These sorts of agreements will allow another step to be made beyond the bilateral agreements (between institutions or even between states) towards regulatory frameworks facilitating dialogue between regions. Although not all the States of Latin America and the Caribbean are members of it, one example could be the Andrés Bello Agreement, an international, intergovernmental organisation seeking to develop the educational, scientific, technological and cultural development of its member states. The current member states are, Bolivia, Chile, Colombia, Ecuador, Spain, Panama, Paraguay, Venezuela and Cuba (Argentina is currently in the process of joining).[11]

11 More information available at http://www.convenioandresbello.org

2. System of government institutions responsible for Higher Education, Science, Technology and Innovation

Once we have identified the key legislation in the field of Higher Education, Science, Technology and Innovation in the countries studied, it is essential to understand their institutional design. Thus, what follow are brief descriptions of the aspects related to the bodies subsidiary to the Executive Branch (whatever their rank); other bodies, such as the higher councils for education or similar; as well as the public agencies which are not subsidiaries of the government but which also form part of the institutional system. Lastly, we analyse in particular detail the quality accreditation agencies and the processes for assessing and accrediting institutions and courses.

In order to understand the system of government institutions with authority in these matters, information was requested on the bodies subsidiary to the Executive Branch and on their authorities and functions. Moreover, a series of questions were included relating to other public agencies or bodies, in particular, those responsible for accreditation of institutions, qualification and lecturers in higher education.

With regards to accreditation agencies, specific information was collected, organised into three sections: accreditation of universities, of university qualifications and of lecturers in higher education. For all of the above, information is required on the following aspects:

- How long the accreditation agency (be it of universities, qualifications, or lecturers) has existed.
- Territorial jurisdiction of the agency.
- Requirements for attaining accreditation.
- Regularity of calls to apply for accreditation.
- Average response time for the agencies.
- Limitations on accreditation in the case of a negative report.

This chapter concludes with a description of the systems of academic organisation that exist in each of the countries (faculties, departments, etc.), as well as the selection systems for the principal academic authorities in the higher education institutions.

2.1. System of government institutions

Each of the countries possesses a ministry, secretary-general, or equivalent, responsible for education. In the majority of cases, this ministry has authority over all levels of education, from primary up to higher education, with any departmental divisions for the different levels involved existing within the said ministry. The Dominican Republic, however, possesses a ministry dedicated exclusively to Higher Education (alongside Science and Technology).

Authority over Science, Technology and Innovation falls in some of the countries on the ministries of Education themselves (delegated to a secretariat or vice-secretariat), while, in the other cases, these sorts of policies are in the hands of a separate ministry. In any case, the institutional design shows an approach in which higher education and the development of science, technology and innovation are closely related and complementary elements, as is inevitably the case.

Conversely, few bodies or public agencies exist that are not subsidiary to the Executive, with the exception of those dedicated to quality accreditation, which will be examined in detail in the next section. Two examples are Uruguay's National Agency for Research and Innovation (Agencia Nacional de la Investigación y la Innovación, ANII) and Mexico's National Council for Science and Technology (Consejo Nacional de Ciencia y Tecnología de Mexico, CONACYT). The following table summarises the institutional system responsible for the aspects relevant to this report in the 22 countries analysed.

Table 2. Institutions responsible for Higher Education, Science, Technology and Innovation.

Country	Institutions
ARGENTINA	• Ministry of Education. • Council of Universities (which assembles representatives of the National Inter-University Council, the Council of Deans of Private Universities, the Regional Councils of Higher Education Planning and the Federal Council of Education). • Ministry of Science, Technology and Productive Innovation. • National Council of Scientific and Technical Research. • Federal Council for Science, Technology and Innovation *(Consejo Federal de Ciencia, Tecnología e Innovación, COFECYT).* • National Agency for the Promotion of Science and Technology *(Agencia Nacional de Promoción Científica y Tecnológica*, ANPCyT). • Inter-Institutional Council of Science and Technology *(Consejo Interinstitucional de Ciencia y Tecnología, CICYT).* • Advisory Committee for the National Plan for Science, Technology and Innovation. • National Commission for University Quality Assessment and Accreditation *(Comisión Nacional de Evaluación y Acreditación de la Calidad Universitaria, CONEAU).*

BOLIVIA	• Ministry of Education (including a Deputy Ministry for Science and Technology). • Bolivian University Executive Committee (Comité Ejecutivo de la Universidad Boliviana, CEUB). • National Conference of Universities. • Bolivian National Council for Science and Technology (Consejo Nacional de Ciencia y Tecnología de Bolivia, CONACYT).
BRAZIL	• Ministry of Education, which encompasses the Secretariat of Higher Education; the Coordination for Higher Education Staff Development (CAPES); the National Council for Education (CNE); and the Anísio Teixeira National Institute for Educational Studies (INEP). • Ministry for Science, Technology and Innovation, which includes the National Council for Scientific and Technological Development (CNPq); the Projects and Studies Financing Body (FINEP); and the Brazilian Institute of Information in Science and Technology (IBICT).
CHILE	• Ministry of Education *(Under-Secretariat of Education; Higher Education Division).* • National Council for Education. • National Accreditation Commission *(Comisión Nacional de Acreditación, CNA).* • Council of Deans of Chilean Universities *(Consejo de Rectores de Universidades Chilenas, CRUCH).* • National Commission for Scientific and Technological Research *(Comisión Nacional de Investigación Científica y Tecnológica CONICYT).* • National School and Scholarship Assistance Council.
COLOMBIA	• Ministry of National Education (within which, the Deputy Ministry of Higher Education). • National Council for Higher Education *(Consejo Nacional de Educación Superior, CESU).* • National Council for Science and Technology *(Consejo Nacional de Ciencia y Tecnología, CNCyT).* • Administrative Department for Science, Technology and Innovation (Departamento Administrativo de Ciencia, Tecnología e Innovación, COLCIENCIAS).
COSTA RICA	• Ministry of Public Education. • National Council of Deans (Consejo Nacional de Rectores, CONARE). • National Council for Private University Higher Education (Consejo Nacional de Enseñanza Superior Universitaria Privada, CONESUP). • National Higher Education Accreditation System (Sistema Nacional de Acreditación de la Educación Superior, SINAES). • Ministry of Science, Technology and Communications. • National Centre of High Technology. • National Council for Scientific and Technological Research (Consejo Nacional para Investigaciones Científicas y Tecnológicas, CONICYT).

CUBA	• Ministry of Higher Education. • Ministry of Science, Technology and the Environment (Ministerio de Ciencia, Tecnología y Medio Ambiente, CITMA).
ECUADOR	• Secretariat of Higher Education, Science, Technology and Innovation (Secretaría de Educación Superior, Ciencia, Tecnología e Innovación, SENESCYT), including the Under-Secretary-Generals of Higher Education, and of Science, Technology and Innovation. • Council of Higher Education (Consejo de Educación Superior, CES). • Council for Assessment, Accreditation and Quality Assurance of Higher Education in Ecuador (Consejo de Evaluación, Acreditación y Aseguramiento de la Calidad de la Educación Superior del Ecuador, CEAACES).
EL SALVADOR	• Ministry of Education (with vice-ministries of Education and of Science and Technology). Includes the national directorates for Higher Education, for Research in Science, Technology and Education and for Education in Science, Technology and Education. • National Council of Deans of El Salvador *(Consejo Nacional de Rectores de El Salvador, CONARES).* • National Council for Science and Technology *(Consejo Nacional de Ciencia y Tecnología, CONACYT).* • El Salvador National Registry of Researchers *(Registro Nacional de Investigadores de El Salvador, REDISAL).* • Salvadorian Advanced Network for Science and Education Research *(Red Avanzada de Investigación en Ciencia y Educación Salvadoreña, RAICES).* • Commission for Higher Education Quality Accreditation.
GUATEMALA	• Council of Private Higher Education (CEPS): body responsible for ensuring that the academic level of private universities is maintained. • National Secretariat for Science and Technology (Secretaría Nacional de Ciencia y Tecnología, SENACYT). • National Council for Science and Technology *(Consejo Nacional de Ciencia y Tecnología, CONCYT)*: tripartite body, consisting of the public, private and academic sectors.
HAITI	• Ministry of National Education and of Professional Development (which includes the Directorate of Higher Education and Research).
HONDURAS	• Directorate of Higher Education. • Honduras National Autonomous University *(Universidad Nacional Autónoma de Honduras, UNAH).* • National Secretariat of Science, Technology and Innovation *(Secretaría Nacional de Ciencia, Tecnología y la Innovación, SENACYT)*. • National Council for the Furtherance of Science, Technology and Innovation *(Consejo Nacional de Fomento de la Ciencia, la Tecnología y la Innovación, CONFOCITI).* • Honduran Institute of Science, Technology and Innovation (Instituto Hondureño de Ciencia, Tecnología y la Innovación, IHCIETI). • Honduran System of Higher Education Quality Accreditation *(Sistema Hondureño de Acreditación de la Calidad de la Educación Superior, SHACES).*

JAMAICA	• Ministry of Education. • National Council for Education. • Jamaica Tertiary Education Commission (J-TEC). • Ministry of Science, Technology, Energy and Mining. • The University Council of Jamaica (UCJ).
MEXICO	• Secretariat of Public Education (Secretaría de Educación Pública, SEP). • National Association of Universities and Higher Education Institutions *(Asociación Nacional de Universidades e Instituciones de Educación Superior, ANUIES)*. • Consortium of Mexican Universities *(Consorcio de Universidades Mexicanas, CUMex).* • Inter-Institutional Committees for the Assessment of Higher Education *(Comités Interinstitucionales para la Evaluación de la Educación Superior, CIEES).* • Council for the Accreditation of Higher Education *(Consejo para la Acreditación de la Educación Superior, COPAES).* • National Council for Science and Technology *(Consejo Nacional de Ciencia y Tecnología, CONACYT).*
NICARAGUA	• National Council for Education *(Consejo Nacional de Educación, CNE)*. • National Council of Universities *(Consejo Nacional de Universidades, CNU).* • High Council of Private Universities *(Consejo Superior de Universidades Privadas, COSUP).* • National Federation of Private Universities *(Federación Nacional de Universidades Privadas, FENUP).* • National Council of Deans. • National Assessment and Accreditation Council *(Consejo Nacional de Evaluación y Acreditación, CNEA).* • Nicaraguan Science and Technology Council *(Consejo Nicaragüense de Ciencias y Tecnología, CONICYT).*
PANAMA	• Ministry of National Education. • Council of Deans of Panama. • National System of Assessment and Accreditation for the Improvement of the Quality of University Higher Education in Panama, whose executive body is the CONEAUPA. • National Secretariat of Science, Technology and Innovation *(Secretaría Nacional de Ciencia, Tecnología e Innovación, SENACYT).* • Institute for the Training and Use of Human Resources *(Instituto para la Formación y Aprovechamiento de Recursos Humanos, IFARHU)*

PARAGUAY	• Ministry of Education and Culture (Viceministry of Higher Education). • National Council for Higher Education *(Consejo Nacional de Educación Superior, CONES).* • National Council for Science and Technology *(Consejo Nacional de Ciencia y Tecnología, CONACYT).* • National Agency for the Assessment and Accreditation of Higher Education *(Agencia Nacional de Evaluación y Acreditación de la Educación Superior, ANEAES).*
PERU	• Ministry of Education. • National Superintendence for University Higher Education *(Superintendencia Nacional de Educación Superior Universitaria, SUNEDU).* • National Council for Science, Technology and Technological Innovation *(Consejo Nacional de Ciencia, Tecnología e Innovación Tecnológica, CONCYTEC).* • National Science and Technology System *(Sistema Nacional de Ciencia y Tecnología, SINACYT).* • National System of Assessment, Accreditation and Certification of Educational Quality *(Sistema Nacional de Evaluación, Acreditación y Certificación de la Calidad Educativa, SINEACE).*
DOMINICAN REPUBLIC	• Ministry of Higher Education, Science and Technology *(Ministerio de Educación Superior, Ciencia y Tecnología, MESCyT),* including viceministries for Higher Education, for Science and Technology and for Assessment and Accreditation of HEIs, among others. • National Council for Higher Education, Science and Technology *(Consejo Nacional de Educación Superior, Ciencia y Tecnología, CONESCyT)*.
TRINIDAD AND TOBAGO	• Ministry of Education (which also covers Science, Technology and Innovation policy). • National Commission of Higher Education. • National Institute of Higher Education. • The Accreditation Council of Trinidad y Tobago (ACTT).
URUGUAY	• Ministry of Education and Culture. • National System of Public Education. • University of the Republic. • Private Tertiary Education Advisory Board. • National Research and Innovation Agency *(Agencia Nacional de Investigación e Innovación, ANII).*
VENEZUELA	• Ministry of the People's Power for University Education, Science and Technology *(Ministerio del Poder Popular para la Educación Universitaria, Ciencia y Tecnología, MPPEUCT).* • National Council of Universities *(Consejo Nacional de Universidades, CNU).* • Assessment, Monitoring and Accreditation System *(Sistema de Evaluación, Seguimiento y Acreditación, SESA).* • Council for Scientific and Technological Development *(Corporación para el Desarrollo Científico y Tecnológico, CODECYT).*

It is important to highlight that, despite the fact that all of the countries have a ministry or secretary of Education, in three Central American countries (Guatemala, Nicaragua and Honduras) these do not have authority over higher education, with legislation and management of this last left to councils or directorates. Nor does Uruguay's Ministry of Education and Culture have political power over public higher education; its powers are limited to regulation of private university institutions and always at the request of these last. In this sense, the University of the Republic and the Technological University are not answerable to the Executive, but rather are autonomous and co-administered institutions which coordinate activities in the National System of Public Education.

In the case of Argentina, it is also notable that the Ministry of Education and Sport has very limited powers, although in this case for a different reason. The distribution of powers between the Federal Government and the 23 provincial governments, combined with university autonomy, has the effect that, as will be seen throughout this report, little regulation exists on higher education which is effective over the entire territory.

With regard to institutional structures related to Science, Technology and Innovation, only Haiti lacks bodies responsible for its management and regulation, at any level. Additionally, authority within these spheres sometimes spills over to the ministries responsible for Industry or Economy, especially where patents are concerned.

2.2. Quality accreditation in Latin American and Caribbean countries

The majority of countries in Latin America and the Caribbean now have quality accreditation systems. Details of these systems vary (whether or not they are answerable to the Executive Branch, their powers or elements related specifically to the assessment and accreditation processes, which will be detailed later), however, en general terms, a single method of working is seen. Haiti and Bolivia are the exception, as neither has any accreditation or assessment system.

In Bolivia, accreditation of the quality of higher education is an unresolved matter, despite the efforts made to attempt to regulate it (for example, the National System of Academic Quality Measuring, the National Academic Council for Higher Education or the National Council of Higher Education Accreditation). At the close of 2008, the National Commission for Accreditation of University Courses was created. The current Law on Education provides for the creation of a Multinational Agency for the Assessment and Accreditation of Higher Education (*Agencia Plurinacional de Evaluación y Acreditación de la Educación Superior, APEASU*), but this is not operational. The Bolivian University System turns to foreign agencies to obtain recognition, with the support of the Executive Committee of the Bolivian University (CEUB), through the National Secretariat of Assessment and Accreditation (*Secretaría Nacional de Evaluación y Acreditación, SNEA*), which also supports and facilitates accreditation for the Mercosur.

Uruguay has a Private Tertiary Education Advisory Board, which issues non-binding rulings on the operating licences of private institutions. In the same vein, the Council of

Private Higher Education (*Consejo de la Enseñanza Privada Superior, CEPS*) in Guatemala is responsible for authorising the commencement of functioning of new private universities, but it is not a quality accreditation agency. For all aspects of quality accreditation related to public institutions, both Uruguay and Guatemala rely on supranational agencies.

Table 3.
State bodies or agencies responsible for quality accreditation.

Public bodies or agencies not answerable to the Executive Branch			
COUNTRIES	**AGENCY**	**YEAR**	**POWERS**
ARGENTINA	National Commission for University Quality Assessment and Accreditation (Comisión Nacional de Evaluación y Acreditación de la Calidad Universitaria, CONEAU).	**1995**	• HEIs • Courses • Private accreditation agencies
CHILE	National Accreditation Commission (Comisión Nacional de Acreditación, CNA).	**2006**	• HEIs • Courses • Private accreditation agencies
COSTA RICA	National Higher Education Accreditation System (Sistema Nacional de Acreditación de la Educación Superior, SINAES).	**1999**	• Courses
ECUADOR	Council for Assessment, Accreditation and Quality Assurance of Higher Education in Ecuador (Consejo de Evaluación, Acreditación y Aseguramiento de la Calidad de la Educación Superior del Ecuador, CEAACES).	**2011**	• HEIs • Courses
EL SALVADOR	Commission for Higher Education Quality Accreditation (Comisión de Acreditación de la Calidad de la Educación Superior, CdA).	**2000**	• HEIs
HONDURAS	Honduran System of Higher Education Quality Accreditation (Sistema Hondureño de Acreditación de la Calidad de la Educación Superior, SHACES).	**2011**	• HEIs • Courses
JAMAICA	The University Council of Jamaica (UCJ).	**1987**	• HEIs • Courses

MEXICO	Federation of Mexican Private Higher Education Institutions.	-	• Private HEIs
	Inter-Institutional Committees for the Assessment of Higher Education (Comités Interinstitucionales para la Evaluación de la Educación Superior, CIEES).	**1991**	• HEIs (functions) • Courses
	Council for the Accreditation of Higher Education (Consejo para la Acreditación de la Educación Superior, COPAES).	**2001**	• CIEES
	National Council for Science and Technology (Consejo Nacional de Ciencia y Tecnología, CONACYT).	**1970**	• Courses (postgraduate) • Lecturers
NICARAGUA	National Assessment and Accreditation Council (*Consejo Nacional de Evaluación y Acreditació*n, CNEA).	**2011**	• HEIs • Courses • Private accreditation agencies
PARAGUAY	National Agency for the Assessment and Accreditation of Higher Education (*Agencia Nacional de Evaluación y Acreditación de la Educación Superio*r, ANEAES).	**2003**	• HEIs • Courses
PERU	National System of Assessment, Accreditation and Certification of Educational Quality (*Sistema Nacional de Evaluación, Acreditación y Certificación de la Calidad Educativa,* SINEACE).	**2006**	• HEIs • Courses • Private accreditation agencies
TRINIDAD AND TOBAGO	The Accreditation Council of Trinidad and Tobago (ACTT).	**2004**	• HEIs • Courses

Authorities answerable to the Executive Branch			
BRAZIL	Comissão Nacional de Avaliação da Educação Superior (CONAES). SESu: Department of Higher Education of the Brazilian Ministry of Education.		• HEIs • Courses
CUBA	National Accreditation Council (*Junta de Acreditación Nacional*, JAN).		• HEIs • Courses
COLOMBIA	National Accreditation System (*Sistema Nacional de Acreditación*, SNA).		• HEIs • Courses
PANAMA	National Council of University Assessment and Accreditation in Panama (*Consejo Nacional de Evaluación y Acreditación Universitaria de Panama*, CONEAUPA).	**2006**	• HEIs • Courses
DOMINICAN REPUBLIC	Vice-ministry of Assessment and Accreditation of HEIs.		• HEIs • Courses
VENEZUELA	Assessment, Monitoring and Accreditation System (*Sistema de Evaluación, Seguimiento y Acreditación*, SESA).	**2013**	• HEIs • Courses
URUGUAY	Private Tertiary Education Advisory Board.		• HEIs • Courses

Table 4.
Regional organisations or agencies responsible for quality accreditation.

COUNTRIES	AGENCY	YEAR	POWERS
Universities attached to the Central American University Higher Education Council (Consejo Superior Universitario Centroamericano, CSUCA) (Guatemala, Belize, Honduras, Nicaragua, Costa Rica, Panama and Dominican Republic).	Central American Higher Education Assessment and Accreditation System (*Sistema Centroamericano de Evaluación y Acreditación de la Educación Superior*, SICEVAES).	**1998**	• HEIs • Courses
Guatemala, Honduras, El Salvador, Nicaragua, Costa Rica y Panama.	Association of Private Universities of Central America (*Asociación de Universidades Privadas de Centroamérica*, AUPRICA).	**1990**	• HEIs • Courses
Guatemala, Belice, El Salvador, Honduras, Nicaragua, Costa Rica and Panama.	Central American Higher Education Accreditation Council (*Consejo Centroamericano de Acreditación de la Educación Superior*, CCA).	**2002**	• Private accreditation agencies
Argentina, Brasil, Paraguay, Uruguay, Bolivia, Chile, Colombia, Venezuela	Regional Accreditation System for University Courses in Mercosur Member States and Associated States (*Sistema de Acreditación Regional de Carreras Universitarias de los Estados Partes de Mercosur y Estados Asociados*, Arcusur).	**2008**	• Courses
Central American countries (public universities and some private).	Central American Postgraduate Accreditation Agency.	**2006**	• Postgraduates

In the following pages, we will perform a thorough analysis of the situations of accreditation and quality assessment systems in Latin America and the Caribbean. As may be noted from the table, we distinguish two waves of implementation: the first wave, before the turn of the century (Argentina, Jamaica, Brazil and Mexico); the second, from the year 2000 to the present day. Moreover, we see that, except in the case of Costa Rica, El Salvador and Mexico, all the accreditation systems assess the quality of both institutions as a whole and of programmes. Thus far, only Mexico has implemented mechanisms for accrediting university teaching staff. Peru provides for the accreditation of lecturers through SINEACE, which already accredits other professions, although currently no legislative developments exist in this regard.

Before moving to a more detailed study of these systems, it is important to underline two elements of note. The first is the presence of private accreditation agencies in some countries. In fact, one of the functions of the accrediting agencies or bodies, in some cases, is assessing whether these sorts of private bodies meet the minimum operating requirements. In Chile, they perform accreditation of undergraduate and postgraduate courses, always with the authorisation of the country's National Accreditation Commission. Currently there are seven agencies authorised to operate. Private agencies are also present in some Central American countries and in Argentina; Peru, in turn, provides for the SINEACE contracting private companies to accomplish the system's goal.

The second element relates to the existence of quality accreditation mechanisms or agencies at the regional level. One example already mentioned: that of Mercosur for Bolivia. However, the majority of these accreditation systems are concentrated in Central America. In addition to the accreditation systems alluded to in the table, other entities exist at a more sectoral level:

- Central American Accreditation Agency for Higher Education in the agro-alimentary and natural resources sector (2005).
- Central American Agency for Accreditation of Architecture and Engineering Programmes (2006).

Once again, it should be noted that some of these accreditation systems are very recent and are still in the process of defining themselves. One example is Honduras: the SHACES was created in 2011 and in 2013 it published its Manual on Accreditation of Institutions and Accreditation of Higher Education Courses in Honduras. Up to that point, however, all that was seen was accreditation of universities and courses in the regional bodies (for example, CSUCA-SICEVAES or AUPRICA).[12]

12 More information can be found in the SHACES Manual (2013), available at https://autoevaluacion.unah.edu.hn/gestordocumentos/15

2.2.1. Accreditation of higher education institutions

As noted above, the majority of Latin American and Caribbean countries have bodies for quality accreditation of their higher education institutions. All the systems are at the national level (with the exception of those previously mentioned which operate at a regional level, like that of Mercosur or those for Central America). Specific mention must be made of the case of Mexico, one of the most complicated accreditation systems. As noted by Rodríguez Andujo, López Díaz, Arras Vota and Basante Butrón (2009: 4), "currently, no law exists obliging higher education institutions to be externally assessed, much less to heed the recommendations given in the assessments". Mexico does not have any legislation in this regard, nor any system at the national level, but rather we can see that various instruments exist, created over time through agreements between universities and the Federal Government. Additionally, in this case, accreditation is voluntary.

What follows is an outline of the primary characteristics of the systems for accreditation of higher education institutions in the countries of Latin America and the Caribbean that have them. For each case, information is given on the access requirements for accreditation; the elements analysed; the calls for applicants or other aspects which may prove of interest to the objective of this work: establishing a general overview of the higher education situation in Latin America and the Caribbean, covering the similarities and differences between countries. As has been mentioned previously, Haiti, Bolivia and Guatemala do not have quality accreditation systems, in Uruguay only private universities are accredited, and in Mexico a large number of agencies and criteria exist, which makes it difficult to establish general trends.

Table 5.
Organisations or agencies responsible for accreditation of Higher Education institutions.

Country Body	Phases	Elements
ARGENTINA CONEAU	• Self-Assessment. • External peer-assessment.	• Technology production and transfer. • Management and government (national universities). • Human resources. • Infrastructure and material resources. • Library, information and computing services.
BRAZIL SESu CONAES	• Prerequisites. • Assessment in situ. • Deliberation.	• Institutional history. • Academic activities. • Creation of expertise. • University extension programmes. • Programmes for optimisation of graduate and postgraduate courses. • Scientific, technical, professional or teaching initiation programmes. • Popular and cultural activities. • Library. • Career planning for functional, teaching, technical and administrative staff and professional development policy. • Compliance with employment law. • National and international cooperation with institutionalised programmes. • Academic qualification of the institution management. • Oversight and remedial measures.
CHILE CNA	• Self-Assessment. • External assessment (committee of peers).	• Continuous operation over the last five years. • Compliance with the information requirements of the National System of Higher Education Information. • No sanctions in the last five years for failing to comply with the Higher Education regulations. • Reporting on its academic offerings. • Accreditation of at least 25 % of undergraduate and postgraduate programmes.

Frecuency	Duration	Limitations
Six years (external assessment)..	One year.	• None exist by CONEAU proposals are ancluded
University faculties and centres: three years. Universities: five years.	One to three years	• Non-university: may be accredited as a university centre. • Non-university centre: may be accredited as a faculty.
N. C.	Approx. six months.	• Two years before making a new request.

Country Body	Phases	Elements
COLOMBIA ACES y CNA	• Self-Assessment • External assessment (committee of peers).	• Funcionamiento continuado durante los últimos cinco años. • Cumplimiento de los requerimientos de información del Sistema Nacional de Información de la Educación Superior. • No sancionada en los últimos cinco años por incumplimiento de las normas de Educación Superior. • Informar de su oferta académica. • Acreditados al menos el 25 % de los programas de grado y posgrado.
CUBA JAN	• Self-Assessment. • Assessment.	• Yearly and monthly work plans for the centre and the faculties. • Accreditation strategies for courses and programmes. • Methodological work plans and field strategies. • Working arrangements for quality management. • Management of human resources. • Undergraduate professional training. • Social interaction. • Infrastructure and resource management. • Societal impact.
ECUADOR CEAACES	• Self-Assessment. • External peer-assessment.	• Academia. • Academic efficiency. • Research. • Organisation. • Infrastructure.

Frecuency	Duration	Limitations
For, six, eight or ten years.	N. R.	Completion to proposed improvements.
N.R.	One month.	Non existent.
Five years.	N. R.	Dependent on score obtained.

Country Body	Phases	Elements
EL SALVADOR CdA	• Appraisal. • Evaluation (self-assessment and peer assessment).	• Governance and administration of institutions. • Institutional integrity. • Social outreach. • Students. • Academics. • Courses and other academic programmes. • Research. • Educative resources. • Financial management and physical infrastructure.
HONDURAS SHACES [1]	• Self-Assessment. • External peer-assessment.	• Academic management. • University teaching. • Research. • Links and outreach.
JAMAICA UCJ	• In situvisit • Report issued to the institution and reply received from it. • Recommendation of the UCJ sub-committee.	• Mission and purpose of the institutions. • Governance and Administration. • Strategic plan. • Education and training programmes. • Research. • Personnel. • Library and media services. • Financing resources. • Physical facilities. • Equipment and supplies. • Student support services. • Public relations and marketing. • Computing equipment and laboratories. • Administrative and teaching staff conditions.

Frecuency	Duration	Limitations
Five years.	N. R.	Non existent.
N. R.	N. R.	Repeatable after one year. If not passed, definitively rejected.
N. R.	N. R.	Non existent.

Country Body	Phases	Elements
NICARAGUA CNEA	• Self-Assessment. • External assessment. • Implementation of the improvement plan. • Self-Assessment. • Second improvement plan.	• Strategic development plan. • Offers at least four professional career choices. • Adequate study plans and syllabi. • Lecturer training. • One research project per year in the fields offered. • Physical infrastructure. • Regulations for academic processes. • 10 % of lecturers full-time. • Requisite academic and administrative staff.
PANAMA CONEAUPA	• Self-Assessment. • External assessment.	• University teaching (educative and curriculum policies and their relationship to societal needs; teaching and learning processes; teaching staff; students) • Research and innovation (research and innovation policy and management; its organisation; resource endowment; research and innovation projects). • University extension (extension policies; equal opportunities; relationships with national and international external institutions; extracurricular and lifelong learning activities; alumni). • University institutional management (institutional, political, regulatory, project ethos; identity and communication; human resources; infrastructure; services; financial management; monitoring and projections).
PARAGUAY ANEAES[2]	• Self-Assessment. • External assessment.	N. R.

Frecuency	Duration	Limitations
N. R.	Ten years.	N. R.
N. R.	Six/seven months.	Maximum of 18 months for a repeat request.
N. R.	N. R.	Obligation to wait at least one year.

Country Body	Phases	Elements
PERU SINEACE	• Self-Assessment. • External assessment.	• Coexistence with and relevance to national and regional university education policies. • Connection of courses on offer to employment demand. • Availability of human and economic resources for the commencement and sustainability of the planned activities. • Existence of academic objectives; degrees and qualifications and study plans; economic and financial forecasting compatible with the aims proposed in the planning instruments; adequate infrastructure and equipment; research areas; no fewer than 25% of lecturers employed full-time; complementary basic education services; mediation mechanisms and employability.
DOMINICAN REPUBLIC Vice-ministry of HEI Assessment and Accreditation	• Self-Assessment • External assessment	• Ethos and purpose of the institutions. • Administrative organisation and academic structure. • Academic offerings. • Human resources. • Facilities and infrastructure. • Student admission and registration process. • Use of equipment, teaching materials and ICT.
TRINIDAD AND TOBAGO ACTT	N. R.	• Capability of the university outfit to offer quality educational programmes. • Governance. • Administrative capability, academic policies and procedures. • Quality of teaching staff. • Physical facilities and financial stability.

Frecuency	Duration	Limitations
Six years (meets all standards). Two years (fails to meet certain standards).	120 business days.	Fulfilment of imposed obligations.
Five years.	On year (self assessment) and approx. four months (external assessment and results).	Three years to implement improvements. If not, possibility of suspension or closure.
N. R.	Two years.	One-year wait. Recommendations.

Country Body	Phases	Elements
VENEZUELA SESA	• Self-Assessment • External peer-assessment	• Measures of academic performance and development (relevance of programmes and courses; territoriality; hinterland or area of influence; socio-productive innovation; intellectual output; inclusion of academic functions). • Measures of socio-political development (regulatory framework; governance; international coordination). • Measures of administrative management (planning; budgeting; infrastructure and funding policies).

Argentina

- National Commission for University Quality Assessment and Accreditation (*Comisión Nacional de Evaluación y Acreditación de la Calidad Universitaria, CONEAU*) is responsible for institutional accreditation in Argentina.

- The said "institutional assessment" consists of two phases: self-assessment and external assessment (by independent peers with an outstanding record in academia or university management, or expertise in the areas to be inspected). The areas considered in the assessment are technology production and transference; management and governance (only for national universities); human resources; infrastructure and material resources; library, information and computing services; inclusiveness of the university institution.

- The external assessment process should be carried out at least every six years. Applications are open for set periods every six years, but differ between fields and areas of expertise. The process is not expected to last more than a year, but is case-dependent. There are no limits on applying for accreditation following a negative outcome, although the institution must have put into effect the commitments made in the improvement plans proposed by CONEAU.

- With regard to new private university institutions at a national level, CONEAU issues a statement on the coherence and viability of the creation project presented and prepares reports in order that the Ministry of Education may rule on provisional authorisation and definitive recognition of these same; likewise, it issues statements on the recognition of provincial university institutions. Additionally, CONEAU must issue a favourable report on private entities founded for the purposes of assessing and accrediting university institutions, as a prerequisite for subsequently obtaining recognition from the Ministry of Education.

Frecuency	Duration	Limitations
Six years.	Eight	No time limits exist. Fulfilment of improvement plans based on score obtained.

Brazil

- Department of Higher Education (SESu). *Comissão Nacional de Avaliação da Educação Superior* (CONAES).
- A number of preconditions exist for requesting accreditation as a university: one third of the teaching staff holds a Master's or PhD; one third of the teaching staff is employed full-time; a score of 4 or higher in the last International External Assessment performed by the National System of Higher Education Assessment (*Sistema Nacional de Evaluación de la Educación Superior, SINAES*); an overall course ranking of 4 or higher in the last publication from the National Institute of Educational Studies and Research (*Instituto Nacional de Estudios e Investigaciones Educativas, INEP*); regular offering of at least four Master's programmes and two doctorate programmes recognised by the Ministry; Compatible with the Development Plan and with the Charter as a university; no sanctions whatsoever received in the last five years by the institution or any of its courses.
- Having met these conditions, the Ministry verifies the quality of the project presented for accreditation as a university and, after an in situ assessment carried out by the INEP, issues an expert opinion to be deliberated on by the Chamber of Higher Education of the National Council of Education. This Council makes its assessment based on aspects related to the institution's record; academic activities; creation of expertise; university extension programmes; programmes for the optimisation of undergraduate and postgraduate courses; programmes for scientific, technical, professional or teaching initiation; cultural and popular activities; library; career planning for functional, teaching, technical and administrative staff and professional development policy; compliance with employment law; national and international cooperation through institutionalised programmes; academic qualifications of all levels of institution management and monitoring and remedial measures.
- No set application periods exist. In general, requests are made when the institution is near the point of requesting institutional recognition (based on the three-year cycle for faculties and university centres and five years for universities).

- The duration of the process is between one and three years. A negative result for accreditation as a university or university centre does not prevent accreditation as a university centre or faculty, respectively.

Chile

- National Accreditation Commission (*Comisión Nacional de Acreditación, CNA*).
- Institutional accreditation processes are voluntary, both for universities and for vocational schools and autonomous technical training centres. The accreditation process consists of a self-assessment by the institution and an external assessment by a committee of peers.
- The minimum assessment areas are institutional management (organisation and structure; governance system and administration of human, material and financial resources), undergraduate teaching (design and approval of courses offered, their monitoring and results and number of teachers). However, institutions may additionally opt for accreditation of postgraduate teaching, research and environmental links.
- Already accredited institutions must bear in mind, when making the request, that the timeframe is approximately seven months, in order to avoid periods of time without any certification having been issued. Those applying for the first time or whose accreditation has expired, should request it in March of each year.
- Following a negative result, institutions may apply again after two years. The duration of the process is approximately seven months.

Colombia

- National Commission for Quality assurance in Higher Education (*Comisión Nacional de Aseguramiento de la calidad de la Educación Superior, CONACES*), for official registration. National Accreditation Council (*Consejo Nacional de Acreditación, CNA*) for high quality accreditation (this last by request).
- Among the access requirements for accreditation (according to the 2015 application period) is the continuous functioning of the institution during the last five years as an institution of the type as which it is applying (technical, technological, university institution or university); being up to date with the information requirements of the National System of Higher Education Information; not having received sanctions in the last five years for failure to comply with higher education regulations; clearly communicating its academic offerings; as of the 1st of January 2015, having at least 25 % of its undergraduate and postgraduate courses accredited. In the case of institutions designated as "multicampus", additional requirements exist.
- Accreditation is temporary, with validity for four, six, eight or ten years, depending on the case in question. During the validity period, the institution's essential features must remain unchanged; notable changes or changes in condition require renewed accreditation.

- No set application period exists. Accreditation is voluntary. Following a negative result, a new application for accreditation may be made when the proposed improvements can be made.

Costa Rica

- Does not have a national agency of body for HEI accreditation[13]. Uses the AUPRICA regional mechanism, which accredits private universities in Central America.
- The criteria assessed relate to: institutional ethos or vision; mission, goals and objectives; strategic planning and resource distribution; organisation, administration and governance; educational programme and study plan; academic personnel; learning resources; institutional effectiveness and accomplishments; student services; financial resources; physical facilities; change and renovation of the institution.
- Applications are permanently open and are valid for either two or four years.
- No limits exist on re-applying for accreditation following a negative result.

Cuba

- National Accreditation Council (*Junta de Acreditación Nacional, JAN*).
- Requests for accreditation are accompanied by a self-assessment from the University.
- The assessment takes into consideration significant results obtained in areas of an institutional nature (yearly and monthly study plans from the centre and faculties; course and programme accreditation strategies; methodological and strategic work plans in each area; quality management methodology); management of human resources; undergraduate professional training; social interaction; infrastructure and resource management; societal impact.
- No limits exist on re-applying for accreditation following a negative result. Accreditation occurs over the course of approximately one month.

Ecuador

- Council for Assessment, Accreditation and Quality Assurance of Higher Education (*Consejo de Evaluación, Acreditación y Aseguramiento de la Calidad de la Educación Superior, CEAACES*).
- The procedure includes a self-assessment and an external assessment by a group of expert peers (who are themselves accredited). The criteria considered include: academia, academic efficiency, research, organisation and infrastructure.
- The procedure in question is very recent. Assessment of universities and polytechnic

13 Does not appear in Table 5, for the same reason as Mexico. In both cases, their unique traits are detailed in the text.

colleges began in April 2012, was completed in November 2013, and resulted in the closure of 12 universities that obtained very low scores. The legal stipulation is that the process be carried out every five years.

- Based on the result obtained, institutions which obtained a score placing them in category D must present an institutional strengthening plan at least one year after the ruling that allows them to move to category C. Institutions in categories B and C must present an improvement plan to the CEAACES within the space of 60 days following the assessment.

El Salvador

- Commission for Higher Education Quality Accreditation.
- Accreditation of Higher Education institutions considers the following criteria: institutional governance and administration; institutional integrity; social outreach; students; academics; courses and other academic programmes; research; educational resources; financial administration and physical infrastructure.
- The period in which applications are open is set each year. Accreditation is temporary (five years) and following this re-accreditation must be requested (ninth months prior to the expiry of the active accreditation).
- No limits exist on re-applying for accreditation following a negative result. They will not, however, enjoy the benefits afforded to accredited institutions, including freedom to create new courses (except postgraduate courses); priority for subsidies and exemption from compulsory assessment processes.

Guatemala

- No quality accreditation systems or agencies exist. Guatemala relies on supranational Central American organisations.

Honduras

- Honduran System of Higher Education Quality Accreditation (*Sistema Hondureño de Acreditación de la Calidad de la Educación Superior, SHACES*).
- This body was created recently and aims to align its criteria with those of the Central American Accreditation Council (*Consejo Centroamericano de Acreditación, CCA*). It provides for self-assessment and subsequent external peer assessment, followed by the appropriate expert opinion. The accreditation process is aimed at both public and private institutions.
- It takes into consideration elements and measures grouped by the following categories: Academic management; University teaching, Research and Links and outreach. Accreditation of institutions considers variables such as infrastructure, the teaching body, study plans, the financial situation and the capacity to manage the institution's education project.

- In accordance with the SHACES Manual, if an institution is denied accreditation, it may apply again after one year. If it again fails to pass the process, it may be definitively rejected. In any case, it has been noted previously that, what we have described thus far are processes for accreditation of Honduran universities through regional systems.

Jamaica

- The University Council of Jamaica (UCJ).
- The accreditation process includes an in situ visit, a report sent to the institution being accredited, a reply from this last, and, lastly, a recommendation from the UCJ subcommittee responsible for assessment.
- The accreditation standards, currently being revised, include: mission and purpose of the institution; governance and administration; strategic plan; education and training programmes; research; staff; library and media services; financial resources; physical facilities; equipment and supplies; student support services; public relations and marketing and computing equipment and laboratories.
- Additionally, specific conditions are set with regards to the institution's staff. Namely, administrative and management staff must hold a degree from an accredited higher education institution and have sufficient experience; postgraduate lecturers must hold doctorates and have teaching qualifications; and undergraduate lecturers, a Master's or equivalent and demonstrated abilities in their field.
- Applications are open throughout the year. No restrictions exist on seeking accreditation after receiving a negative result.

Mexico

- No law exists concerning the accreditation of higher education institutions in Mexico. Nor is there a unified national system.
- Comparable work is carried out by the CIEES and the Federation of Mexican Private Higher Education Institutions. These processes are, in any case, voluntary.
- CIEES: evaluate functions of HEIs. According to the Statutes of the CIEES,[14] the functions accredited are those of "Institutional Administration and Management" and of "Cultural Diffusion, Connection and Outreach". It is not, therefore, used for institutional accreditation. According to the CIEES website, 38 functions are currently accredited.
- Federation of Mexican Private Higher Education Institutions, in turn, also carries out accreditation work in a "voluntary and non-governmental" process. Of the 108 federal institutions, 88 are accredited[15] The procedure includes a self-assessment and a peer assessment. A total of 39 criteria are evaluated, corresponding to the capability

14 Available at http://www.ciees.edu.mx/images/documentos/Estatutos.pdf
15 Information available at http://www.fimpes.org.mx/index.php/estatus

and effectiveness of the institution. This leads to four kinds of accreditation: fully accredited; accredited; conditionally accredited and not accredited.

Nicaragua

- National Assessment and Accreditation Council (*Consejo Nacional de Evaluación y Acreditación, CNEA*).
- Accreditation involves various stages: self-assessment, external assessment, implementation of the improvement plan, a second self-assessment and a second improvement plan.
- The compulsory requirements for public and private universities include the existence of a strategic development plan along with the necessary assessment and monitoring mechanisms; the offer of at least four professional courses; adequate study plans and syllabi, updated at least once over the duration of the course; lecturers must hold at least the level of qualification that they teach; at least one relevant research project per year in the fields offered; adequate physical infrastructure; necessary regulations for academic processes; at least 10 % of teaching staff employed full-time and distributed across all fields; required academic and administrative staff.
- Assessment is centred on four functions, with a total of 21 factors and 141 measures.
- The accreditation progress was begun in 2013, with a two-year period to complete self-assessment. The duration of the full procedure is ten years (two years for self-assessment; three years for implementation of the improvement plan, following self-assessment and external assessment; another two-year self-assessment and implementation of a second three-year improvement plan).

Panama

- National Council of University Assessment and Accreditation(*Consejo Nacional de Evaluación y Acreditación Universitaria, CONEAUPA*).
- Currently, regulation is pending for Law 52 of 2015 establishing the requirements. While this is being approved, the 2011 matrix remains in force. This included as factors: university teaching (educational policies, curricula and their relationship to societal needs; teaching and learning processes; teaching staff; students); research and innovation (research and innovation policy and management; organisation of research and innovation; resource endowment; research and innovation projects); university outreach (outreach policies; equal opportunities; relationships with external national and international institutions; extracurricular and lifelong learning activities; alumni); university institutional management (institutional, political, regulatory and project ethos; identity and communication; human resources; infrastructure; services; financial management; monitoring and projections).
- As is the norm, it includes a self-assessment and an external assessment of the institution. Applications are open annually. Accreditation is compulsory for

universities more than eight years old, and the process may be initiated voluntarily prior to this.

- Pending development of the relevant legislation, the previous legislation set a maximum of six to seven months for the procedure. In the case of a negative result, the institution has a window of no more than 18 months to re-apply for accreditation.

Paraguay

- National Agency for the Assessment and Accreditation of Higher Education (*Agencia Nacional de Evaluación y Acreditación de la Educación Superior, ANEAES*).

- Law 2.072/2013, creating the ANEAES, does not set specific requirements. The 13th of March 2015 saw approval of ANAES Resolution 43, "Approving the experimental implementation of the assessment mechanism for institutional accreditation and its guidance documents, in six selected higher education institutions, during the years 2015 and 2016". ANAES has submitted for the attention of the institutions the document "Assessment Mechanism for Institutional Accreditation", "in order that this might be agreed upon by all the interested parties".[16]

- This document establishes a self-assessment phase and an external assessment, as well as a series of areas and elements on whose basis the accreditation will be made. The areas include Governance, Administrative Management and Support for Institutional Development, Academic Development, Information Management and Institutional Analysis and Institutional Management of Social Links.

- In the case of a negative result, the institution may not re-apply for accreditation until a year has elapsed.

Peru

- National System of Assessment, Accreditation and Certification of Educational Quality (*Sistema Nacional de Evaluación, Acreditación y Certificación de la Calidad Educativa, SINEACE*).

- Accreditation takes into account a self-assessment by the institution and an external assessment.

- The accreditation requirements are the same as those required for creation of a university institution (guarantee of coexistence with and relevant to national and regional university education policies; connect the courses on offer to the employment demand; demonstrate the availability of human and economic resources for the commencement and sustainability of the proposed activities).

- To the above must be added the basic conditions established by the National Superintendency of Higher Education (*Superintendencia Nacional de Educación*

16 More information and documents available at http://www.aneaes.gov.py/aneaes/index.php/mecanismo-de-evaluacion-y-acreditacion-institucional

Superior, SUNEDU): existence of academic objectives; degrees and qualifications and study plans; economic and financial forecasting compatible with the aims proposed in the planning instruments; adequate infrastructure and equipment; research areas to develop; no fewer than 25 % of lecturers employed full-time; complementary basic education services; mediation mechanisms and employability.

- Applications are open throughout the year.
- The procedure takes 120 business days (45 for the document check; 45 for verification in person and 30 working days for the ruling to be issued). There are not limits on re-applying for accreditation following a negative result, so long as the recommendations given have been met.

Dominican Republic

- Vice-ministry of Assessment and Accreditation of HEIs.
- Accreditation of institutions and qualifications occurs every five years. To this effect, the Ministry of Higher Education, Science and Technology develops a new procedure or instrument every five years to assess the Dominican institutions.
- In accordance with the Regulation for Quality Assessment of Higher Education Institutions (2006), this includes a self-assessment and an external assessment. The elements assessed include the ethos and purpose of the institution (mission, values, goals, relation to the needs of society); administrative organisation and academic structure; academic offerings; human resources (academic staff and administrative staff); facilities and infrastructure; student admission and registration process (student services, training program results); use of equipment, teaching materials and ICT.
- Accreditation takes approximately one year (self-assessment) and four months (external assessment and results). Institutions are given three years to implement improvements. If these are not made, they may be suspended or closed.

Trinidad and Tobago

- The Accreditation Council of Trinidad and Tobago (ACTT).
- For an accreditation request to be considered, the institution must have been registered for at least two years and at least one cohort must have graduated. Institutions which offer only transnational programmes are not permitted to opt for accreditation (they may only request recognition).
- Elements assessed include the organisational capacity of the university to offer quality programmes of education; governance, administrative capability, academic policies and procedures; quality of teaching; physical facilities and financial stability.
- Requests may be made at any point.
- The procedure takes approximately two years. In the case of a negative ruling,

the institution must wait a year and demonstrate the reasons for which its request should be considered (which includes actions related to the recommendations received by it).

Uruguay

- As previously mentioned, Uruguay only accredits private institutions.
- Authorisation to operate may be withdrawn if the institution diverges from the conditions imposed. Provisional authorisation is granted for a five-year period. In the case of non-compliance, this may be revoked for the institution's activities in general or for any one of the courses offered.

Venezuela

- Assessment, Monitoring and Accreditation System (*Sistema de Evaluación, Seguimiento y Acreditación, SESA*).
- The process includes a self-assessment and an external peer assessment. To attain accreditation, the institution must obtain 75 points or more out of 100 in an assessment which takes into account: measures of academic performance and development (relevance of programmes and courses; territoriality; hinterland or area of influence; socio-productive innovation; intellectual output; inclusion of academic functions); measures of socio-political development (regulatory framework; governance; international coordination); measures of administrative management (planning; budgeting; infrastructure and funding policy).
- If the institution obtains between 50 and 74 points (Type B) it must complete an improvement plan which it shall create itself, without the involvement of the Ministry of Popular Power for University Education. If its score is between 25 and 49 points, it must complete the improvement plan set and supervised by the Ministry. In the case that between 0 and 24 points are obtained, the Ministry shall set and supervise an emergency plan.
- Details of the assessment process, including the weighting obtained in each measure and in the items, are not public.
- Requests may be made at any point and no limitations exist on repeat attempts to obtain accreditation in the case of a negative ruling.

This general overview allows us to make some comments. The first is the notable differences in the durations of the processes, which range from months to the ten years of the system launched in Nicaragua in 2013. We should also highlight the differences when it comes to whether or not it is compulsory for institutions to submit themselves to these procedures, with voluntary processes notable in both Mexico and in Chile and Colombia.

The second comment relates to the similarities. The phases of the accreditation process are the same in practically all the States, self-assessment and external peer assessment; even in those systems which introduce variations on this model or incorporate more phases, as

in Nicaragua or El Salvador, these two phases are maintained. A similar situation is seen with the components examined by both the self-assessment and the external assessment.

System of academic organisation and election of university authorities

The majority of universities in Latin America and the Caribbean enjoy the autonomy to design their own systems of academic planning. The degree of freedom to set organisation ranges from cases where universities decide their own organisation and reflect this in their statutes, to those which are free to establish their organisation, but within guidelines and conditions set by various regulations. In the case of Ecuador, where decisions must fit with the dictates of the *Ley Orgánica* on Higher Education; Jamaica, where there is again autonomy to decide, but where systems must pass the scrutiny of the registration (J-TEC) and accreditation (UCJ) bodies; or Peru, where Law 30.220, of 2014, establishes the permissible organisational units and requires public universities to include at least one research institute. In the case of Cuba, the structures of higher education institutions must be approved by the Ministry of Higher Education.

In some cases, the types of design and the general patterns to be followed may differ depending on the type of institution concerned. For example, in Mexico, autonomous and private universities have the autonomy to decide their academic planning systems, while for other public universities the planning is dictated by the relevant federal entity of by the Federal Government.

In general, what the various laws define are the types of administrative unit (faculty, school, research institute, department), leaving the university to choose which faculties it wishes to create, how to organise itself into departments, etc. In this regard, it can be seen that the faculty is the principal organisational unit, in both public and private universities and even when no general regulations exist referring to its existence. It is interesting to note, however, that in Argentina there is a tendency towards the disappearance of this organisational unit in the case of new universities (created in the last 25 years), which are structured by departments and institutions. The largest and oldest universities (like the University of Buenos Aires or the National University of Córdoba) do base their entire system on faculties, within which they distinguish departments, teaching departments, research institutes, etc.

More regulations exist with regards to systems for electing or appointing academic authorities. The education laws stipulate, in most cases at least, what the academic authorities are. The next step in the continuum of regulation is establishing selection processes (Brazil, Nicaragua or Peru), with countries like Ecuador or Venezuela also legislating on the conditions for acting as an academic authority or on whether or not re-election is possible.

We can clearly distinguish three systems for electing or appointing academic authorities. On the one hand, is the system in Jamaica and Trinidad and Tobago (also used in the case of some private universities in Argentina), following the typical pattern of the Anglo-

Saxon world, in which a public call for applications is made (within the institution or indeed without, depending on the post in question) to which candidates present their CVs and one of the highest bodies of the institution (for example, the University Council or the vice-chancellor) makes the decision. In other words, it is a job offer with a corresponding selection process.

In a fair number of the remaining countries, election procedures are carried out to select the top-ranking academic authorities. The procedure may be regulated by law, in general for all the institutions in the country, or be at the discretion of each of the institutions, employing their university autonomy. Ecuador, Haiti, Nicaragua, Peru and Venezuela establish that the country's universities (the public ones, in each case) elect their deans and vice-deans through elections involving the entire university community. In Ecuador and Peru, voting is compulsory. In the case of Panama, although not regulated, it is clear that public universities imitate the statutes of the University of Panama, which establishes qualified voting in the university community.

In Argentina and Uruguay, elections are indirect: the University Assembly and the Faculty General Assembly, respectively, are the bodies that elect the dean. Representation within these of the various groups within the institutions (teachers, students, etc.) is guaranteed. Lastly, in Cuba it is the Ministry of Higher Education which nominates rectors and deans.

Private universities enjoy complete autonomy to decide how they elect or appoint their authorities; it should be specified that Uruguay positively values lecturer and student participation in management and academic bodies when it comes to obtaining authorisation, despite maintaining autonomy.

2.2.2. Accreditation of qualifications, programs or courses

Accreditation of programmes and courses is a task which falls, generally, to the same bodies or agencies responsible for accrediting higher education institutions in each of the countries. Only in Costa Rica and El Salvador, whose national institutions only accredit courses and institutions, respectively, are differences seen. These, with the exception of the aforementioned cases of supra-national or regional accreditation systems, are national bodies. Mexico is the only exception, given that accreditation of institutions is a task shared by various bodies (among them, COPAES), while that of programmes and (postgraduate) courses falls to CONACYT.

There are some countries in which no authority is responsible for accrediting programmes. In Bolivia, one of the few cases without quality accreditation systems, the accredited courses or qualifications obtained this accreditation through the Mercosur system. The same is true of Uruguay. In El Salvador, the Commission for Higher Education Quality Accreditation only accredits institutions, not qualifications, and as such, once again, qualifications which attain accreditation do so through supra-national systems; the same situation is seen in Guatemala. Conversely, in Haiti, there is no accreditation; the Ministry only has control of any kind over qualifications relating to Education or Public Health.

It must be emphasised that in a good number of the countries it is apparent that accreditation of qualifications is a very recent phenomenon. For example, consider that the

SINEACE in Peru adopted its Manual on Accreditation of Study Programs in University Higher Education in March 2016. Nicaragua also has plans for this type of accreditation, but this is still not regulated. Panama, in turn, continues to use its previous model while waiting on the regulatory development of Law 52 of 2015.

The following is an outline of the principal characteristics of accreditation of qualifications in the various countries with national systems, noting the accrediting body, the characteristics and stages of the process, the regularity of calls for applications, etc. As in the case of accreditation of higher education institutions, Central America is the region with the highest number of supra-national or regional systems, mentioned previously in the section on accreditation of institutions.

We wish to stress, once again, that Bolivia and Haiti do not have quality accreditation systems, while El Salvador, Guatemala and Uruguay turn to supra-national bodies or agencies for accreditation of their qualifications.

Table 6.
Organisations or agencies responsible for accreditation of qualification, programs or courses.

Country / Body	Phases	Elements
ARGENTINA CONEAU	Undergraduate courses: • Self-Assessment. • Committee of peers (with visit).	• With regard to the minimum class load (art. 42, Law 24.521). • Basic course content. • Intensity of practical training set
	Postgraduate courses: • Eight stages. • No self-assessment.	• Study plan • Academic body • Postgraduate students and alumni. • Infrastructure and equipment. • Research and internship activities.
BRAZIL SINAES	• Compulsory visit from a committee of specialists.	• Teaching/education organisation. • Profile of the teaching body. • Physical facilities.
CHILE Private agencies authorised by the CNA	Undergraduate courses: • Self-Assessment. • External assessment.	• Purpose and relevance to the institution of the course or programme; operating conditions; results and self-regulation capability.
	Postgraduate courses: • Self-Assessment. • External assessment.	• Institutional context of the programme, characteristics and results of this last (study plan, admission requirements), academic group (characteristics and history of the teaching staff), support resources and self-regulation capability.
COLOMBIA CNA	Undergraduate courses: • Self-Assessment. • External peer-assessment.	• Mission, institution and programme plan, students, teachers, academic processes, national and international visibility, research, innovation and artistic and cultural output, condition of the institution, organisation, administration and management, graduates and environmental impact, physical and financial resources.
	Postgraduate courses • Self-Assessment. • External peer-assessment.	N. R.

Country / Body	Phases	Elements
COSTA RICA SINAES	• Self-Assessment. • External peer-assessment.	• Admissibility; information and advocacy; admissions and intake process; contextual relevance; study plan; academic staff; administrative staff; infrastructure; information and resource centre; equipment and materials; finances and budgets; teacher development; teaching and learning methodology; course management; research; outreach; student life; student performance; alumni; employment prospects; sustainability.
CUBA JAN	N. R.	N. R.
ECUADOR CEAACES	• Self-Assessment. • Information upload. • Document evaluation. • In situ visit . • Adjustments.	• Relevance, context, profession, Curriculum, “macro-curriculum”, “meso-curriculum”, “micro-curriculum”, academia, teaching quality, dedication, academic output, institutional environment, library funding, laboratories, simulation centres and workshops, students; student participation, efficiency.
HONDURAS SHACES	• Self-Assessment. • External peer-assessment.	• Academic management; university teaching, research, links and outreach.
JAMAICA UCJ	• Autoevaluación. • Visita in situ.	• Programme structure and ethos, assessment methods, teaching resources, staff, admission requirements and selection process, analysis of graduate career paths.
MEXICO Committees for Accreditation of Education Programmes CONACYT COPAES	• Self-Assessment. • In situ visit.	• Academic staff assigned to the programme, study plan, methods and tools for assessing learning, institutional services to support student learning, students, infrastructure and equipment for supporting the programme, research areas and activities, institutional linkage, academic-administrative leadership, planning and assessment processes, management and finance.
NICARAGUA CNEA-accredited agencies	N.R.	N.R.

Frequency	Duration	Limitations
Four years (first accreditation). Two or eight years (renewals).	15 months.	Non-existent.
N. R.	N. R.	N.R.
Five years.	N. R.	N. R.
N.R.	N.R.	N.R.
N.R.	N.R.	Non-existent.
Five years.	N.R.	N.R.
N.R.	N.R.	N.R.

Country / Body	Phases	Elements
PANAMA CONEAUPA	• Self-assessment. • External assessment by academic peers	N.R.
PARAGUAY ANAES	• Self-Assessment. • External assessment..	• Organisation and management; Academic proposal; personnel; Resources, results and impact.
PERU SINEACE	• Self-Assessment. • External assessment.	• Strategic management, comprehensive education, institutional support and results.
DOMINICAN REPUBLIC Vice-ministry of HEI Assessment and Accreditation	• Self-Assessment. • External assessment.	• Level of completion of the programme objectives, relevance of programme participation policies, effectiveness of the teaching-learning process, adequacy of the assessment system, level of compliance with various elements related to students, relevance of the course to the economic and societal needs of the country, teaching and administrative staff, facilities, etc.
TRINIDAD AND TOBAGO ACTT	N. R.	• Quality of teaching and support for learners, design and planning of curricula, assessment and student response, learning environments and student support services, quality assurance and programme assessment systems.
VENEZUELA SESA	• Planning. • Self-Assessment. • External assessment. • Monitoring.	N. R.

Argentina

- National Commission for University Quality Assessment and Accreditation (*Comisión Nacional de Evaluación y Acreditación de la Calidad Universitaria, CONEAU*).
- Accreditation of qualifications is outlined for undergraduate courses corresponding to State-regulated professions (art. 43, Law 24.521 on Higher Education) and for postgraduate courses.
- Graduate courses. The number of courses subject to accreditation has increased over time. The process includes a self-assessment stage, a visit to the course site

Frequency	Duration	Limitations
Six years.	Six months (approx.).	Improvement plan (18 months).
Three or six years.	N.R.	N.R.
Six years (full accreditation).	N.R.	N.R.
Five years.	N. R.	N.R.
N. R.	Six months (min.).	One-year wait.
N. R.	Eight months/one year.	Dependent on score obtained.

by a committee of peers and, finally, a decision by the CONEAU. Among the required conditions for receiving accreditation is observance of the minimum class load outlined in art. 42 of Law 24.521, the basic curriculum content and criteria on the intensity of practical training established by the Ministry of Education in an agreement with the Council of Universities, with these being the bodies that set the standards required in the accreditation process. Courses are accredited every six years (provisions exist for a three-year accreditation when some, but not all, the requirements are met; at the end of the three years, a second phases of the process takes place: if passed, the accreditation is extended by the remaining three years; if not, the course is declared non-accredited).

- Postgraduate courses (Master's, specialisations and doctorates). Eight stages are outlined, including the intervention of the Committee of Peers; in this case, however, there is no self-assessment. The aspects examined are the study plans and programmes of the various courses; the academic body; the students and alumni from the postgraduate courses; questions related to infrastructure, equipment, libraries and documentation centres, research activities and internships. Accreditation is valid for three years, at the end of which a new accreditation is requested which is valid for six years.

- The average response time varies between cases, but should not be more than a year.

- No limits exist on on requesting accreditation following a negative outcome, although this requires implementation of the commitments made in the improvement plans proposed by CONEAU in its expert opinion and non-accreditation ruling.

Brazil

- National System of Higher Education Assessment (*Sistema Nacional de Evaluación de la Educación Superior, SINAES*).

- Three areas are taken into account in assessing courses: teaching/educational organisation; profile of the teaching body and physical facilities. The visit from a specialist committee is compulsory.

- In the case of a negative result from the process, a series of recommendations are made (processes, goals and deadlines) and failure to comply with these can lead to temporary suspension of the programme.

Chile

- Private accreditation agencies, are themselves accredited by the National Accreditation Committee (*Comisión Nacional de Acreditación, CNA*) for the performance of these tasks.

- Accreditation is provided for in the case of both undergraduate and postgraduate courses.

- Undergraduate courses. This is a voluntary procedure. It is compulsory only for courses and study programmes leading to professional qualifications in Medicine Surgery, Primary Teaching, Secondary Teaching, Special Education Teaching and Nursery Teaching. In order to begin the process, it is mandatory that the qualification have at least one graduated cohort. It is stipulated that accreditation should not exceed seven months. Accreditation is valid for seven years and there are provisions for the possible accreditation of qualifications without a graduated cohort (valid for three years in this case)[17]. The assessment criteria are grouped by

17 Regulation setting the procedure for developing accreditation processes for higher-level professional and technical courses and undergraduate programmes, of the 24th of November 2016. Available at https://www.cnachile.cl/Criterios %20y %20Procedimientos/1147335.pdf

three areas: Purpose and relevance to the institution of the course or programme; Operating conditions; Results and self-regulation capability (CNA Exempt Resolution N.º DJ 009-4). In any case these are general areas and criteria, given that the accreditation agency in question can introduce others.

- Postgraduate courses. Accreditation of Master's, doctorates and specialisations is voluntary. Again, accreditations are issued for a seven-year period, with three-year accreditations for postgraduate courses from which no students have yet graduated. The average duration of the process is, as for undergraduate courses, seven months (CNA Exempt Resolution N.º DJ 006-4). The regulation establishes some differences between accreditation criteria for Master's, professional Master's and doctorates, although the general approaches and areas are similar: institutional context of the programme, characteristics and results of this last (study plan, admission requirements), academic group (characteristics and history of the teaching staff), support resources and self-regulation capability.

Colombia

- Higher Education Quality Assurance System (*Sistema de Aseguramiento de la Calidad de la Educación Superior, SACES*). Includes Official Registration (National Inter-Sectoral Commission for Higher Education Quality Assurance, CONACES) and the high-quality accreditation bestowed by the National Accreditation Council (*Consejo Nacional de Acreditación, CNA*), following a voluntary application. Accreditation of both undergraduate and postgraduate courses is provided for.

- In the cases of both undergraduate and postgraduate courses, accreditation begins with self-assessment by the programme itself, followed by an external peer assessment. Based on this information, an expert opinion is issued on the quality of the programme. Assessments, in the case of undergraduate courses, consider a total of 40 characteristics grouped into the following factors: mission, institution and programme plan, students, teachers, academic processes, national and international visibility, research, innovation and artistic and cultural output, condition of the institution, organisation, administration and management, graduates and environmental impact, physical and financial resources.

- Accreditations of undergraduate courses can be valid for four, six, eight or ten years. According to decree N.º 1075 of the 26th of May 2015, which issued the Single Regulatory Decree for the Education Sector, in article 2.5.3.7.9, "If the programme or institution is not accredited, this last may request, having met the recommendations of the National Accreditation Council, the commencement of a new process (2) years later".

Costa Rica

- National Higher Education Accreditation System (Sistema Nacional de Acreditación de la Educa*ción Superior, SINAES*).

- The official accreditation process is outlined for undergraduate and postgraduate courses and for technical courses, with a self-assessment phase and an external

peer assessment. The elements considered include: admissibility; information and advocacy; admissions and intake process; contextual relevance; study plan; academic staff; administrative staff; infrastructure; information and resource centre; equipment and materials; finances and budgets; teacher development; teaching and learning methodology; course management; research; outreach; student life; student performance; alumni; employment prospects; sustainability.

- The average response time is 15 months from the start of the process. The accreditation is valid for four years the first time it is requested. Subsequent renewals may be from two to eight years18.
- No limitations exist on requesting accreditation after a negative result.
- Although the SINAES does provide for accreditation of postgraduate courses and has created a manual on the subject, thus far no such assessment has been made.

Cuba

- National Accreditation Council (*Junta de Acreditación Nacional, JAN*).
- Accreditation is carried out for all Cuba's higher education programmes. Specifically, it has three systems geared towards accrediting qualifications: the University Course Assessment and Accreditation System (*Sistema de Evaluación y Acreditación de Carreras Universitarias, SEA-CU*), the Master's Assessment and Accreditation System (*Sistema de Evaluación y Acreditación de Maestrías, SEA-M*) and the Doctorate Assessment and Accreditation System (*Sistema de Evaluación y Acreditación de Doctorados, SEA-D*).

Ecuador

- Council for Assessment, Accreditation and Quality Assurance of Higher Education in Ecuador (*Consejo de Evaluación, Acreditación y Aseguramiento de la Calidad de la Educación Superior del Ecuador, CEAACES*).
- The current quality accreditation system in Ecuador begin with the assessment of universities and polytechnic colleges in 2012. Subsequently, in December 2014, assessment of courses began, starting with 12 public service courses selected by CEAACES. The law declares that assessment and accreditation of the 5000 courses offered in the country is obligatory. It is stipulated that this is a five-year procedure.
- In 2015, the CEAACES published the document Generic model for assessment of the learning environment of face-to-face and blended courses at the universities and polytechnic colleges of Ecuador[19], which outlines the criteria to be assessed and the measures to be used. These criteria are: Relevance, Context, Profession, Curriculum, "Macro-curriculum", "Meso-curriculum", "Micro-curriculum",

18 Information available at http://www.sinaes.ac.cr/index.php?option=com_content&view=article&id=9&Itemid=110

19 Available at http://www.ceaaces.gob.ec/sitio/wp-content/uploads/2013/10/MODELO-GEN%C3%89RICO-DE-EVALUACI%C3%93N-DEL-ENTORNO-DE-APRENDIZAJE-CARRERAS-2-0-Marzo-2015-FINAL-pdf.pdf

Academia, Teaching quality, Dedication, Academic output, Institutional environment, Library funding, Laboratories, simulation centres and workshops, Students; Student participation, efficiency.

- The "Assessment of the Learning Environment" provides for stages of self-assessment, reporting information, document assessment, an in situ visit, adjustments and a final report.

Honduras

- SHACES (Honduran System of Higher Education Quality Accreditation, *Sistema Hondureño de Acreditación de la Calidad de la Educación Superior*).

- This body was created recently and aims to align its criteria with those of the Central American Accreditation Council (*Consejo Centroamericano de Acreditación, CCA*). It provides for self-assessment and subsequent external peer assessment, followed by the appropriate expert opinion. It published its Manual on Accreditation of Institutions and Accreditation of Higher Education Courses in Honduras in 2013.[20]

- Accreditation of programmes and courses takes into consideration points and measures grouped into the following areas: academic management; university teaching, research and links and outreach.

- Calls for applications are made yearly, requests being presented in the month of February.

Jamaica

- The University Council of Jamaica (UCJ).

- Accreditations are only performed for courses or programmes with a minimum number of graduates and which are run by an accredited university.

- The process includes the request accompanied by a self-assessment; processing by the UCJ (verification of information and setting of a date for the in situ visit); selection of the team of professionals responsible for the visit, which includes interviews and even attending some of the classes; and, lastly, issuance of an assessment report.

- The elements assessed are grouped into two categories: programme structure and ethos, assessment methods, teaching resources, staff, admission requirements and selection process, analysis of graduate career paths. This must be accompanied by supplementary information such as the subject syllabi, timetables and, additionally, the institution's self-assessment.

- The accreditation entails the submission of annual reports on the status of the accredited programme. Three months prior to the end of the accreditation period, institutions must request renewal of this last. This is not automatic, but may instead

20 Available at: https://autoevaluacion.unah.edu.hn/gestordocumentos/15

by denies if it is observed that the quality standards have not been maintained.

- No limitations exist on requesting accreditation after a negative result.

Mexico

- Inter-institutional Committee for the Assessment of Higher Education (*Comités Interinstitucionales para la Evaluación de la Educación Superior, CIESS*); Committee for Educative Program Accreditation (*Comités de Acreditación de Programas Educativos*); CONACYT (assessment of postgraduate courses for the purposes of integration into a national postgraduate registry); COPAES (Council for the Accreditation of Higher Education, *Consejo para la Acreditación de la Educación Superior*).

- COPAES boasts 29 recognised accreditation agencies and four in the process of being recognised. Although each agency has its own assessment and certification methodology, COPAES lays out a general framework which includes the following categories: academic staff assigned to the programme, study plan, methods and tools for assessing learning, institutional services to support student learning, students, infrastructure and equipment for supporting the programme, research areas and activities, institutional linkage, academic-administrative leadership, planning and assessment processes, management and finance.[21].

- The academic programme (*licenciatura*, specialisation, Master's or doctorate) is responsible for making the accreditation request. Re-accreditation takes place every five years.

- The process includes the formulation and acceptance of the request; self-assessment of the programme by the higher education institution running it; peer assessment on behalf of the accreditation agency in question; and, lastly, the expert opinion from that agency.

- As for CONACYT, it boasts a National Programme of Quality Postgraduate Courses (*Programa Nacional de Posgrados de Calidad, PNPC*) which assesses programmes run by public and private institutions and classifies them in four categories (recently created, under development, established and international scope). Quality recognition brings significant economic benefits, both for students on the programme (with monthly maintenance loans and national and international mobility loans), and for enhancement of the programme itself and its teaching body.

Nicaragua

- The National Assessment and Accreditation Council *(Consejo Nacional de Evaluación y Acreditación, CNEA*) was created in 2011 and in 2013 it opened its first call for applications, calling for higher education institutions to begin the self-assessment process. According to article 30 of Law 704, "Higher education institutions, once accredited as institutions, may submit their undergraduate and postgraduate courses for accreditation, which will be carried out by the accreditation agencies

21 For more information, see http://www.copaes.org/wp/wp-content/uploads/2015/07/MARCO_DE_REFERENCIA_COPAES-2012.pdf

approved by the CNEA". Although this sort of accreditation is provided for, the standards and procedures have not yet been fixed and no agency has been authorised to accredit programmes or courses.

Panama

- National Council of University Assessment and Accreditation (*Consejo Nacional de Evaluación y Acreditación Universitaria, CONEAUPA*).
- Law 52 of 2015 is still awaiting the development of regulations, and as such the standards to be considered and the phases of the process remain unknown (Law 30 of 2006 included self-assessment, external assessment by academic peers and, lastly, the accreditation ruling).
- Law 52 of 2015 does not establish compulsory accreditation for all programmes, but rather for just two courses within the whole accredited university (this, however, is legally required to attain accreditation). For the rest, accreditation is voluntary.
- Based on the deadlines established in the corresponding regulation, we can infer that the average resolution time is no more than six months.
- Following a negative result, the institution has a maximum deadline of 18 months to apply again for accreditation.

Paraguay

- National Agency for the Assessment and Accreditation of Higher Education (*Agencia Nacional de Evaluación y Acreditación de la Educación Superior, ANEAES*).
- The course accreditation model, with one self-assessment phase and another of external assessment, considers five areas of assessment: Organisation and management; Academic proposal; personnel; Resources, Results and impact..
- Ruling N.º 382 of the 24th of November 2016 two types of validity period for accreditations of undergraduate courses: three years for "basic" completion of the quality criteria and six years for "substantial" completion. Previously, the validity period stipulated was five years.
- Resolution 11/08, of the 1st of August 2008, established accreditation as voluntary and, in any case, only for courses from which at least one cohort has graduated. In 2009, Resolution 51/09 modified this point by making the procedure compulsory, including in the case of programmes without graduates.

Peru

- National System of Assessment, Accreditation and Certification of Educational Quality (*Sistema Nacional de Evaluación, Acreditación y Certificación de la Calidad Educativa, SINEACE*).
- The Accreditation Model for University Higher Education Curricula was approved

in October 2016[22]. It considers four areas (strategic management, comprehensive education, institutional support and results). In addition to the general standards, are those corresponding to each course or programme.

- If all the conditions are met in full, accreditation is granted for six years. If only some are met, accreditation is granted for two years. If, upon expiry, it is certified that all conditions are met, it is then granted for six years.

Dominican Republic

- Vice-ministry of Assessment and Accreditation of HEIs.
- Undergraduate and postgraduate qualifications are subject to assessment every five years, according to the procedures and methods designed by the Ministry of Education, Science and Technology every five years.
- Assessment consists of a first phase of internal assessment or self-assessment followed by an external assessment.
- According to the Regulation for assessment and approval of degree-level courses issued by the Secretary of State for Education, Science and Technology in July 2013, internal quality assessment must consider points such as the degree of completion of the programme objectives, relevance of programme participation policies, effectiveness of the teaching-learning process, adequacy of the assessment system, level of compliance with various elements related to students, relevance of the course to the economic and societal needs of the country, teaching and administrative staff, facilities, etc.

Trinidad and Tobago

- The Accreditation Council of Trinidad and Tobago (ACTT).
- The requesting institution must have at least one cohort of graduated students.
- Before the ACTT existed, qualifications carried out their accreditation processes with foreign agencies.
- Among the elements assessed are the quality of teaching and support for learners, design and planning of curricula, assessment and student response, learning environments and student support services, quality assurance and programme assessment systems.[23]
- The process takes a minimum of six months, although this always depends on the willingness of the institution to provide the requested information.
- If accreditation is denied or if the institution withdraws from the process, it must

22 Available at https://www.sineace.gob.pe/wp-content/uploads/2014/08/Anexo-1-nuevo-modelo-programas-Resolucion-175.pdf

23 For a more detailed description of the criteria, see: http://www.actt.org.tt/images/documents/services/Crit%20for%20Specialized%20Prog%20accreditation%20updated%20March%202011.pdf

wait until one year has elapsed before requesting accreditation again; following this, it must state its case for re-consideration of its request and, in some cases, this includes actions taken in relation to the ACTT's recommendations (which works to this effect with institutions to eliminate factors which might impede accreditation).

Venezuela

- Assessment, Monitoring and Accreditation System (*Sistema de Evaluación, Seguimiento y Acreditación, SESA*).
- It is provided for both for undergraduate and postgraduate courses.
- According to article 22 of Resolution Nº Caracas Years 202 and 153 (sic), the external assessment report "contains conclusions on the status and level of institutional performance, of responsibility, of social engagement and of connection to the national development plans of the university education institutions".[24]
- As in the case of institutions, courses are classified based on the score obtained as follows:
  - Type A (75-100 points). Accredited.
  - Type B (50-74 points). Must complete an improvement plan established by the institution itself, without input from the Ministry of Popular Power for University Education, Science and Technology.
  - Type C (25-49 points). Must complete an improvement plan established and monitored by the Ministry.
  - Type D (0-24 points). The Ministry sets and supervises an emergency plan.
- Accreditation of a programme takes between eight months and a year.

As can be seen, there are unique aspects to each of the national systems. However, we also note the presence of elements common to nearly all of them, such as the existence of self-assessment and peer assessment phases in the accreditation processes. Likewise, the areas and measures considered are very similar, which should make it easier to establish quality levels for Latin America and the Caribbean.

2.2.3 Accreditation of university lecturers

The countries of Latin America and the Caribbean do not have agencies for accrediting university lecturers. As will be analysed in the section corresponding to practicing as a teacher (see chapter 4), more or less thorough regulation exists, depending on the case, concerning the required conditions to practice as a university lecturer, as well as promotion mechanisms. However, there is no accreditation system as such. Mexico is the sole exception, and therefore this case is explored in detail below. As has previously

24 Resolution available at http://www.curricular.info.ve/Docu/CNC/sesa5.pdf

been noted, Peru provides for this sort of accreditation, but as yet no regulation has been developed on the subject.

One one hand, Mexico has the National Researcher System (*Sistema Nacional de Investigadores, SNI*), created in 1984 and intended to strengthen scientific research and to train high-level human resources, especially in postgraduate studies. An essential requirement for accessing the accreditation system is to be affiliated to a higher education institution and to dedicate at least 20 hours per week to research, approximately ten hours to teaching and another ten hours to student guidance or tutoring and management of an academic nature, thus fulfilling the 40 hours of work a week for full-time lecturers.

According to the SNI Regulations, the research output considered when deciding on admission, re-admission or extensions in the System are divided into two groups: scientific and technological research and training of scientists and technicians. Where research is concerned, the key considerations are: articles, books, chapters of books, patents, technological developments, technological innovations and transfers. In turn, the section relating to training, takes into account direction of completed professional and postgraduate theses; delivery of bachelor's and postgraduate courses; and training of researchers and research groups.

The second instrument at Mexico's disposal is the Programme for the Professional Development of Teachers (*Programa para el Desarrollo Profesional Docente, PRODEP*), answerable to the Sub-secretary of Higher Education of the Federal Government's Secretary of Public Education. The programme issues the "recognition of desirable Profile" to full time lecturers who satisfactorily complete academic functions and can certify having done so for at least the last three years.

This recognition is afforded to teaching staff who, in accordance with the characteristics and focus of each subsystem, possess an academic and/or higher technical qualification at a level above that of the educational programmes they teach; possess an academic degree at the preferred or minimum level; and carry out a balance of teaching activities, creation or innovative application of expertise, applied research or technological development, assimilation, development an transfer of technologies or innovative educational research and tutorials, academic management and linking.

To attain recognition as a Full Time Lecturer with a suitable profile, the following general requirements are demanded:

a. Designated as a full time lecturer.

b. Has obtained a degree at the preferred (doctorate) or minimum (Master's) level.

c. Demonstrates activities in:

   - Teaching: has taught a course to one group a year during the three years immediately preceding the date of application to the Programme or during the time transpired since first being appointed as a full-time lecturer at the higher education or since obtaining their latest degree (should this time be less than three years).

- Creation or innovative application of expertise/applied research, assimilation, development and transfer of technology/applied research and technological development (depending on the subsystem): must be demonstrated with one good-quality product per year on average during the three years immediately preceding the date of application to the Programme or during the time transpired since first being appointed as a full-time lecturer at the higher education or since obtaining their latest degree (should this time be less than three years).

- Tutorials: during the last year immediately prior the date of their application, tutorials given to students or groups or at least one thesis directed. In this section, specifications exist in the case of technological universities, technological institutes and intercultural universities.

- Academic management and linking, as an individual or part of a body, during the last year immediately prior to the date of their application. This activity includes participation in formal collegiate bodies (colleges, councils, adjudication committees, etc.); committees for the design, assessment and operation of education programmes and study plans; committees for the assessment of research, linking or dissemination projects; management, coordination and supervision of educational, research, linking or dissemination programmes; activities for creating and strengthening bodies and mechanisms for coherent coordination of the academic offerings, the vocation and overall development of students relative to the employment demand and the demands of national and regional development; management of links which establish cooperation and exchange of expertise relationships with bodies, either public or private, outside the Higher Education institution; organisation of regular seminars or academic events; and administrative activities.

As can be seen, in the case of both the SNI and the PRODEP, assessment of teachers is based on three pillars: firstly, pure teaching work; secondly, performance as a researcher; and, lastly, tasks related to academic management.

Calls for accreditation applications are open during specific periods, during which the lecturers mus assemble the documentation proving they meet the requirements, upload it to the digital platform created for the purpose and await the verdict of the relevant assessment committee, which is issued within an period of 120 calendar days. In the case that the lecturer does not attain the required accreditation, there is no limitation preventing them from applying in the next application period.

Remarks and recommendations

Remark 1.

Although a group of countries in Latin America and the Caribbean have had some form of quality accreditation system for decades, another group has introduced these institutions and procedures only recently. Despite this, what can be said for certain is that the situation is evolving in the opposite direction to what was seen in Europe. In this case, the first step was expression of the political will to work towards a common higher education area and the foundations of this last were set out. It was from this point, for the most part, that accreditation agencies began to emerge. In Latin America and the Caribbean, steps towards a higher education area has no option but to unfold in reverse: accreditation agencies already exist and are operational. This is not necessarily an advantage nor an inconvenience: it is merely a question of different starting points.

As has just been noted, in some of the countries the assessment and accreditation systems are very recent (in Bolivia, Guatemala and Haiti they are still non-existent). In other cases, provisions are made for the accreditation of qualifications and even lecturers, but the regulations have yet to be developed. In countries like Nicaragua, accreditation is taking its first steps and higher education institutions have just completed the self-assessment process. Note here that the duration of procedures in this country bear no resemblance to the other cases: accreditation of a HEI takes ten years; a point which may, doubtless, prove to be a disincentive.

In any case, it can be seen that both the phases of the accreditation procedures (in almost all cases a self-assessment, followed by an external peer assessment and the final ruling from the corresponding body) and the areas or measures assessed in accreditations of institutions or courses are, in general, very similar. This represents, without a doubt, a significant advantage when it comes to a possible unification of criteria and procedures.

Recommendation.

It would be advisable to create an area in which the various quality accreditation agencies of Latin America and the Caribbean could exchange information and procedures and coordinate activity. In doing so, consideration would need to be given to the tasks of gathering information and analysis carried out in the context of quality accreditation by UNESCO's International Institute for Higher Education in Latin America and the Caribbean (*Instituto Internacional para la Educación Superior en América Latina y el Caribe, IESALC*).

Additionally, it would be interesting to observe the evolution of the Central American accreditation systems, most of which emerged around the CSUCA. This forum for exchange and coordination could also prove key to providing support and advice to the countries whose accreditation systems are still being implemented or to those which have none. In this vein, the CSUCA experiment again proves relevant, given that some of its systems serve to compensate for the lack of national accreditation bodies in some Central American countries. The CCA is also an experiment worth considering. Its work as a second-level accreditation agency (that is, accrediting other agencies) could be taken into

account when establishing mechanisms to standardise the existing agencies of the various countries.

Remark 2.

The debate on the design of the accreditation systems with regards to their answerability to the executive branch has yet to be concluded. Both in the EHEA and in the Latin American and Caribbean countries analysed, examples exist of accreditation agencies answerable to the executive branch, albeit the trend is much clearer in the second case. Going beyond this and the differences that can be seen, which need not necessarily represent an obstacle to progress towards the bi-regional area, we do see that in some cases (not numerous, but present) details of the quality accreditation process are not public, which does nothing but cast doubts on the validity of the results of the accreditation process and on the process itself.

Recommendation.

In order to increase transparency in the systems of quality accreditation for higher education in Latin America and the Caribbean, it would be of interest to carry out a systematisation project on every detail of the laws, rules, regulation and resolution which govern these processes in the various states. This would afford an exhaustive analysis of information which, currently, is sometimes sparse or even unavailable for public access. In this way, an assessment could be made of points of contact and difference and of the work needed in order to establish common standards. Again, IESALC could serve as the point of contact between the various actors, continuing the studies it has carried out thus far.

Remark 3.

Quality accreditation for higher education in Latin America and the Caribbean is confined, for now, to higher education institutions and the qualifications they offer. Teachers fall outside the scope of these assessments (except in Mexico). For now, they are assessed only as part of institution accreditation. That is to say, one of the factors assessed considers elements related to the workforce.

Recommendation.

The countries analysed must work to improve the quality and training of their lecturers (for more on this subject, refer to chapter 4). In light of the possible construction of a European, Latin American and Caribbean Area, it would be advisable for the member States to share certain basic standards, including with regards to lecturers. It has already been noted that the SNI and the PRODEP are the two instruments used in Mexico to assess lecturers and researchers. Broadcasting its methods of operation and the results attained could help raise awareness on the need to implement similar mechanisms.

Remark 4.

It can be seen that, in some cases, quality accreditation is still a voluntary process for the various higher education institutions.

Recommendation.

One of the options from the various States is to make these procedures compulsory, both for those which already exist (HEIs and qualifications) and for those which it would be advisable to design (lecturers). The other option, perhaps less abrupt, involves incentives for quality accreditation. Note the example of El Salvador, where accredited institutions enjoy benefits such as the ability to create new undergraduate qualifications or priority for grants.

3. Analysis of the structure of higher education qualifications

This chapter centres on the analysis of higher education qualifications in each of the countries, with higher education being taken to mean "third level of the education system, generally structured in two levels, undergraduate and postgraduate" (UNESCO-IESALC 2005)[25]. This is a key part of the report, given that standardisation of qualification characteristics is a crucial element in the creation of a common area for Higher Education, Science, Technology and Innovation. For the purposes of identifying and assessing the possible decisions to be made in constructing a common framework, what follows is a general overview of the current situation.

The information is presented divided by level. Firstly, undergraduate studies, including *licenciaturas*, *grados*, *carreras*, *bachillerato* or *bachillerato universitarios*, etc. Secondly, postgraduate studies, primarily known as specialisations and Master's. Lastly, information relating to doctorate studies is presented separately. In all three cases, information is given on the following elements:

- Access requirements for specific studies.
- Duration of studies.
- Existence of distinct levels or types of qualification within undergraduate and postgraduate studies and duration of these same.
- Modes of study offered (face-to-face, blended, online…).
- Existence of dual degree programmes.
- Existence of placement periods and their natures (duration, whether compulsory, etc.).
- System for earning the qualification (doctorate studies): thesis, academic articles, etc.

A key point is the academic organisation system for the studies. General information on the duration of qualifications is covered in the section relating to each of the levels. The existence of credit systems in the different educational structures of the Latin American and Caribbean States is addressed in the last section of the chapter, analysing the extent to which these structures have been implemented and the equivalencies established in each country.

25 TN - The source text mentions that in some cases 'pregrado' is used rather than 'grado'. As both of these translate to 'undergraduate', I have omitted this note.

3.1. Undergraduate studies

Generally speaking, undergraduate studies are defined as university studies following the completion of middle or secondary education and which, in many cases, provide access, when completed, to Master's and doctorate studies. The complete list of undergraduate studies offered in the 22 countries can be found in Appendix I of this report.

3.1.1. Access requirements for undergraduate studies

The main requirement for access to undergraduate studies established in the countries of Latin America and the Caribbean is conclusion of middle or secondary education, also known as baccalaureate. In countries like Argentina, obtaining the Certificate of Secondary Education guarantees unrestricted access to university undergraduate education (although special conditions are outlined for persons over 25 years of age). Even at this stage, recognition or validation of studies pursued abroad are highly relevant, given that the interested party must complete the necessary procedures before the relevant authorities in order for this secondary-level qualification to allow access to the university system.

In many other countries, completion of secondary education is a requirement but is not in itself sufficient to commence university studies. In this vein, the presence of admissions tests is fairly common throughout education systems; in some cases, completion of a university foundation course is also expected. These admissions tests are not always unified at a national level, but rather it is possible that, despite the existence of common features, each university has the freedom to design and regulate them, as is seen in Costa Rica, Honduras or Paraguay. In other countries, general requirements or tests do exist: Ecuador (Placement and Admissions System), Brazil (National Secondary Education Exam), Chile (University Admissions Test) or the Dominican Republic (Academic Orientation and Mediation Test), among other examples.

On the other hand, it is important to highlight the difference in conditions between public and private universities, as in the latter we see fewer admissions tests for undergraduate studies. We also see, in some cases, the requirement of a specific grade in order to access certain studies, or, in countries such as Panama or Cuba, of an adequate proficiency in the Spanish language.

What follows is a presentation of the principal entry requirements for undergraduate studies in the various countries analysed, taking into account elements mentioned previously, such as minimum level of studies required or the presence of admissions tests. As will be seen, certain areas of expertise (Engineering, Art or Health Sciences) may require more specific conditions or tests.

Table 7. Access requirements for undergraduate studies.

Countries	Prior studies	Admissions test
ARGENTINA	Certificate of Secondary Education.	None.
BOLIVIA	Secondary-level (Baccalaureate diploma).	Academic Proficiency Test (Prueba de Suficiencia Académica, PSA).
BRASIL	Secondary Education Studies.	National Secondary Education Exam.
CHILE	Certificate of Secondary Education.	University Admissions Test (Prueba de Selección Universitaria, PSU).
COLOMBIA	Baccalaureate Diploma.	State Exam.
COSTA RICA	Secondary Education Diploma.	Aptitude tests, specific tests.
CUBA	Pre-university level of education.	Entrance exams in three subjects (History of Cuba, Spanish Language and Mathematics).
ECUADOR	Baccalaureate Diploma or equivalent.	National Exam for Higher Education (Examen Nacional para la Educación Superior, ENES).
EL SALVADOR	Título de Bachiller.	No.
GUATEMALA	Diversified level Diploma.	Academic Aptitude Test (Prueba de Aptitud Académica, PAA).
HAITI	Secondary education.	Admissions test or exam.
HONDURAS	Studies in the diversified secondary-level cycle.	Admissions Test.
JAMAICA	Five CSEC subjects.	Certificate of general and technical skills.
MEXICO	Minimum high school studies (Baccalaureate).	Exani-II.
NICARAGUA	Baccalaureate Diploma or equivalent.	Public and private university admissions tests.
PANAMA	Baccalaureate.	Admissions Exam.
PARAGUAY	Secondary-level Education.	Admissions Exam.
PERU		Proficiency test (compulsory); aptitude and attitude assessment (optional).
DOMINICAN REPUBLIC	Baccalaureate Certificate or equivalent.	Academic Orientation and Mediation Test (Prueba de Orientación y Medición Académica, POMA).

Countries	Prior studies	Admissions test
TRINIDAD AND TOBAGO	Secondary Education.	Caribbean Advanced Proficiency Examination (CAPE); Caribbean Secondary Education Certificate (CSEC).
URUGUAY	Secondary Education completed.	Admission exam for some courses.
VENEZUELA	Baccalaureate Diploma.	Internal tests by universities.

Argentina

- Certificate of Secondary Education.
- No admissions tests.
- Law 24.521 (art. 7) provides for exceptional access by persons over 25 years of age who have not completed secondary education. Admissions exams in these cases are set by individual universities.

Bolivia

- Completed secondary-level education and possess a Baccalaureate diploma.
- Various procedures for admissions to public universities: Academic Proficiency Test (*Prueba de Suficiencia Académica, PSA*), University Foundation Course (*Curso Preuniversitario, CPU*) or Special Admission (*Admisión Especial, AE*).
- Private universities: outline various intake criteria and procedures, among them entry at the full discretion of the student, process of selection by study grants, transfer of records from another university, transfer between courses within the same private university. The requirement for completion of secondary education remains.

Brazil

- Completed secondary education studies.
- Pass the appropriate selection process. The National Secondary Education Exam (*Examen Nacional de Enseñanza Media, ENEM*) was restructured by the Federal Government in 2009 in order to employ it as an selection method for admission to higher education institutions, for academic mobility and, likewise, to encourage restructuring of secondary education curricula. Universities, within the frame of their university autonomy, may choose whether or not to join the ENEM, although it can be seen that the majority of institutions, both public and private, do use it.

Chile

- Secondary education diploma or certificate.
- The Council of Deans (*Consejo de Rectores, CRUCH*) sets the University Admissions Test (*Prueba de Selección Universitaria, PSU*), a shared admissions procedure for all undergraduate studies. The specific procedures and other types of requirements in addition to the above are decided by individual universities, vocational institutions or technical training centres, in exercise of their autonomy.
- Depending on the institution, some artistic courses may have additional admission requirements.

Colombia

- Baccalaureate Diploma certifying completion of secondary education (tenth and eleventh grades).
- State Test run by the Colombian Institute for the Assessment of Education (*Instituto Colombiano para la Evaluación de la Educación, ICFES*) or its equivalent in other countries. Each institution may establish other requirements as it sees fit (from admissions exams to, in the case of Music programmes, instrumental exams or auditions and sight-reading).
- Private universities: carry out admission exams, but more for the purposes of appraisal than selection.

Costa Rica

- Secondary Education Diploma.
- Aptitude tests (in three of the four public universities), with a required score for the degree to be studied. Some artistic courses (Dance or Music) require applicants to pass additional specific aptitude tests. Specific tests also exist in state universities and in those linked with international organisations. Provisions are made for certain cases to be exempt from the test in state universities (having completed another course or favouring admission of certain groups).

Cuba

- Pre-university level of education.
- Admission exams in the subjects of History of Cuba, Spanish Language and Mathematics, which must be passed with a mark of 60 or higher.

Ecuador

- Baccalaureate Diploma or equivalent.
- In the case of public HEIs, the requirements set by the National Placement and Admissions System must be met, which includes passing the National Exam for Higher Education (*Examen Nacional para la Educación Superior, ENES*).

El Salvador

- Baccalaureate Diploma.
- The Law on Higher Education does not require that any admission exam be taken.
- Private universities: may set admission exams.

Guatemala

- Academic Aptitude Test (*Prueba de Aptitud Académica, PAA*).
- Diversified-level Diploma (pre-university, which includes various technical courses). Not comparable to a higher education qualification, but rather consists of preparatory studies for university. Completing it involves two years of study following the third year of basic or secondary education (5th and 6th year of secondary school). It is applicable to both public schools and private colleges.

Haiti

- Secondary education completed and certified.
- Admission test or exam, following which the students with the highest marks will be accepted.

Honduras

- Studies in the diversified secondary-level cycle.
- Admissions test in public universities. Each centre has its own regulations, although common features exist.

Jamaica

- The admission requirements are set by the document Defining Tertiary Education, issued by the J-TEC, and which is currently a draft text. The requirement is possession of CSECs (Caribbean Secondary Education Certificate) in at least five subjects, which are examined to obtain the certificate of general and technical skills which gives students the necessary foundation to continue their studies or enter the workforce.
- Each university may also establish its own requirements.

Mexico

- Studies at a minimum of high-school level (baccalaureate) or equivalent, which have duration of three years and take place at a level after Secondary Education.
- The National Assessment Centre (*Centro Nacional de Evaluación, CENEVAL*) sets the Exani-II examination.

Nicaragua

- Baccalaureate Diploma or equivalent, with grade certificates for 4th and 5th years.
- There is no common university admissions test. Public and private universities set entrance exams, not always for all courses.

Panama

- Baccalaureate Diploma.
- Proficiency in the Spanish language.
- Exam for admission to public universities on general knowledge, with the aim of determining the student's level in basic literacy and writing skills.

Paraguay

- Secondary-level Education.
- Public universities must regulate in their statues the nature of the entrance exam, whatever it may be called. This exam is set based on the places available in each course. Additionally, each institution may set other admissions requirements.
- Private universities: very few apply entrance exams.

Peru

- Secondary education.
- System of open competition, comprising a compulsory proficiency test and an optional aptitude and attitude assessment. Each university outlines in its statutes the procedures and rules of the ordinary admissions process.
- Admission is strictly merit-based, with exceptions possible for graduates or alumni or applicants who have already passed at least four teaching semesters (who must be subjected to individual analysis); top-level athletes; or people with disabilities, for whom 5% of places are reserved. Persons convicted for terrorist actions or advocating terrorism may not be admitted to universities.

Dominican Republic

- Baccalaureate Certificate or equivalent at secondary technical level, along with certification of the qualifications obtained.
- Initial diagnostic test (Law N.º 139-01), compulsory for all those wishing to be admitted to higher education. The results obtained are passed to the higher education institutions, in order that they can use them among their admission criteria. The test in question is the Academic Orientation and Mediation Test (*Prueba de Orientación y Medición Académica, POMA*).
- In the case of Engineering courses, there are additional requirements established by the institution in question and by the Ministry of Higher Education, Science and Technology itself. To this effect, aspiring students must have basic skills in Science and Mathematics and be demonstrate problem-solving skills, analytical abilities and suitable attitudes for the engineering profession. The admission examinations are standardised at a national level and measure level in reasoning and knowledge of the Spanish Language, Basic Sciences and Mathematics. If the student fails this test, they may attempt it two more times. To improve their level, programmes exist offered by the higher education institutions.

Trinidad and Tobago

- Secondary Education.
- Generally, two passes are required in the Caribbean Advanced Proficiency Examination (CAPE) and five passes in the CSEC (Caribbean Secondary Education Certificate). However, each institution has its own requirements.

Uruguay

- Secondary Education completed (exceptions made in the University of the Republic the case of some resits, which must be passed within the first two months of the course).
- Entrance exam for courses at the University College of Medical Technology (Faculty of Medicine) and at the Higher Institution of Physical Education of the University of the Republic (currently, this condition is undergoing revision).
- Private universities: the majority do not require entrance exams.

Venezuela

- Baccalaureate Diploma. Should this qualification be of a format other than that required by the corresponding Faculty Regulations, an exam set by the Council of that Faculty must be passed. Exceptions are also considered for graduates who are members of the Higher Education staff or in certain cases for persons without a Baccalaureate Diploma.
- The academic aptitude test was dropped as an entrance requirement for national

universities in 2010. Despite this, both public and private universities set internal tests as selection methods.

- The University Sector Planning Office (*Oficina de Planificación del Sector Universitario, OPSU*) created an 2015 a university admission system which weighs: a) the grade point average derived from studies pursued in the general secondary education or technical secondary education system (50 %); b) socio-economic condition (30 %); c) territoriality (15 %); y d) elements linked with vocation and participation (5 %).

3.1.2. Duration and nature of undergraduate studies

Undergraduate studies cover various types of qualification, for example, *Técnico Superior*, *Bachillerato* o *Licenciatura*, each of which has a particular duration. Based on this classification, we can see in countries like Argentina, Guatemala or Venezuela a proliferation of what are termed "short courses", springing from the growth of the non-university tertiary education sector, with a duration of two to three years. In contrast to these are the "long courses", whose duration varies between four and six years. In this latter group, it should be borne in mind that, in the majority of cases, courses in the field of Health Sciences, especially Medicine, extend the basic duration by one or two years, leading to qualification lasting between five and seven years, depending on the case.

Jamaica and Trinidad and Tobago are special cases, given that they have a certificate or diploma which which accredits passage from one type of undergraduate study to the next; which is to say, studies are organised incrementally and the previous level must be passed before moving to the next level. Thus, the certificate has a duration of one year and leads into matriculation in an associate degree programme (with a duration of two years full-time) or undergraduate degree (three to four years full-time, with the exception of Medicine, which takes longer).

The following table outlines the types of undergraduate studies present in each country and the duration of each of them. In this way, a comparison may be made between the situation of the various countries in a clear and simple way. It is interesting to see how the duration of the same kind of undergraduate study within one country can vary depending on whether it is pursued in a public or a private university, with differences of as much as one whole year.

Table 8.
Duration of undergraduate studies in Latin American and Caribbean country

Countries	Duration
ARGENTINA	• Five or six years on average. • "Short courses" exist, with durations of up to three years.
BOLIVIA	• Higher Technical Degree: no less than three years and with 3,400 contact hours. • Licenciatura degree in the field of Medical Health: no less than six years and with 6,000 contact hours. • Licenciatura in the field of non-medicine Health Sciences: no less than four years and with 5,300 contact hours. • Licenciatura degree in the field of Technical and Technological Engineering: no less than four years and with 5,300 contact hours. • Licenciatura degree: no less than four years and with 4,800 contact hours.
BRAZIL	• Bachelor's: minimum of 2,400 hours. • Licenciatura: 3,200 hours (distributed between eight semesters or four years). • Higher technology courses: generally more than 1,600 hours, although this varies based on the specifics of each course.
CHILE	• Bachelor's Degree: two to three years. • Licenciatura Degree: four to five years
COLOMBIA	• Technical: two years. • Technological: three years. • Professional Studies: for the most part, five years. • Medicine: six years.
COSTA RICA	• Bachillerato universitario: three or four years. • Licenciatura: four or five years.
CUBA	• Degree: five years. • Degree in Mathematics: four years. • Degree in Medicine: six years.
ECUADOR	• Licenciaturas and equivalents: 7,200 hours. • Engineering, Architecture and courses in Basic Sciences: 8000 hours. • Dentistry and Veterinary Medicine: 8000 hours. • Human Medicine: 10,000 hours.

Countries	Duration
EL SALVADOR	• Technical: minimum duration of two years. • Teaching: minimum duration of three years. • Technological: four years. • Licenciado, engineering or architecture: five years.
GUATEMALA	• Licenciatura: between five and six years (at the University of San Carlos, the only public university). • Private universities: undergraduate studies between four and six years.
HAITI	• Licenciatura: four years, in general.
HONDURAS	• Associate's Degree: two years or more. • Licenciatura: four years, in general. • Doctorate in Medical Sciences: duration of between six and eight years.
JAMAICA	• Degree: three to four years. • Some professional degrees (medicine or dentistry), have longer durations.
MEXICO	• Degree: from four to five years, depending on the field
NICARAGUA	• Higher Technical: minimum of 1,500 hours. • Licenciatura: minimum of 2,500 horas (dependent on the course profile). • Courses such as Engineering, Architecture and Medicine: minimum of 4,500 hours.
PANAMA	• Human, Social, Basic, Educational and Legal Sciences: four years (public universities); three and a half years (private universities). • Health Sciences: five years in all universities.
PARAGUAY	• Degree: minimum of four years and 2,700 contact hours.
PERU	• Undergraduate (general studies, specific and specialised studies): five years.
DOMINICAN REPUBLIC	• Architecture, Veterinary Medicine, Law, Dentistry, Pharmacology and Engineering: minimum course duration of four years. • Medicine: five years.
TRINIDAD AND TOBAGO	• Degree: generally three years. • Optometry and Pharmacology: four years. • Medicine and Surgery: five years • Licenciatura (taught at The University of the Southern Caribbean): four years

Countries	Duration
URUGUAY	• University Licenciatura: four years. • Engineering, Agricultural Engineering, Dentistry and Veterinary Medicine: five years. • Doctor of Law or Advocacy: six years. • Architecture: six years. • Doctor of Medicine: seven years.
VENEZUELA	• University técnico superior ("short courses"): from two to three years. • *Licenciado* or equivalent ("long courses"): from four to six years.

To complete undergraduate studies, some countries (for example, Costa Rica) require students to take courses or seminars or to write a final project for their degree (graduation seminar, a published article, an essay, an artistic work or a graduation project). El Salvador, in turn, requires completion of a period of social work, set for each qualification. This does not appear to be a general trend.

With regards to modes of study, blended or online options are apparent in a good number of the countries analysed, although face-to-face education continues to be more relevant than the other alternatives.

3.1.3. Organisation arrangements for academic activity

As can be seen in Table 8, the majority of universities organise their academic activity by years (Haiti) or semesters (Colombia, Costa Rica, Cuba, Guatemala, Jamaica, Mexico, Panama, Peru, Dominican Republic, Trinidad and Tobago and Uruguay), although variations exist in each country. Thus, state universities in Costa Rica organise themselves by 17- or 18-week terms and some public universities offer summer terms, whereas others opt to organise by four-month terms. In the Dominican Republic we can see two-month, three-month and four-month terms, and semesters.

In Paraguay and Chile also, there is no uniformity in the organisation of academic activity, and we note years, semesters, three-month terms, mixed systems and other approaches, depending on the specific institution or studies. The situation is similar in Venezuela, where we see organisation by years, semesters or three-month terms, all of them linked to credit units.

In the case of Argentina, the national regulation (art. 42 of Law 24.521) only establishes a set minimum class-load: university autonomy means that each institution can establish its own organisation methods. In other countries we note the presence of a system of "contact hours" (Bolivia, Brazil, Ecuador, Nicaragua and Paraguay) or of "evaluation units" in Honduras and El Salvador. Use of academic credit as a method of organising and structuring teaching activity is not widespread: it is only seen in some countries and

is applied differently between them. Due to its relevance to the creation of a common bi-regional educative area, this topic will be analysed separately in the last section of this chapter.

3.1.4. Existence of joint-honours undergraduate degrees

Joint-honours undergraduate degrees (that is, study plans designed in such a way that upon completion, the student can obtain two degrees issued by the same higher education institution, for example, Law and Translation) are not present in all the countries. On one hand, in a handful of cases this possibility is provided for (Brazil, Chile, Colombia, Costa Rica, Guatemala, Mexico, Dominican Republic and Venezuela). On the other, Argentina, Bolivia, Cuba, Ecuador, El Salvador, Haiti, Honduras (with the exception of the National Autonomous University of Honduras, although not in a generalised manner), Nicaragua, Panama, Paraguay, Peru and Uruguay do not offer joint-honours degrees within the same university. In the case of Argentina, what exists is the possibility of obtaining a degree in a specific area of expertise, for example, History, and simultaneously obtaining a qualification as a History teacher. Jamaica and Trinidad and Tobago deserve special mention, as what their education system does is establish majors and minors in courses, which is to say, focal points for studies.

Within the countries with joint-honours undergraduate degrees we can see that this is sometimes dependent on the specific university, which is to say, that no general regulations exist. This is the case in Colombia, where this option is available at the University of *La Sabana de Bogotá* and, moreover, only for students with high grade-point averages.

Along with joint-honours degrees offered by the university itself, some universities offer the option to obtain this joint-honours degree but, in this case, with a university in another country with which an agreement has been signed. Cases can be found, to a greater or lesser degree, in practically all the countries.

3..1.5. Placement periods in undergraduate studies

Inclusion of a placement period in undergraduate studies is a fairly common practice among the countries of Latin America and the Caribbean, although the characteristics and duration vary depending on the field concerned (technical, healthcare, artistic, etc.), as does the degree of autonomy afforded to the universities of each State in devising this aspect of the course.

Regulated placements appear in the study plans themselves. Each teaching institution establishes agreements with institutions, bodies or companies which will receive students in the placement period. In a general sense, though not in all cases, internal regulations exist, geared towards ensuring that certain standards are met during the said placements. In the case that general regulation does not exist, the higher education institutions themselves apply the criteria that they deem appropriate. In any case, whether placements are compulsory or are a requirement for graduating from university are matters linked to the discipline or area of expertise involved. As will be seen later, all courses related to Health Sciences, among others, have strict regulations in this regard.

It has already been indicated that regulation of this sort of placement can even vary between individual HEIs, and as such it is impossible to make a global comparison. What can be seen is both a tendency to include a placement period in undergraduate studies and an awareness that this sort of professional training requires some minimum completion conditions.

One of the most relevant questions in the march towards a common bi-regional area is whether this sort of practicum is obligatory; a student who decides to pursue part of their studies in another country should know in advance whether they have the option of this sort of training and whether or not it will be recognised on their return.

In Argentina, internships are included in study plans approved by the Higher University Councils, and are compulsory in some cases (Medicine, Psychology, Dentistry, Economic Sciences and Architecture); universities, however, have significant decision-making power within the frame of their university autonomy and the degree is equally valid, regardless of the design of the curriculum.

Some study plans in Bolivia also include placements in institutions with which they have agreements and in El Salvador the majority of undergraduate courses include a number of hours of internships, work placements or teaching practice. In Paraguay, each university makes its own decision on this type of training, whilst in Uruguay they do exist and are certified. In Brazil, law 11.788/2008 establishes that the *bachillerato* curriculum includes a compulsory practicum of no more than 20% of the class-load for the course. In the case of the *licenciatura*, this can be as much as 400 hours, while in the technological degree, details are set in the study plans.

In Chile, study plans leading to professional qualifications include compulsory internships. In Costa Rica we see that the majority of courses include a work placement course or experience outside the campus (in schools, hospitals, companies, municipal offices, etc.). Likewise, in Cuba all study plans for courses studied face-to-face include work placements, which are part of the curriculum and are assessed just like another subject.

Colombia specifically regulates placements for courses in the fields of healthcare, teacher training and Law, while in other areas of expertise they are not compulsory, though they may exist. Similarly, in Haiti, compulsory placements are set for future healthcare professionals and lawyers. Panama follows the same pattern of including compulsory placements for specific courses that, as can be seen, are generally in the field of healthcare (Medicine, Nursing, Pharmacology, Dentistry), of administration (Accounting, Business Administration and Public Administration), and of Education, in addition to Media Studies/Communication Studies. The situation is similar in Peru and Trinidad and Tobago.

In Mexico, work placements are again compulsory, contribute credits towards the *licenciatura* and may be carried out in companies, laboratories, schools, hospitals, etc., always assuming these fit with the discipline studied. It should be highlighted that, in addition, it is compulsory in Mexico to complete a period of community service that also contributes credits towards graduation. Both the compulsory placements and the community service have duration of approximately 480 hours.

Although Ecuador does not have a separate and compulsory period of community service,

it does emphasis the social function of placements and views them, in addition to their education or training aspect, as activities which provide a social benefit to the community and the country. Thus, to obtain their professional qualification, must demonstrate community service through their placements or internships. Placements have a minimum duration of 400. Likewise, in Venezuela, the legislation alludes to the social function of the placements and, according to the Law on Community Service by Students in Higher Education, providing this community service is a requirement in order to graduate.

In Honduras as well, according to the Higher Education Academic Regulations, supervised work placements are a requisite for graduation, although each centre subsequently establishes its own regulation in this regard. By way of an example, the country's National Autonomous University expects 800 hours with an institution or organisation which provides services similar to those to be provided by the future professional.

The situation is very similar in the Dominican Republic. The Regulation for Assessment and Approval of Graduate-level Courses stipulates, as one of the necessary requirements for meeting the objectives of the National System of Higher Education, the "completion of co-curricular activities, visits, placements in companies and centres connected to the profession, participation in community services benefiting the overall education of the students". Following this, the higher education institutions outline their own regulations for internships. In courses where it is required, study plans include a subject dedicated to putting the concepts and skills learned in the classroom into practice in a real-world environment.

In Nicaragua, the requirements for placements are included in the curricula and are established in accordance with the dictates of the National Council of Universities, which regulates these aspects at a national level. In Guatemala, at the University of San Carlos, are again a prerequisite for graduation and are allocated credits. Lastly, in countries like Jamaica, only some programmes offer external placements (with durations of between four and 30 weeks) and these are only compulsory in some cases.

With regards to mentoring for placements, we see a general awareness of the need for involvement in the process, although the criteria may vary between countries. In any case, the student carrying out the placement is usually supported both by university professionals (tutors) and by professionals from the other party (schools, companies, hospitals, municipal bodies, etc.). Monitoring can include creation and submission of reports, activity schedules or other methods of verifying the tasks performed and when they were carried out.

As noted above, special consideration should be given to courses in the field of Health Sciences, as well as those related to Education and Law. In these cases, placements are compulsory and are regulated in more depth and more detail, especially in qualifications belonging to the field of medicine and health in all its forms.

The structure and duration of placements varies in these cases as well, often depending on the provisions of each individual university. In general terms, placements or internships in Medicine have a duration of at least one year (Peru, Dominican Republic, Trinidad and Tobago, Mexico and Jamaica). In all the countries, placements are compulsory, and, in the case of Cuba, this training is in addition to the obligation to pass a state exam in order to

practise. Other qualifications in the field of Health Sciences such as Nursing (Dominican Republic), Optometry and Dentistry (Trinidad and Tobago) also require the completion of placements lasting between six and twelve months.

Where other qualifications are concerned, in Haiti, Chile and Colombia the placement periods are also compulsory for Law and Legal Sciences; in Trinidad and Tobago and Costa Rica, among others, for qualifications in Education and, in Uruguay, for Physical Education.

3.2. Postgraduate studies

This section of the third chapter of the report carries out a systematic analysis of the principal characteristics of the postgraduate studies to be found in Latin American and Caribbean countries. The same aspects are considered as for undergraduate studies, but in this case for specialisations, Master's and similar qualifications. Doctorate studies, in turn, will be analysed separately in the following section.

3.2.1. Access requirements for postgraduate and Master's studies

The general condition for accessing postgraduate education in the various countries analysed is possession of a university degree at undergraduate level. Some States consider exceptions in very specific situations: for example, in Argentina it is possible to access postgraduate education with a non-university higher qualification that has duration of at least four years. In Jamaica, for specific cases, proof or years of experience in a field related to the field in which the applicant wishes to study may serve instead of the degree requirement.

From the starting point of this basic condition (which is the only one in Bolivia, Paraguay, Peru, the Dominican Republic and Uruguay, apart from those established by individual universities), there are a wide variety of requirements that vary depending on the particular country or university. In cases such as Jamaica, Honduras, Chile and Trinidad and Tobago, the grades on the students academic record are taken into account when considering an application to a postgraduate programme. Other countries, such as Chile, Costa Rica, Cuba, Mexico and Venezuela, require certification of a certain level in a second language (Mexico and Venezuela only in certain cases) and in other cases there is a face-to-face interview with the candidate. Ecuador, Haiti, Panama and Venezuela require completion of admissions tests or examinations. Additionally, as these studies, in many cases, already include a significant research element, in Brazil, for example, a research plan is requested of the student as part of their application.

Once again, postgraduate courses corresponding to specific areas of expertise include additional conditions. Thus, in Panama, the general requirement is possession of an undergraduate degree. However, in the case of programmes in Health Sciences, some branches of engineering or Architecture, the undergraduate degree must be specifically from these fields. The situation is similar in Colombia, where specialisation programmes

relating to professions require a degree in the corresponding profession or similar. In Chile, in the case of medical specialisations, the professional qualification is required and, if this last was obtained abroad, it must be re-validated through the Single National Medical Exam.

As with a fair number of the aspects analysed in this report, we see countries that do not have general access requirements for postgraduate courses, but where these depend instead on what is established by the individual universities. In the case of Guatemala, Nicaragua (the only general condition is possession of a degree in order to access postgraduate-level courses and a *licenciatura* to access a Master's programme) or El Salvador (where for some universities, specific programmes, such as Aeronautical Engineering at the University of Don Bosco, require an entrance examination to be passed).

Lastly, where concerns modes of study for postgraduate courses, face-to-face teaching continues to be most common, although little by little a new tendency is appearing towards education on virtual platforms. In this vein, all the countries analysed offer postgraduate courses in face-to-face, blended and distance- or online-learning formats.

3.2.2. Duration and typology of postgraduate studies

Classifications of postgraduate studies in the countries analysed includes, in broad terms, specialisations, Master's and doctorates (all points relating to doctorates are covered separately in section 3.3). Paraguay includes '*capacitaciones*' in addition to these types and Peru distinguishes between diplomas, Master's and doctorates. In some cases, programmes exist for technical professional specialisation, technological specialisation and professional specialisation. It should be emphasised that, in many of the States, special importance is given to programmes related to the Sciences, in particular to the field of Healthcare, which are a separate category in Ecuador, Colombia and Chile.

Some countries (Brazil, Costa Rica and Nicaragua) make a clear distinction between two types of Master's: professional, and academic, respectively, those which aim to train students for professional practice and those which aim to train researchers. In Costa Rica, professional Master's are characterised by the absence of a requirement for training in the field of study of the Master's; additionally, no final thesis is required, but rather a graduation project. The academic Master's, in turn, requires prior studies in the area of expertise and defence of a thesis. In the same way, in Nicaragua, professional Master's consist of 15% research oriented, 35% academic and 50% employment related, and may culminate in research for a thesis. Academic Master's are, in this case, those pursued in areas of the Sciences, Humanities or Arts and require a deeper understanding; they culminate in a research project or a graduate thesis which must be defended before a committee.

The duration of postgraduate studies relates to the specific type in question. In general terms, durations of specialisations range from a few months to a year, given that these are studies following a degree course and allowing development as a professional or researcher. Master's, in turn, have a duration of two to three years in most cases (although there are exceptions, such as Guatemala, where the duration is shorter, in this case between a year

and a half and two years). This time around, the programmes are aimed at broadening understanding and feature research and knowledge generation as key components.

Despite these general patterns of types and durations for postgraduate courses, there are systems which fall outside their scope. This is the case in Cuba, where postgraduate courses (courses proper) have a duration of one month; diplomas, one semester; and Master's last five years: a teaching period of two years and another three to defend the project.

It bears mentioning that some countries, such as Trinidad and Tobago, allow for variations in the duration depending on whether the studies are undertaken full- or part-time (18 and 36 months respectively). This differentiation is also seen in some countries when it comes to doctorate studies. Lastly, we should address the specifics unique to postgraduate courses in Health Sciences, which generally take longer than the average. Consider, for example, the case of the Dominican Republic, where those specialisations in this field with a programme and level equivalent to a Master's include a minimum of 40 credits earned over three years of study and research and are undertaken in teaching hospitals endorsed by higher education in

3.2.3. Organisation arrangements for academic activity

Similar to what we have seen in the case of undergraduate studies, no general mechanism exists for organising academic activity in postgraduate study in the countries of Latin America and the Caribbean. Thus, we can see evidence of organisation by years, four-month terms, credits, assessment units and hours (credit systems will be discussed in the final section of this chapter). In addition to the differences between states, we once again see that university autonomy can introduce notable differences in the systems for organising academic activity. This is seen in Guatemala, Chile and Venezuela, in which each institution establishes the composition of the curricula for its study programmes.

In some of the cases, organisation is based on semesters, four-month terms, trimesters or two-month terms, but in both Mexico (semester-based) and Nicaragua (semesters, four-month terms, trimesters and two-month terms), credits are also considered. In the case of Paraguay, postgraduate studies are organised by modules through what are known as "lecture hours" (*horas cátedra*) On the other hand, Costa Rica is currently pushing for Master's to be organised by semesters.

3.2.4. Placements in postgraduate studies

No common pattern exists when it comes to placement periods, be they voluntary or compulsory, in postgraduate studies. In various countries, this sort of training is not included for studies at this level (Bolivia, Ecuador and Honduras). In other cases, placements are included, but limited to only studies in the field of Healthcare and Health Sciences (for example, clinical practicums in postgraduate studies in Argentina, Colombia, Costa Rica; in Mexico for medical specialisations; and in Peru, in the form of medical internships). They are also compulsory in Chile, where students must additionally sit a theory exam set by the National Autonomous Council for the Certification of Medical Specialisations (*Corporación Nacional Autónoma de Certificación de Especialidades Médicas*) and, upon passing this, another practical exam.

In contrast to these States, in other countries, placements are indeed of great importance in the training of postgraduate students. In Cuba, they feature in the study plans for each year and are part of the learning assessment. In Nicaragua also, as a rule, higher education institutions must include in their study plans the placement periods and durations. In Panama, for studies that include placements, these are obligatory, while in Haiti, in the few existing postgraduate courses placements related to the specialisations in question are encouraged. Lastly, in El Salvador all postgraduate study plans require a period of "social work".

In Guatemala, Jamaica, Trinidad and Tobago, Uruguay and Venezuela, it is up to each institution (or even the specific postgraduate programme) to decide whether to include placements in the students' education. The same situation is seen in the Dominican Republic and in Paraguay, where placements are regulated in general terms, but institutions introduce them into their study plans.

3.3. Doctorate studies

This section provides information on the principal characteristics of postgraduate studies in the countries of the latin american and caribbean region. It addresses similar questions to those analysed for undergraduate and postgraduate studies, although it presents the information in a different format due to the unique properties of these sorts of postgraduate studies.

3.3.1. Access requirements for doctorate studies

The first thing to note with regards to these types of studies is their uneven development in the various countries of Latin America and the Caribbean. For example, in El Salvador the existing programmes are very sparse; in Haiti, doctorate programmes only exist in the field of Medicine. In other countries, the offering is much broader and encompasses all areas of expertise.

In terms of conditions for accessing doctorate programmes, generally speaking, possession of a *licenciatura* or Master's degree is required. What follows, as with graduate studies and the other kinds of postgraduate studies, are additional requirements and various levels of stringency depending on the country of programme in question. In Guatemala or Colombia it is necessary to have completed undergraduate studies, while in Costa Rica, Nicaragua, Paraguay, Peru, the Dominican Republic and Uruguay a Master's is required. In Chile, the essential condition for admission is a *licenciatura* degree (or better). In Argentina no common pattern exists: in some cases it is enough to hold an undergraduate degree, but other institutions require a postgraduate degree.

The differences which exist with regard to the minimum level of studies required for a doctorate must be considered when taking steps towards creation of a common higher education area; in the current situation, an undergraduate degree is enough to be admitted for a doctorate in Colombia, but a Colombian student who wanted to study for a doctorate in Uruguay would require a Master's. These are significant differences which could prove a hindrance to student mobility.

Table 9.
Access requirements for doctorate studies.

Countries	Prior studies
ARGENTINA	Depends on the institutions: undergraduate or postgraduate degree.
BOLIVIA	Master's.
BRASIL	Degree and Master's.
CHILE	*Licenciatura* or better.
COLOMBIA	Undergraduate degree.
COSTA RICA	Master's (exceptions exist permitting undergraduate degrees).
CUBA	Undergraduate degree.
EL SALVADOR	Master's..
GUATEMALA	*Licenciatura.*
HAITI	*(Only one doctorate programme exists).
HONDURAS	Degree.
JAMAICA	Degree or Master's.
MEXICO	*Licenciatura* or Master's.
NICARAGUA	*Licenciatura* or Master's.
PANAMA	Master's.
PARAGUAY	Master's
PERU	Master's.
DOMINICAN REPUBLIC	Master's (although it is noted that no doctorates exist).
TRINIDAD AND TOBAGO	Master's..
URUGUAY	Master's.
VENEZUELA	Master's (not always).

Aside from the minimum level of studies and depending, as has already been mentioned, on the individual country, institution or even programme, access to a doctorate programme may require certification of an acceptable level of a second language (Brazil, Costa Rica, Cuba, El Salvador and Peru, among others); presentation of a research project; an individual interview; reports, references or letters of recommendation; a certain level of grades in academic records of previous studies, etc.

3.3.2. Duration and format of doctorate studies

The duration of doctorate studies runs, in general terms, from a minimum of three to a maximum of five years. They tend to be split into one part dedicated to research seminars and, once this is complete, a part geared towards writing a doctoral thesis. Exceptions to this general tendency are Honduras and Paraguay, where doctorates take two years. In Nicaragua, Panama and Jamaica different durations are provided for depending on whether the student is studying full- or part-time and on the complexity of the PhD. For example, in Trinidad and Tobago, which also makes these distinctions, a student may spend up to eight years on a doctorate if they consistently study part-time. In Ecuador also, the duration of these studies depends on the field of knowledge and the student's study scheme, permitting a maximum of seven years, plus an additional grace year.

With regards to study modes for these studies, face-to-face continues to dominate. In this respect, the majority of countries offer only this option. Other cases do provide for distance learning. Haiti is a special case, where the few existing doctorate programmes are recent, and as such, generally speaking, agreements are made with foreign universities allowing these studies to be done by distance learning, although some are pursued in Haiti. In some cases, the student participates through video-conferences but, at times, they are required to travel to the country in question for the classes.

3.3.3. Structure of doctorate studies

A large number of the countries employ a similar structure for doctorates. Which is to say, they differentiate between the teaching and research parts, divided by credits and hours in most cases, although programmes structured by year also exist. As is to be expected given the nature of these types of studies, the research side is more heavily weighted, focusing on the writing and presentation of a thesis or individual and original research project. In countries like Brazil, there is no teaching period, and the entire doctorate instead focuses on study and research. In other cases, like Panama, both parts happen simultaneously, while in the existing programmes in Haiti there is a clear split into two parts: one of doctoral training (60 credits) and the other for writing the thesis (120 credits).

Doctorate studies are structured by semesters (Trinidad and Tobago, Peru, Jamaica and Mexico), although in this last case a large number of programmes are divided into four-month terms (with hours and credits). In Venezuela, Guatemala and Chile there is no defined general structure, but rather this is left in the hands of the higher education institutions. In Venezuela, however, some minimum regulations are indeed set: at least 45 credits must be studied and a doctoral thesis must be presented, which carries, as a minimum, 30 credits. Lastly, in Paraguay courses are organised into "lecture hours" (*horas cátedra*). The credit and hours mechanisms which exist in the region will be analysed in greater detail in the following section.

3.3.4. Attainment system for doctoral degrees

In all the countries of Latin America and the Caribbean, in order to obtain a doctorate, it is necessary to complete a doctoral thesis, an original work which represents a contribution to the area of expertise to which it belongs. This thesis is written under the supervision

of a tutor and is presented in a public defence before a committee. In cases where studies include a teaching or course section, it is understood that this must also be passed (Haiti, Trinidad and Tobago and Venezuela, for example).

Beyond writing the thesis, countries such as Uruguay include as a requirement (at the University of the Republic specifically) the publication of two articles. The same occurs in Trinidad and Tobago in the case of what are known as "professional doctorates". In Mexico as well, some programmes include in the design of their curricula and regulations the publication of an article, which, depending on the level of stringency, may be a reviewed or indexed article.

Along with this core requirement, of a doctoral thesis, some States require a certain skill-level in one or more languages, not only as a condition for accessing the programme but as an additional and sometimes essential requirement for obtaining the doctorate (Peru and Venezuela for some programmes). In Chile, there is also a requirement to complete internships abroad.

It should be noted that, as in many other points covered in this report, university autonomy plays a vital role, such that in countries like Guatemala and Jamaica these institutions specify the requirements for obtaining a doctorate qualification.

3.4. Credit/hours systems

Credit is a unit of measurement for academic work which can be based on various parameters, such as hour/class load, independent study, field work, laboratory work or learning outcomes. Thus, a credit system is a way of describing a teaching programme by assigning credits to each of its components. By way of an example, in the case of the European Higher Education Area (as will be seen in the chapter dedicated to the EHEA specifically), one ECTS credit (European Credit Transfer and Accumulation System) is equivalent to 25-30 hours of work, including contact hours, placements and independent study by the student. Credits are assigned to all educative components: modules, courses, placements and thesis projects.

In the case of Latin America and the Caribbean, more than half the countries use some sort of credit system to quantify academic activity. We see, however, a varied landscape when it comes to the hours which comprise one credit. Likewise, differences exist with regards to the educative components to which credits are assigned, based on the individual philosophies of the systems: while in this region credits are decided on the basis of hours/classes, the ECTS seeks to assess the student's learning with regards to skills acquisition.

When the general or education-specific regulations assign a unit of measurement for academic work, whether this is called a credit or a value unit, they tend to specify its value in hours (hours which are not necessarily composed of 60 minutes, but rather range from 45 to 60 minutes). In some countries, when it comes to setting credit/hour equivalencies, consideration is also given to independent work by students; this is true of Colombia, Cuba, Guatemala, Mexico and the Dominican Republic.

3.4.1. Credit/hours systems in undergraduate studies

Countries like Argentina and Bolivia do not have regulations on credits for undergraduate studies. When this occurs, the academic load is organised on the basis of a number of hours to be completed for each of the levels comprising the studies. In El Salvador and Honduras the term "value units" is employed, but they do not assign the same number of hours to them: in El Salvador, one value unit is 20 class hours of 50 minutes each; in Honduras, one hour of theory or three of practicals. In Paraguay, on the other hand, the credit system is little used in higher education: a modular system of lecture hours is used (60 minutes each).

The remaining countries (Brazil, Chile, Colombia, Costa Rica, Cuba, Ecuador, Guatemala, Haiti, Jamaica, Mexico, Nicaragua, Panama, Peru, the Dominican Republic and Venezuela) do use the credit system to measure activity in undergraduate studies. The credits assigned vary based on the level or type of qualification concerned (*técnico*, *bachiller*, *licenciado* or engineering degree), and in particular for courses related to the field of Medicine, in which the number of credits tends to be higher than in the others.

It is crucial to note that significant differences exist in how hour equivalencies are set for these credits: there are no standard criteria. Values can range from one hour per week (a single credit in Jamaica) to the 50 hours of professional activities in Mexico. In this last case, the credit is also equivalent to 16 hours of theory, 16 hours of practicals or 20 hours on individual or independent study.

Moreover, while in some countries the hour equivalency of a credit encompasses all activity without distinction between hours spent on theory, practicals, research projects, etc., in other cases there is a distinction between theory hours and the student's independent study. Thus, in Colombia one credit equals 48 hours, of which 16 are contact hours and 32 are independent study. In Cuba too, it is 48 hours, 12 of contact and 36 of independent study. In Brazil one credit equals 15 hours; in Chile, from 24 to 31 hours; in Ecuador, 40 hours (50 for Medicine); in Guatemala, 45 hours; in Haiti, 15 hours of activity; in Nicaragua, 15 hours of theoretical or practical classes; in Peru, 16 hours of theory or 32 of practicals; and in the Dominican Republic, five or 30 hours of supervised practice or 45 hours of independent study.

The following table outlines in detail the credit/hour relationship for undergraduate studies in the various countries of Latin America and the Caribbean.

Table 10.
Credit/hours equivalencies for undergraduate studies.

Countries	Duration of qualifications in credits/hours
ARGENTINA	No credit/hours system exists (for engineering only).
BOLIVIA	No credit/hours system exists.
BRAZIL	One credit = 15 hours of 60 minutes each (100 days – 15 weeks). Bachelor's: 2,400 hours. *Licenciatura:* 3,200 hours (eight semesters – four years). Technological Training: 1,600 hours.
CHILE	Un crédito = 24-31 horas de trabajo real (60 créditos por año = 1.440-1.900 horas). Un año completo: 60 créditos. Cuatro años: 240 créditos. Cinco años: 300 créditos. Siete años: 420 créditos.
COLOMBIA	Un crédito = 48 horas de trabajo (16 horas de clase + 24 horas de trabajo autónomo).
COSTA RICA	One credit = three hours Bachiller universitario: 120 credits (three-four years). *Diplomatura*: 40 credits. *Licenciatura*: 175 credits (four-five years).
CUBA	No credit system exists at undergraduate level.
ECUADOR	One credit = 40 hours (50 for Human Medicine). *Licenciatura*: 7,200 hours. Engineering, architecture and courses in basic sciences: 8000 hours. Dentistry and veterinary medicine: 8000 hours. Human medicine: 10,800 hours
EL SALVADOR	Value unit = 20 hours of work (of 50 minutes each). Technical: 64 value units (two years). Teaching: 96 value units (three years). Technological: 128 value units (four years). *Licenciatura*, engineering or architecture: 160 value units (five years)..
GUATEMALA	One credit = 15 contact hours (one contact hour implies two hours of study, and as such the student works for a total of 45 hours). Normal duration of a class period: 45 minutes. Average number of credits per course: 225 credits. *Data drawn from a report by the Guatemala Council for Private Higher Education (*Consejo de la Enseñanza Privada Superior de Guatemala, CEPS*). This document is not official nor mandatory for all institutions.
HAITI	One credit = 15 hours of activities. Credits are beginning to be used in some HEIs.

Countries	Duration of qualifications in credits/hours
HONDURAS	Value unit = one hour of theory or three hours of practicals per week for 18 weeks. Associated Degree: 80 value units (two years or more). *Licenciatura*: 160 value units or more.
JAMAICA	Once credit = one hour per week for 13 weeks (information based on The University of West Indies).
MEXICO	Credit equivalence by type and number of hours varies depending on the higher education institution. Undergraduate studies: 180-240 credits (four-six years).
NICARAGUA	One credit = 15 hours of classes (theoretical or practical) in one 16-week semester. This is not general across HEIs. Higher Technical courses: 96-120 credits (1,500 hours). Licenciatura: 200-220 credits (2.500-4.500 hours). Medicine and Surgery: 249-291 credits in the first five years of the course.
PANAMA	Credit systems in all universities, but each assigns a different number of hours to them. One credit = one hour of classes per week for 15-16 weeks. One credit = two-three hours of laboratory or practical work. Private universities: - Technical: 120-150 credits (one and a half to two years) - Licenciatura: 180-215 credits (four-five years). - Specialisation: 20-25 credits (one year). - Master's: 30-40 credits (one and half to two years). - Doctorate: 60 credits + defence of thesis (two years)
PARAGUAY	Credit system little used. System of lecture hours studied (45 minutes) Degrees: minimum duration of four years (2,700 hours).
PERU	Each university establishes its own scheme (preferably, following the semester system and using credits). One credit (face-to-face classes) = 16 contact hours or 32 hours of practicals (depending on the university, hours may be from 45 to 60 minutes). Undergraduate studies: general studies + specific and specialised studies. General studies (compulsory): duration of no less than 35 credits. Study period: duration of no less than 165 credits.

Countries	Duration of qualifications in credits/hours
DOMINICAN REPUBLIC	Once credit = five hours of theory instruction and/or direct supervision by the lecturer; or 30 hours of practicals supervised by the teacher; or 45 hours of research or independent study. It is assumed that for every hour of teaching (theoretical or practical) the student will spend three to four hours studying. *Licenciados*: 140 credits. Architecture, Veterinary Medicine, Law, Dentistry, Pharmacology and Engineering: 200 credits (minimum duration of four years). Medicine: minimum duration of five years (includes medicine foundation course, with a minimum of 90 credits).
TRINIDAD AND TOBAGO	There are no standard criteria for credit to hour equivalencies. The University of Trinidad and Tobago: one credit = 15 hours. University of the Southern Caribbean: one credit per semester indicates a face-to-face class time of 50 minutes. A preparation time of two hours is assumed per class. A class worth four credits takes place four times per week. A three-hour practicum is equivalent to a standard class period (unless otherwise noted by the course syllabus). The University of The West Indies: one credit = one hour of classes per week for 13 weeks.
URUGUAY	One credit = 15 hours (not implemented in all universities). University of the Republic *Licenciatura*: 1,800 hours (four years). Engineering, Dentistry and Veterinary Medicine: 450-495 credits (4,000-4,400 hours over approximately five years). Doctorate in Law or Advocacy: 2,967 hours (six years). Architecture: 583 credits (six years). Medicine: 741 credits (seven years).
VENEZUELA	One credit = one-three hours (14-16 weeks). This does not include the student's independent study time. Advanced Technical Courses (short courses): two-three years. *Licenciaturas* or equivalent, including medicine (long courses): four-six years.

As can be seen, not all the countries have credit/hours systems for organising academic activity. There are, however, a large number which have begun implementing this sort of organisation, although with notable differences between countries (both in the number of hours in a credit and in they type of hours or work which the credit includes) and even between higher education institutions within the same country. The following figure notes the the value of one credit in undergraduate studies (the value units used in El Salvador and Honduras are also considered as credits) for which there is a common system or, at least, some general values, even if individual HEIs have autonomy in this regard.

3.4.2. Credit/hours systems in postgraduate studies

As with undergraduate studies, not all the countries employ credit systems for organising academic activity at postgraduate level. Argentina, Chile, Costa Rica, Haiti (with a very small number of these sorts of studies) and Jamaica do not employ this method of

organisation. In these cases, activity is structured by years (with the exception of Jamaica, which uses semesters).

El Salvador and Honduras, in the same way as with undergraduate studies, have value units rather than credits. They have the same hour equivalencies as for undergraduate level in El Salvador (20 hours of 50 minutes of work each) and equal one hour of theory and three or practicals or four hours of supervised work in Honduras. In Paraguay, the situation is the same as at undergraduate level: the credit system is not yet established and the system uses lecture hours, equivalent to one hour (60 minutes).

In Guatemala and Panama we see credit systems used, but we also note that the number of hours to one credit is not well defined. For example, in Guatemala, a proposal was made in 2015 of 12 hours per academic credit for Master's and postgraduate levels (three hours of independent work by the student for every contact hour, which is to say, a total work load of 48 hours per credit). Mexico, in turn, distinguishes between four type of hours: theoretical, practical, individual study and supervised learning. Equivalencies exist based on type and number of hours which vary between higher education institutions.

The remaining countries do employ credit systems to quantify educational activity at postgraduate level with its equivalent in hours (Bolivia, Brazil, Colombia, Cuba, Ecuador, Nicaragua, Peru, the Dominican Republic and Venezuela). As with undergraduate studies, the number of credits varies between the different levels of studies (specialisations, Master's and doctorates). Furthermore, while in some States credits encompass all activity without distinctions, other establish differences between theoretical and practical hours.

Similarly, we see a significant difference where concerns the equivalent in hours of these credits. Values of credits can vary from three hours per week in Brazil (one hour with the teacher and two hours of other study activities) to the 48 hours of academic work in Cuba and Colombia. These latter two countries make a distinction between contact hours and independent study. In Colombia, of the 48 hours, 16 correspond to contact hours and 32 to independent study. In Cuba, of the 48 hours in one credit, 12 are contact hours and the other 36 are independent study.

In Bolivia and Ecuador, one credit equates to 40 academic hours; in Nicaragua, to 15 hours of theory and 40 hours for supervised non-theory activities; in Peru, to 15 contact hours or 30 of practical activities. In the Dominican Republic, one credit is equivalent to 15 hours of theory or 30 hours of practicals or 45 hours of research. Lastly, in Venezuela a credit at postgraduate level entails 16 hours of theory and 32 hours of practicals.

The following table outlines, this time around for postgraduate studies, the credit/hour relationship in the various countries of Latin America and the Caribbean..

Table 11.
Credit/hours equivalencies for postgraduate studies

Country	Duration of qualifications in credits/hours
ARGENTINA	• No credit/hours system exists.
BOLIVIA	• One credit = 40 academic hours. • *Diplomado*: 20 credits (800 hours). • Specialisation: 25 credits (1000 hours). • Master's: 60 credits (2,400 hours). • Doctorate: 70 credits (2,800 hours spread over three years).
BRAZIL	• Credit unit = three hours of activity per week (one with the teacher and two hours of study activities). • Postgraduate programmes: 24 credits in four semesters (classes, practicals, seminars… with the teacher) + eight credits (doctoral thesis).
CHILE	• There is no standardised method of academic organisation.
COLOMBIA	• One credit = 48 hours of academic work (16 contact hours + 32 hours of independent study). • Undergraduate and specialisations: 160 credits maximum (one year). • Master's: 67 credits (two years). • Doctorate: 91 credits (between seven-ten semesters; three-five years).
COSTA RICA	• There is no standardised method of academic organisation.
CUBA	• Once credit = 48 academic hours (12 contact + 36 independent) • Postgraduate courses: one month. • *Diplomado*: one semester. • Master's: 70 credits (three-four years). • Doctorate: four-five years. • Between three and six credits are awarded per academic activity undertaken (workshops, courses, electives, articles, presentations, etc.).
ECUADOR	• One credit = 40 hours. • Academic period: minimum duration of 16 weeks (Medicine and technology courses, 18 weeks). • Professional Master's: 2,125 hours (minimum duration of three ordinary academic periods or their equivalent in months and weeks). • Research Master's: 2,625 hours (minimum duration of four ordinary academic periods or their equivalent in months and weeks).).

Country	Duration of qualifications in credits/hours
EL SALVADOR	• Value unit = 20 hours (of 50 minutes each) of student work. • Master's: 64 value units (two years). • Doctorate: 96 value units (three years) + thesis. • Specialist: 96 value units (three years).
GUATEMALA	• Postgraduate: one credit = 12 hours of face-to-face classes (each hour requires three hours of study, thus 48 hours of work). • Master's: 45-60 credits (540-600 hours, in a year and a half to two years). *Data drawn from a report by the Guatemala Council for Private Higher Education (Consejo de la Enseñanza Privada Superior de Guatemala, CEPS). This document is not official or mandatory for all institutions.uatemala (CEPS). No se trata de un documento oficial obligatorio para todas las instituciones.
HAITI	• Doctorate: 60 credits of doctoral training + 120 of thesis writing.
HONDURAS	• Value unit = one hour of theory and three hours of practicals or four hours of supervised academic work. • Speciality: 30-90 value units (one-three years). • Medical specialisation: 90 value units (three years). • Master's: 40-52 value units (a year and half to two years). • Doctorate: 52-70 value units following a Licenciatura or 25-30 value units following a postgraduate course of at least two years. • Doctorate in Medical Sciences: 320 value units minimum (six-eight years).
JAMAICA	• There is no standardised method of academic organisation.
MEXICO	• The value of the credits varies based on the HEI • Specialisations: 45 credits (12 months, two semesters). • Master's: 75 credits (24 months, four semesters). • Doctorates: up to 88 credits (36-42 months, six-seven semesters). • Integrated doctorates: 48 months, eight semesters. • Medical specialisations (four-eight semesters).
NICARAGUA	• One credit = 15 hours of theory classes and 40 of supervised non-theory activities (not a single mapping, variations exist). • Specialisation: 750-1,100 hours. • Master's: 1,200-1,500 hours.
PANAMA	• Specialisations: 24-26 credits (3-4 per subject), in two four-month terms (eight months). • Master's: 30-36 credits (three-four per subject), in three-four four-month terms (16 months).

Country	Duration of qualifications in credits/hours
PARAGUAY	• No credit system exists. • Modular system of lecture hours (of 60 minutes each). • Specialisation: minimum of 360 hours. • Master's: minimum of 700 hours.
PERU	• One credit = minimum of 16 lecture hours of theory or 32 hours of practicals. • *Diplomados*: 24 credits. • Master's: 48 credits and proficiency in a foreign language (approximately 768 hours over two semesters, one year). • Doctorate: 64 credits (1,024 hours of classes) over six semesters (three years).
DOMINICAN REPUBLIC	• One credit = 15 hours of theory classes or 30 hours of practicals or 45 hours of research. • Specialisation: 20 credits (nine months). • Master's: 40 credits (18 months). • Specialisations in the field of Health Sciences: 40 credits (three years). • Doctorate: 60 credits (three years).
TRINIDAD AND TOBAGO	• Varies depending on the individual university. • The University of The West Indies: one credit = 1 hour of classes per week for 13 weeks.
URUGUAY	• One credit = 15 hours of work. • The University of the Republic and the UTEC use the same system.
VENEZUELA	• One credit = 16 hours of theory classes or seminars or 33 hours of practicals or laboratory classes. • Organised by trimesters or semesters in the majority of cases. • Master's: no fewer than 24 credits + final project. • Specialist or technical specialist: no fewer than 24 credits + special final project. • Doctorate: 45 credits + 30 credits minimum from the doctoral thesis.

First of all, it bears noting the cases of Bolivia and Cuba, which do not have credit/hours systems for their undergraduate programmes but do have them for those at postgraduate level. In countries such as Mexico or Trinidad and Tobago, each of the higher education institutions must set out its own guidelines on the number of hours to a credit. Venezuela, Guatemala and Brazil assign different numbers of hours to credits depending on whether

the studies in question are at undergraduate or postgraduate level. In contrast, Uruguay, El Salvador, Ecuador and Colombia maintain the same equivalencies, as do the Dominican Republic, Nicaragua and Honduras, although these last three introduce minor variations at postgraduate level.

Remarks and recommendations

Remark 1.

Generally speaking, undergraduate studies can be said to last between four and six years in the various countries. It should be noted that there is a general tendency towards a longer duration for studies in the field of Health (in particular, Medicine). The duration varies depending on the exact type of the qualification (*licenciaturas*, technical studies or *bachilleratos universitarios*). The same occurs for postgraduate courses, which are generally between two and three years for Master's and specialisations. It is important to note, in relation to undergraduate studies, the proliferation of so-called "short courses" in countries like Argentina or Venezuela, with the countries expressing their doubts about this phenomenon. Doctorates, aside from variations in duration, are, in all the countries, qualification focused on developing the research skills of the student and which, in all cases, require presentation of a doctoral thesis.

In general, access to a certain level of studies is conditional on possession of the level below (middle or high school diploma or baccalaureate for undergraduate studies and undergraduate studies to access Master's studies). Additionally, in several countries, adjudication of the available places for each undergraduate or postgraduate course depends on the grades obtained in previous studies or in the admissions tests, where these exist.

Recommendation.

Given the methods of access to studies, it would be interesting to explore the possibility of establishing an entrance method which facilitates mobility for those people who wish to pursue their studies, wholly or partially, in foreign countries. One example could be the Graduate Record Examination (GRE), employed in the United States to determine the level of the applicants. Thanks to the GRE, the country is able to attract students from all over the world without the uncertainty that comes from being unfamiliar with the institution in which the applicant studied.

Recommendation.

It is extremely positive that a number of countries have begun implementing, to a greater or lesser degree, credit/hours systems as a method of academic organisation, since this indicates that a willingness exists among the education systems to adopt this device. This must be the starting point of the common area: establishing a unit of measurement of academic work common to all the countries which facilitates attempts to create equivalencies between higher education institutions and between countries. These measurement units

(credits) must specify how many hours they entail and what sort of work is included in these hours. In this regard, it is important for the various countries to work the already existing systems into a common measure. Brazil, Guatemala, Haiti, Nicaragua, Panama and Uruguay currently operate around 15 hours. These common elements should serve as the starting point for coordination of a regional system which, at a later date, will be able to communicate with the ECTS system of the European Higher Education Area. In other words: if it proves impossible to reach an agreement on implementation of a single system, it will at least be necessary to design equivalencies between the different systems.

This is a task which requires an in-depth examination of the composition of curricula, the components of each credit, the class load of the qualifications, etc. It would be advisable to establish work groups which could set temporary objectives and meet regularly to analyse them. Once again, the involvement of political actors, who will be the ones to make the decisions, is vital in order not to lose contact between the more technical or academic studies and the final decision-makers.

The benefits of a "Latin American and Caribbean credit system" will be evident in the other aspects analysed in this report. These range from mobility, to recognition of qualifications obtained abroad, to a future system for accreditation of the quality of lecturers, whose work should also be measured using credits. Thus, at least initially, it should not be problematic that a *licenciatura* in country A has a duration of 260 credits, while in country B it is 300. So long as it is clear what a credit is and what sort of work it involves, it should not prove difficult to establish educational supplements in this respect.

The EHEA itself sets a range of credits for undergraduate or first cycle studies (between 180 and 240 ECTS) and those of second cycle or Master's (between 80 and 120, with a minimum of 60 ECTS). The various countries and universities are can differ within this range without impeding mobility or recognition of studies. The reason for this is that the basic organisational element is the same: the credit. The same occurs when it comes to carrying out placement periods, included in a fair number of undergraduate and postgraduate studies in the countries of Latin America and the Caribbean. With a common credit/hours system, the various States and institutions can be certain that these placements have a similar value, regardless of where they are carried out.

Establishing a common credit/hours system will also prove relevant when it comes to establishing common criteria for access to the various levels of higher education, in such a way as to facilitate one student studying different levels in different countries. In this sense, by way of an example, note how in the EHEA have opted for what is known as a 3+2 system (three years of undergraduate + two years of Master's) and others for the 4+1 system (four years of undergraduate + one of Master's). As with any difference, it entails additional effort when it comes to planning mobility or recognition of studies, but it does not render these impossible.

As such, at least in the medium term, it will be more relevant and practicable to begin work on a credit/hours system than to focus on standardising the durations in years or semesters of the various qualifications. This would serve no purpose if afterwards, internally, the class load proved uneven.

4. University teaching

Lecturers at higher education institutions are key players in the education systems and, as such, it is crucial to understand their current situation in the various countries which are to form the European, Latin American and Caribbean Area for Higher Education, Science, Technology and Innovation. The reports from each of the States present information concerning the following aspects, which are presented below in a systematised format:

- Teaching regulations and legislative reference where these exist (see Table 1 in the first chapter of the report).
- Qualifications required to teach at a university, with special focus on whether or not a doctorate is required.
- Categories of university teaching staff.
- Procedures for promotion from one category to another.
- Contract modalities for lecturers (indefinite, part-time, full-time, by hours…).
- Whether or not incompatibility regimes exist.
- Recognition of the rights and duties of lecturers.

For all these aspects, consideration has been given to the differences which exist between public and private higher education institutions.

4.1 Regulation of university teaching

The countries of Latin America and the Caribbean can be divided into two groups with regards to teaching regulations for higher education institutions, be they public or private: one the one hand, the countries in which no general standard exists and all regulations relating to university teaching staff are left to the various institutions, within the scope of their autonomy; on the other, the countries in which, although the institutions have autonomy to design their own regulations, these must conform, to a greater or lesser extent, to general provisions.

Argentina, Chile, Guatemala, Haiti, Jamaica, Mexico, Panama, Paraguay, Trinidad and Tobago and Uruguay do not have any generally applicable standards, neither in the public nor the private sector. In Costa Rica no general regulation exists for the public sector and, in the private sector, each institution has its own teaching regulations or similar instrument.

However, private universities are subject to article 20 of the General Regulations issued by the National Council of Private University Higher Education, which establishes the percentages of the entire teaching body which must hold a specific qualification (*bachiller universitario, licenciatura*), a number of years of experience in universities or a number of publications in specialist journals or similar. In this sense, Costa Rica is the only country in which more regulation exists for the private sector than for the public.

In a second group of countries are those in which institutions maintain their autonomy to regulate university teaching, but certain general rules exist. En Ecuador (*Ley Orgánica* on Higher Education, 2010), El Salvador (Law on Higher Education, 2004), Nicaragua (Law on the Autonomy of Higher Education Institutions), Peru (University Act 30.220/2014) and the Dominican Republic (Law 139-01, 2001, creating the National System of Higher Education, Science and Technology), these rules are the same for the public and private sectors. Likewise in Colombia (Law 30/1992, organising the Higher Education public service) and Brazil (Law on Foundations and Guidelines for National Education, 9,394/1996), although they outline additional dispositions for the public sector. In the case of Venezuela, private higher education institutions must comply with certain articles of the Law on Universities (which applies in full to the public sector, although university autonomy is provided for), specifically those concerning management staff, conditions for practising as a lecturer and academic structure. In Bolivia, the public sector is governed by the Regulation of the Academic Teaching Arrangements for the Bolivian University System, and the private sector by the General Regulation for Private Universities. In Cuba, where only public institutions exist, various provisions regulate practice as a lecturer (among them, the Regulation on Categories of Teaching Staff or Resolution N.º 128/2006, which establishes the functions and duties of teaching staff in HEIs).

Lastly, Honduras finds itself in the opposite situation to Costa Rica: it possesses general legislation for the public sector (Law on Higher Education, *Ley Orgánica* on the National Autonomous University of Honduras and the University Teaching Statutes of the aforementioned university), while such regulation is completely in the hands of the individual institutions in the private sector.

4.2 Requirements for practising as a university lecturer

The first trend we can see in the conditions for practising as a university lecturer is that the majority of public higher education systems are similar in requiring that their lecturers hold at least the same level of education as they are teaching: undergraduate qualification to teach undergraduate programmes, a Master's to teach a Master's or a doctorate to teach in a doctorate programme.

Apart from this base requirement, countries such as Ecuador, Panama, Peru and Costa Rica require possession of a Master's degree in order to teach in higher education. In the case of Costa Rica, a timeframe is stipulated for teachers without this qualification to obtain it. In Trinidad and Tobago a postgraduate qualification is required, preferably a doctorate. On the other hand, we see some cases in which some sort of teacher training is

required to practise as a university lecturer, as in Honduras, Paraguay and Trinidad and Tobago.

Lastly, three countries do not have general regulations for practising as a lecturer in the public sector. The first is Chile, which leaves regulation to the individual institutions. Secondly, Jamaica, where work is currently ongoing on a draft from the Tertiary Education Commission on the minimum qualifications required of teaching staff (in both the public and private sectors); the text stipulates a Master's as the minimum qualification and a doctorate for teaching Master's or doctorate programmes. Last is Haiti, a country in which a study noted that fewer than 10 % of teachers in the system hold a Master's degree or doctorate.

Table 12.
Minimum qualification needed to practice as a university lecturer in the public sector.

Countries	Minimum Qualification
ARGENTINA	It is hoped that eventually all lecturer's will hold doctorates (Law 24.521).
BOLIVIA	Academic level equal to or higher than the one being taught and diploma in university teaching.
BRASIL	Graduate or *licenciado* in the subject, true postgraduate qualification (Master's or doctorate).
CHILE	No general regulation exists, dependent on individual institutions.
COLOMBIA	University professional degree (with exceptions). Qualified at least to the level to be taught (in practice, a Master's is required in most cases).
COSTA RICA	Master's for public universities (if not held, stipulated timeframe to obtain it).
CUBA	Good record as a student helper; good overall assessment, grade point average above 4 or equivalent. Professionals linked to state bodies: favourable reports and aptitude test.
ECUADOR	Master's (unofficial foreign qualifications are not considered).
EL SALVADOR	Qualified to at least the level to be taught.
GUATEMALA	Qualified to at least the level to be taught. Exceptions in the case of recognised experience in the field of teaching.
HAITI	Master's or doctorate not required.
HONDURAS	Qualified to at least the level to be taught. Advanced-level teacher training set by the centre.

Countries	Minimum Qualification
JAMAICA	No general regulation exists, dependent on individual institutions.
MEXICO	*Licenciatura*. For postgraduate studies, qualified to at least the level to be taught.
NICARAGUA	Percentages of the entire teaching body with a certain qualification. No general regulation exists, dependent on individual institutions.
PANAMA	Master's
PARAGUAY	Bachelor's degree. Training in higher education teaching, notable scientific, technical or intellectual ability.
PERU	Master's to teach at undergraduate level. Master's or doctorate to teach Master's or specialisation programmes.
DOMINICAN REPUBLIC	Percentages of the entire teaching body for specialisation or Master's programmes with a certain qualification.
TRINIDAD AND TOBAGO	Postgraduate qualification (preferably doctorate) in most cases. Master's along with professional experience in teaching and research in some cases.
URUGUAY	Undergraduate degree for lower levels of the teaching hierarchy. Master's for adjunct professor.
VENEZUELA	Qualified to at least the level to be taught (special cases without university studies).

It is interesting to note how in the majority of cases the requirements for the teaching profession in the public sector are maintained in the private sector (at least in theory), with subtle differences. In Brazil we see a relaxation of the doctorate requirements which exist in the public system (for recruitment by faculties, the requirement is a degree as minimum and a postgraduate qualification in the loose sense. That is, a specialisation, or a Master's); Argentina is similar, as the requirement that candidates hold a doctorate does not apply, to a large extent because private universities do not carry out scientific research activities, except in a few outstanding cases. In the case of Guatemala no requirement exists for possession of a doctorate (in the public system it is required for teaching at this level) although some private universities call for a minimum number of doctors among their staff.

In the same vein, in Honduras there is no regulation in this regard and it is considered "expedient" for a teacher to hold, at the least, a qualification of the same level as the classes to be taught. In Panama new contracts are starting to require, as a minimum, a Master's degree to practise as a lecturer in the private sector, although it is noted that this is more a desire than a reality. However, we do see that teachers of Master's and doctorate programmes hold these levels of training, almost without exception.

The largest differences between sectors are seen in Uruguay, where the access conditions for the teaching profession in the private sector are established entirely by the individual institutions, in contrast to the regulation that exists in the public sector.

It bears mentioning that there are two systems, the Dominican Republic and Nicaragua, that establish percentages relative to the entire teaching body where necessary education is concerned, for both the public and private sectors. In the Dominican Republic (Regulation of Higher Education Institutions, 2004), 50% of teachers for specialisation programmes must hold a Master's and the remaining 50% a specialisation; for Master's programmes, 30% of teachers must hold a doctorate and the remaining 70% must have a Master's and professional and teaching experience. In both cases, these are goals set by the aforementioned regulation with timeframes of five and eight years for specialisations and Master's, respectively. In Nicaragua, the Manual for imparting courses in Higher Education Institutions (2010) issued by the National Council of Universities establishes that the percentage of teachers educated to Master's level must be equal to or higher than 10% of the total number.

The second notable trend related to the practise of university teaching is that, in many of the countries, either due to government initiative, or that of the individual higher education institutions, possession of a doctorate qualification is beginning to be desirable and valuable. In Argentina, in accordance with Law 24.521 on Higher Education (1995) it is envisaged that over time possession of a doctorate qualification will become necessary to practise as a university lecturer, a condition which does not currently apply, as can be seen from the fact that nothing prevents applications to aptitude tests or teaching poses by those without a postgraduate qualification. In Bolivia, a doctorate qualification is desirable, but not required. Colombia has a similar situation, with increasing numbers of universities including it as a selection criterion in teaching applications. Likewise in Panama, where holding a doctorate qualification grants additional points when applying for a professorship. Lastly, in Mexico, in accordance with the national policies of the Secretary of Public Education, university lecturers must preferably hold a doctorate qualification.

The following table outlines how the public higher education systems of Latin America and the Caribbean value doctorate qualifications when it comes to practising as a university teacher.

Table 13. Value of doctorate qualifications for practise as a university lecturer in the public sector.

Countries	Doctorate required
ARGENTINA	Doctorate not required, despite being regulated in Law 24.521 on Higher Education (1995).
BOLIVIA	Doctorate desirable.
BRAZIL	Class A adjunct professor: doctorate (this condition can be substituted for possession of a Master's, a specialisation or a Bachelor's degree in the case of areas of expertise or districts where there is a severe shortage of doctorate holders). Full professor: doctorate.
CHILE	No standardised regulation exists.
COLOMBIA	Doctorate not compulsory, but increasing numbers of universities are including it as a selection criterion in teaching applications.
COSTA RICA	Doctorate compulsory for teaching doctorate programmes.
CUBA	Full professor: doctorate.
ECUADOR	Senior professor: doctorate.
EL SALVADOR	Doctorate compulsory for teaching doctorate programmes.
GUATEMALA	Doctorate compulsory for teaching doctorate programmes.
HAITI	No standardised regulation exists.
HONDURAS	Doctorate compulsory for teaching doctorate programmes. Doctorate qualification: direct admission to the teaching profession in the category of Full Professor III.
JAMAICA	Doctorate for teaching Master's and doctorate programmes (draft from the Tertiary Education Commission).
MEXICO	Doctorate compulsory for teaching doctorate programmes. National policies from the Secretary of Public Educations stating that lecturers should preferably hold a doctorate.
NICARAGUA	No standardised regulation exists.
PANAMA	Tendency to require a doctorate (contributes extra points in applications to professorships).

Countries	Doctorate required
PARAGUAY	No standardised regulation exists.
PERU	Doctorate compulsory for teaching doctorate programmes. Senior professor: doctorate.
REPÚBLICA DOMINICANA	Doctorate compulsory for teaching doctorate programmes.
TRINIDAD AND TOBAGO	Doctorate (although this may be substituted by a Master's in certain circumstances).
URUGUAY	Adjunct professor (grade 4): doctorate. Full professor (grade 5): doctorate..
VENEZUELA	Associate professor: doctorate.

As can be seen, a doctorate is not a necessity for entering the teaching profession in any of the countries (despite the fact that, as has been noted, it is beginning to be valued in some of them). It is mandatory in most cases in order to teach classes in programmes of the same level, that is, in doctorate programmes. Lastly, in countries such as Brazil, Ecuador, Cuba, Honduras, Peru, Uruguay and Venezuela, it can be seen that, although a doctorate is not necessary to commence university teaching, it is nonetheless a requirement for accessing the higher levels of the teaching hierarchy.

4.3 Categories of university teaching staff

The teaching profession in higher education institutions is characterised by being, for the most part, tiered and supports different working arrangements. However, not all the countries have general regulations. This is the case in Chile, where categories vary depending on the institution, although universities belonging to the CRUCH carry out similar categorisation processes linked to demonstration of objectives and fulfilment of goals, which could serve as a convenient starting point for national regulation.

Nor do Costa Rica, El Salvador, Guatemala, Mexico, the Dominican Republic or Trinidad and Tobago have general categorisation systems, although upon examination of examples of different institutions similarities to the other countries can be seen, in the sense that these are tiered systems both in terms of required education and salary received.

Independent of the specific names employed in each of the countries, three general types can be identified which group together the various categories:

a. One type for those lecturers permanently linked to the higher education institution. These will have passed an admissions exam or process, in addition to the education or career history conditions required in each case, and enter the teaching profession.

b. A second type for the teaching staff contracted by the institutions according to their needs at any given time and with no permanent links to the institution.

c. A third type brings together categories along the lines of emeritus professor professors from other countries teaching for a set period of time, whatever their designation may be.

In contrast to what was seen in the case of minimum requirements to practise as a university teacher, in which the general trend was towards similarity between the public and private sectors, in the case of categorisations of teaching staff, differences do exist between sectors, although situations vary depending on the country. In Bolivia, Honduras and Panama, categories do exist in the public sector, but not in the private sector.

Likewise, in Bolivia, Haiti, Honduras, Nicaragua and Panama, in contrast to the general regulation for the public sector, institutions determine their own categorisation systems in the private sector. In Mexico and Argentina we see a much greater variety of systems and categories than exist in the public sector. In the case of Ecuador, Paraguay and Peru, the regulation is the same, and in Venezuela the same categories are employed as in the public sector, with the exception of special members. In Uruguay, in contrast to the tiered system used in the public sector, in the private sector, lecturers are classed as either full-time or part-time. Jamaica also uses two different systems. The private sector in Colombia is organised based on the public sector.

Chile, Costa Rica, El Salvador, Guatemala, the Dominican Republic and Trinidad and Tobago do not have regulated categorisation systems for the private sector, just as they do not have them for the public sector.

4.4 Procedure for promotion between categories in the public sector

Although in a large number of countries the procedures for promotion between teaching categories depend on the individual institution in the public sector (El Salvador, Guatemala, Haiti, Jamaica, Mexico, Nicaragua, Panama, Paraguay, the Dominican Republic and Trinidad and Tobago), common elements exist between many of them. In the case of Chile, they again depend on the HEI, although the CRUCH universities share a procedure. In this regard, the promotion processes tend to include conditions for accessing the next category relating to:

- Seniority: a specific period of time spent as a practising professional in the category immediately below.
- Research-related aspects: published work, articles, etc.

The following table outlines, in very broad terms, the aspects considered for promotion of university teaching staff in the public sector for those countries in which an established system exists.

Table 14.
Points for developing of university teaching staff in the public sector.

Countries	Elements required
ARGENTINA	Curriculum vitae
BOLIVIA	Curriculum vitae (expertise and scientific production, teacher training, completion of assigned academic activities, participation in university life, participation in tutorials and mentoring in the degree process, social interaction).
BRAZIL	Progression (moving to the next level within the same class): • Seniority (24 months at each level). • Performance assessment. Promotion (moving to the next class): • Seniority (24 months in the last level of the previous class). • Performance assessment. • Curriculum vitae.
CHILE	Curriculum vitae (undergraduate and postgraduate teaching, thesis guidance, teaching innovations and products, participation in committees and work groups, academic management projects, research and outreach).
COLOMBIA	Seniority. Work representing a significant contribution to teaching, science, the arts or the humanities.
COSTA RICA	Seniority. Curriculum vitae (publications, refresher courses, other languages).
CUBA	Requirements and performance as applicable.
ECUADOR	Seniority (18, 36, 48 months, depending on level). Assessment of teaching. Curriculum vitae (publications, training and ongoing development; in some categories, participation in research projects and Master's or doctoral thesis guidance).
HONDURAS	Seniority (five years). Curriculum vitae.
PERU	Seniority (five, ten or 15 years, depending on level). Assessment (teaching and research).
URUGUAY	Assessment (one by a superior and one by students).
VENEZUELA	Seniority (two, four or five years, depending on level). Presentation of a promotion project.

Argentina, Uruguay and Peru are three countries in which passing an first aptitude test to enter the teaching profession does not grant a permanent position, but must instead by periodically renewed (in contrast to Ecuador and Brazil, where, once employed on the basis of a public application, lecturers enjoy permanent stability until minimum retirement age). In the case of Argentina, lecturers who attain their positions through public applications or tests are appointed for a seven-year period (plus or minus one year depending on the statutes of each institution).[26] They maintain their position through periodic renewal (of professorship) which requires participating in an aptitude test when the appointment period finishes.

The situation is similar in Uruguay, where teaching positions are subject to reappointment by the governing bodies on the basis of an action report attested by their academic superior and an opinion report from the students. In the case of interim posts, reappointments are annual; for full posts, reappointment occurs after two years on the first occasion and every five years on subsequent occasions.

In Peru, appointment of an assistant professor is for three years; for an appropriate professor, five; and for a full professor, seven. Once this time has passed, professors are affirmed, promoted or removed from teaching through an assessment process based on academic merits (scientific, teaching and research output).

4.5 Contract modalities

Only three countries consider permanent contracts where private higher education institutions are concerned (Ecuador, Jamaica and Trinidad and Tobago), with lack of job security being the norm for teachers in this sector. Thus, the trend is towards contracts for provision of services for the duration which the institution requires at any given time (annual, semi-annual, etc.) and the working arrangements which it specifies (full-time or part-time). In a certain number of cases (Brazil, Costa Rica, El Salvador, Guatemala, Honduras and Panama) the possibility exists of contracts based on "classroom-hours" or "class-hours". In any event, in the majority of cases, the types of contract depend on the internal regulations of each institution, subject to the employment laws of the country concerned. In contrast, in Cuba, the majority of lecturer's are employed full-time.

Where the public sector is concerned, there are a number of countries in which contract modalities depend on the individual higher education institution: Chile, Guatemala, Haiti, Mexico, Paraguay, the Dominican Republic, Trinidad and Tobago and Venezuela. As has been noted, in Argentina, Uruguay and Peru, lecturers must renew their positions at fixed-year intervals. Brazil, Costa Rica, Ecuador, El Salvador, Honduras, Jamaica and Panama all provide for some posts of a permanent nature, whatever they may be called (proprietary, full, lifelong, indefinite or standard lecturer). In the remaining States, there are no permanently-linked roles.

With regards to the other contracts, which are characterised by a great variety between countries, it can be seen that their maximum duration is pre-set in many cases. What

26 In the case of Ecuador, upon becoming full professors.

follows is a presentation of some notable characteristics which differ from the general trend: contracts with a fixed duration, various modalities and in some cases with a term decided in advance. In this vein, in Ecuador, contracts for temporary professors do not exceed 48 months and for visiting professors, 24. Temporary appointments, a system used for temporary staff replacing teachers who have been suspended, dismissed, or seconded without pay, among other circumstances, have a duration of up to four years.

In Panama, contract for irregular lecturers cannot exceed three years and those for special lecturers cannot exceed one. In the latter case, they may be renewed up to three times, becoming indefinite after the final renewal (for which reason this eventuality rarely occurs). In Trinidad and Tobago, normal appointment contracts generally have a renewable duration of three years, while temporary contracts may not exceed two years. Lastly, although no regulation exists in this respect, in El Salvador, the majority of contracts are annual.

It should be noted that in some countries we observe regulations geared towards increasing the stability of teaching staff in higher education institutions. In Peru, Law 30.220 of 2014 (art. 83) requires that 25 % of lecturers be employed full-time. In the case of Nicaragua, the Manual for imparting courses in Higher Education Institutions (2010) issued by the National Council of Universities (valid for state, community and private institutions) stipulates that the percentage of full-time lecturers should be greater than or equal to 30%. Furthermore, in Cuba we see that, although no rule exists in this regard, almost all teaching staff are employed full-time and very few practise part-time (contracted), a situation that tends to be reserved for specialists outstanding in their fields.

4.6 Incompatibilities regime

It is possible to differentiate two large groups of countries with regard to the incompatibilities regime of teaching staff in the public sector: those which have some form of regulation, and those which have no regulation on this subject.

Within the cases in which incompatibilities of lecturers are regulated, these regulations are for the most part limited to full-time lecturers. This is seen in Argentina (only for roles with exclusive or semi-exclusive contracts); Brazil, Costa Rica and Panama (exclusive); Cuba, Peru and Venezuela (full-time); Ecuador (exclusive or full-time). Outside these sorts of working arrangements, Ecuador places no restrictions on half- or part-time academic personnel. Nor does Panama for lecturers working part-time, full-time or in non-regular or special teaching categories, nor do Peru or Venezuela for any lecturers working less than full-time.

In Colombia, the law stipulates that nobody may simultaneously be employed in more than one public office or receive more than one appointment from the Public Treasury, or from companies or institutions in which the State holds a majority share; the sole exception permitted is for university lecturers acting as legislative advisors. In Bolivia, the only incompatibility stipulated is holding office in two unrelated institutions.

A second group of countries lacks any general regulation on the subject. This is the case

in Chile, where incompatibilities, if any exist, are determined by the statutes or teaching regulations of each higher education institution. Equally, in Jamaica regulation is up to institutions: for example, The University of the West Indies allows consultancy work.

In El Salvador and Guatemala, no regulation exists and it is apparent that many lecturers, even full-time, work in other universities or have jobs outside the university. Neither does Honduras have any incompatibilities regime, and in Mexico, aside from the 40-hour workload of full-time teachers, no limits exist on pursuing other activities. In the same vein, Uruguay has posts with 40-hour work weeks without exclusive contracts. Lastly, in Paraguay, teaching and research are the only two profession compatible with every other job, always assuming working hours are observed.

4.7 Rights and duties of lecturers

In all cases, rights and duties of university lecturers are recognised, be this through a general rule applicable throughout the country (Bolivia, Cuba, Ecuador, Honduras, Paraguay and Peru), through regulations or statutes in each higher education institution (Brazil, Chile, Costa Rica, El Salvador, Guatemala, Jamaica, Mexico, Nicaragua, Panama, the Dominican Republic, Trinidad and Tobago and Uruguay) or, occasionally, through a combination of both (Argentina, Colombia and Venezuela). In Haiti, a draft document is currently in use.

Regarding the private sector, only Bolivia (General Employment Regulation), Colombia, Ecuador and Paraguay outline any sort of general regulation, affording greater or lesser degrees of autonomy to individual private institutions to establish these rights and duties. In the remaining countries, recognition is dependent on each higher education institution.

Remarks and recommendations

Remark 1.

In the education process, the teaching body can be said to be "forgotten" in most systems in Latin America and the Caribbean. First of all, the teaching profession lacks regulation in some of the countries. Secondly, it is apparent that unstable employment is fairly widespread (note the countries in which we see only a very limited number of full-time or indefinite contracts), which in some cases leads to practising as a teacher in multiple universities at once. It is possible that the fact that no incompatibility exists for the teaching profession in some countries may be related to this situation.

As far as lecturer education is concerned, practically all the States demand that they hold at least the level of education which they teach (Master's for Master's; doctorate for doctorate). In general terms, there is a tendency towards increasing the education requirements for teaching staff. It is very positive to see that doctorate qualifications are beginning to be taken into account: albeit not obligatory, it can prove a point in an applicant's favour when it comes to attaining a post or position.

Recommendation.

When it comes to improving the education level of lecturers and, by education, the quality of universities, the experiences of the Dominican Republic and Nicaragua are particularly interesting, establishing that in each higher education institutions a certain percentage of the teaching staff must hold a Master's or doctorate. This could be the first step towards improving, in general terms, the quality of university teaching in the various countries.

Recommendation.

Establishing some sort of shared minimum requirement for university teaching practice is essential, especially with regards to implementation and promotion of lecturer mobility programmes. The fact that one can be a lecturer in one country with only an undergraduate degree, while in another a doctorate is required, means that lecturers from the first country have difficulties when it comes to accessing exchange programmes; institutions would have no interest in making use of lecturers with a lower level of education than those they themselves employ.

Lastly, it should be noted that one of the greatest problems for the teaching system in Latin America and the Caribbean is the limited number of doctors available in these countries, which leads to significant difficulties for universities when it comes to meeting the demand for teachers. This deficit is difficult to address due to the time and resources required for training a doctor.

Recommendation.

Cooperation between countries and regions should be a tool which helps improve the average education of lecturers in Latin America and the Caribbean. Grant, mobility, exchange and internship programmes are tools which should, in their design, factor in this view. Furthermore, given that lecturers' research work appears to have little impact, a programme for training teaching staff in basic research techniques could produce positive results, whether it be carried out through agreements between institutions or at the level of international organisations or programmes of an intergovernmental nature.

5. Public and private scholarship systems

This chapter offers an overview of the public and private scholarship systems which exist in the countries of Latin America and the Caribbean. What this means is presenting a general view of the current situation, since the multitude of initiatives, especially in cases where no grant structure exists at a national level, results in the criteria and characteristics of the various programmes differing wildly. Likewise, a huge variety of agents are involved, from national governments to local institutions, and private companies to international organisations.

The information presented below corresponds to the following points from the questionnaire on which the reports are based:

- Scholarship programmes for studies abroad (although provisions are also made for supporting studies in other institutions of the same country).
- Frequency of calls for applications.
- Requirements demanded of applicants.
- Types of studies covered by scholarships (level and area of expertise).
- Requirements for universities receiving scholarship students.
- Recognition of studies pursued abroad.

These points are considered both for public scholarship programmes and for those financed by private enterprise, with a scholarship being considered to be a "a traditional form of economic support for students, in the form of a periodic sum allotted by the state or donated by other institutions, associations, or persons" (Iberian Network for High Quality Accreditation, RIACES 2004).

5.1. Public scholarship

This first section gives an overview of public scholarship programmes and their characteristics. It is a question of identifying which countries possess public support systems and which do not, as well as the key features (application requirements, frequency of calls for applications, etc.) in cases where such programmes do exist.

5.1.1. Public scholarship programs for the promotion of studies abroad

Just as with the other aspects analysed in this report, two groups of countries can be differentiated in Latin America and the Caribbean with regards to public scholarship programmes for encouraging studies abroad. There is no doubt that this was only to be expected of a geographic region encompassing countries in such different situations of economic and social developments (see, for example, the subsequent Human Development Indices from the United Nations Development Programme).[27]

We have therefore, on the one hand, those States which have support systems, be they more or less developed; and on the other, those which have serious difficulties instituting these sorts of programmes. Some countries in Central America, the Andean region and the Caribbean have practically none of these sorts of mechanisms; these are, generally, some of the cases with the lowest income per capita in the region. This is the case in Bolivia, Haiti, Guatemala, Honduras, Cuba, Jamaica and Nicaragua.

In the countries which do have some sort of scholarship system, different public bodies exist responsible for managing everything related to these systems, whether this is their sole function or is one of a range of responsibilities. In Chile, the Advanced Human Capital Training Programme is the main government agency dedicated to administering scholarships (postgraduate only). In Mexico, the main provider of this sort of support is the CONACYT, but other public programmes do exist.

In Peru, the National Scholarship Programme (*Programa Nacional de Becas, PRONABEC*) is responsible for promoting and regulating the country's scholarship system, while in Ecuador this function belongs to the National Secretariat of Higher Education, Science, Technology and Innovation (*Secretaría Nacional de Educación Superior, Ciencia, Tecnología e Innovación, SENESCyT*). The Dominican Republic has a Department of International Scholarships, a public body dedicated to fostering permanent learning through the development of scholarship programmes in cooperation with international bodies and governments of other countries. In Venezuela, within the public scholarship programme, the Gran Mariscal de Ayacucho Foundation (*Fundayacucho*) is particularly active. It is a subsidiary institution of the Ministry of the People's Power for University Education, Science and Technology, which administers the majority of scholarship programmes for study abroad. Lastly, in Panama there is the Institute for the Training and Use of Human Resources (*Instituto para la Formación y Aprovechamiento de Recursos Humanos, IFARHU*) which administers both programmes internal to the country and those studied abroad.

In El Salvador we see two programmes meant for granting scholarships for foreign studies of some kind: the Fantel Scholarship Programme and the Central Reserve Bank Scholarship Fund. In Costa Rica, public universities have scholarship funds to allow academic staff to study abroad, with these scholarships managed by the universities themselves. Lastly, Guatemala does not have any public scholarship programme for studies abroad. However, the work done by the Presidential Planning Secretariat (*Secretaría de Planificación de la Presidencia, SEGEPLAN*) in centralising grant awards stemming from international

27 For more information, see http://hdr.undp.org/es/content/el-%C3 %ADndice-de-desarrollo-humano-idh

cooperation is an interesting practice which proves useful when it comes to centralising and distributing information. This is the role played by IFARHU in Panama.

In contrast to the countries with major limitations when it comes to scholarships, another group exists (consisting of Argentina, Chile, Colombia, Ecuador, Peru and Trinidad and Tobago, among others) in which we do see a large variety and diversity of programmes. What follows is a summary of the initiatives and core characteristics of the countries with public scholarship systems, in order to give, based on these examples, a general picture of the situation. As has previously been noted, the absence of national scholarship systems in some of the States analysed results in the list consisting primarily of private initiatives, with various kinds of institutions, organisations or companies responsible for financing them, which complicates the task of establishing a series of general or common characteristics for at least some of the support systems.

Once again, it should be reiterated that what follows if general information common to most of the existing scholarship programmes. It is nonetheless impossible to systematise the information in the same way as has been done in previous chapters, given that the situation in each of the countries is extremely different depending on its economic capability and level of institutionalisation. In any case, it is important to note the great efforts made by the various governments in order to equip their States with various support programmes.

Argentina

- International Postgraduate Scholarship Programme from the National Directorate of International Cooperation, a public body which promotes and grants scholarship for postgraduate study and research placements abroad.
- Specific scholarship programme for foreign students in Argentina, which awards scholarships to foreign graduates who carry out postgraduate study or research in the country.

Bolivia

- N. R.

Brazil

- The Government awards scholarships for the training of human resources in the field of scientific and technological research, in universities, research institutions, technological centres and centres of professional training abroad. A key role is played by the Brazilian Coordination of Advanced-Level Personnel Improvements (*Coordinación de Mejora de Personal de Nivel Superior de Brasil, CAPES*).
- Scholarship programme of the *Conselho Nacional de Desenvolvimento Científico e Tecnológico* (CNPq).
- The Science without Frontiers Programme aims to promote consolidation, expansion

and internationalisation of science and technology, innovation and competitiveness through exchanges and international mobility.

- Each of the 27 Brazilian states has its own support foundation for research and scientific development, some of which also possess programmes that award scholarships for studies abroad. For example, the *Fundação Carlos Chagas Filho de Amparo à Pesquisa do Estado do Rio de Janeiro* (FAPERJ) offers scholarships for completion of so-called "sandwich doctorates" (half of the research is completed at a foreign university) and other bursaries for short- and medium-length research programmes at undergraduate, Master's, doctorate or postdoctorate level.

Chile

- Human Capital Training Programme. This is the main government agency dedicated to administering postgraduate scholarships. It provides 13 instruments for improving the education of human capital at top level. Of these, six are postgraduate scholarships abroad (Master's Scholarships for Education Professionals; Master's Scholarships; Doctorate Scholarships; Postdoctorate Scholarships; Scholarships for Medical Subspecialties; Doctorate Joint Tutoring

Colombia

- ICETEX (Colombian Institute of Educational Credit and Technical Studies) is a specialist body for the promotion of higher education in Colombia. It awards scholarships to Colombians abroad for postgraduates, visiting professors, language assistants and academic exchange missions.

Ecuador

- Globo Común Programme, run by the National Secretary for Higher Education, Science, Technology and Innovation (*Secretaría Nacional de Educación Superior, Ciencia, Tecnología e Innovación*). The National government, along with the institutions and governments of partner countries, awards scholarships for higher education studies with high standards of academic quality at an international level (Globo Común Russia, China, Hungary and Korea, among other destinations).

- Outstanding University Scholarship Programme (for fourth level: Master's, doctorates and medical specialisations), based on the listings published periodically in accordance with the requirements of the Sub-secretariat for the Improvement of Knowledge and Scholarships.

- Open Tender Scholarships, for fourth-level studies at prestigious higher education institutions in other countries.

- Fourth-Level Scholarship Programme for researchers.

- Scholarships for university lecturers, which award scholarships for doctorate studies at universities and study centres abroad, for lecturers at the country's universities and polytechnic colleges.

- Academic Merit Recognition scholarship programme, point-based scholarships for specific activities, generally with short durations and smaller values.
- Postdoctorate scholarships, which include four categories: a) home-foreign, aimed at researchers resident in Ecuador at the time of applying and who wish to undertake a research residency abroad; b) foreign-home, for researchers who wish to return to Ecuador; c) home-home, which require that the planned research be covered by a financed international programme and which is endorsed by an internationally acclaimed university or research institution; y d) foreign-foreign, aimed at Ecuadorian researchers abroad who have not received scholarships from the SENESCyT.
- GAR (*Grupos de Alto Rendimiento*, High Performance Groups) Scholarships, in technical and technological fields and at third-level in the most prestigious higher education centres in the world.

Costa Rica

- Scholarship funds exist in public universities to allow academic staff to undertake studies abroad.

Cuba

- No scholarships exist for financing studies abroad.

El Salvador

- Fantel Scholarship Programme (funds derived from the privatisation of Antel, the National Telecommunications Administration). Includes Higher Education Scholarships, some of which finance studies abroad.
- Central Reserve Bank Scholarship Fund. This is a programme which awards scholarships at home and abroad for pursuing undergraduate, postgraduate and doctorate studies. It is administered by the Corporate Foundation for Educational Development (*Fundación Empresarial para el Desarrollo Educativo, FEPADE*), a private foundation specialised in education. The scholarships are directed at the fields of Engineering, Environmental Studies, Economy, Orthopaedics, Computer Science, Food and Tourism, at both the technical and university levels.

Guatemala

- No public scholarships exist to finance studies abroad. All the awards come from bilateral donors and partner countries.

Haiti

- No public scholarships exist to finance studies abroad. The existing awards stem from cooperation.

Honduras

- No public scholarships exist to finance studies abroad. The existing awards stem from cooperation.

Jamaica

- No public scholarships exist to finance studies abroad. The existing awards stem from bilateral cooperation.

Mexico

- Although various programmes exist, the most consequential in terms of budget and number of scholarships awarded is that of the CONACYT, called *Becas al extranjero* (foreign scholarships).

Nicaragua

- No public scholarships exist to finance studies abroad. The existing awards stem from bilateral cooperation.

Panama

- The Institute for the Training and Use of Human Resources (*Instituto para la Formación y Aprovechamiento de Recursos Humanos, IFARHU*) is the institution responsible for managing support from the Panamanian government for higher education. It establishes training internships in Cuba and centralises the scholarships on offer from other countries or from cooperation. Scholarships for studies abroad (complete non-refundable scholarships) are managed by the National Secretariat for Science and Technology (*Secretaría Nacional de Ciencia y Tecnología, SENACyT*).

Paraguay

- Carlos Antonio López Scholarships, National Programme of Foreign Scholarships. Covers scholarships for both Master's degrees and doctorates.

Peru

- *Beca 18 Colombia*, which awards scholarships for access to higher education. It is financed by Colombia's Ministry of Education, and it is in Colombia that the scholarship student will pursue their undergraduate studies.

- President of the Republic Scholarship, which finances Master's or doctorate studies in foreign higher education institutions placed within the top 400 in quality rankings. These are managed by Peruvian professionals resident in the country and who hold the qualification of *Bachiller* or of *Licenciado*.

- Aleprona Scholarship, which promotes postgraduate scholarships abroad, specifically in universities considered to be among the best in the world.

- France Excellence Scholarships, which consist of comprehensive scholarships from the Ministry of Education to study science and technology courses for up to three years at French universities.
- Supplementary scholarship, which finances undergraduate, postgraduate and postdoctorate studies through access to education programmes on offer from international cooperation sources.
- CONCYTEC, a programme which finances international and national scholarships of up to two years duration.

Dominican Republic

- The Department of International Scholarships of the MESCyT develops scholarship programmes in concert with cooperating international bodies and governments of partner countries.

Trinidad and Tobago

- The Ministry of Education's Department of Scholarships and Advanced Education oversees a series of public scholarship programmes which promote studies abroad.
- Among the programmes are those of Scholarships for Development Needs, Postgraduate scholarships for students graduating with honours, Scholarships for the Protection of Tropical Crops, Meteorology Scholarships and the Open Scholarships Programme.

Uruguay

- The ANII has bilateral agreements which govern some scholarships for postgraduate education and a programme of internships within the country geared towards training researchers and technologists.
- Scholarships are aimed at Uruguayans or foreigners who have been resident in the country for at least two years and fall into two categories: external, for postgraduate programmes to be studied in other countries; and "sandwich", in which activities are partly undertaken abroad, and partly within Uruguay.

Venezuela

- Fundayacucho Foundation: maintains agreements with various countries through which scholarships are managed. For example, the Jacinto Convit international scholarship programme is intended to grant, each year, 10,000 scholarships to Venezuelans for studies abroad.
- The Venezuelan Institute of Scientific Research (*Instituto Venezolano de Investigaciones Científicas, IVIC*) has an programme of international scholarships for postgraduate study abroad (chiefly focused on Master's and doctorate studies), both for researchers at the Institute and for participants from other university institutions.

In all the cases, but especially in those countries where the national scholarship system is non-existent or underdeveloped, cooperation and collaboration scholarships are crucial. Thus, in Bolivia, postgraduate students have only what are known as International Cooperation Scholarships, which are maintained through programmes financed by various countries and institutions (for example, Sweden's ASDI, the Spanish International Cooperation Agency for Development, Spain's Carolina Foundation or the United States' Fullbright). Something similar occurs in Haiti, where the scholarships which exist are financed by other countries or universities with whom a collaboration agreement exists. In Honduras, grants exist offered by foreign countries and bodies which the national universities and the Secretary of State for External Relations and International Cooperation are responsible for coordinating.

In other countries, the cooperation or collaboration scholarships supplement, to a greater or lesser degree, those which exist at a national level. Generally speaking, the Fulbright and Carolina Foundation grants are present in many of the countries analysed.

5.1.2. Frequency of publication of calls for applications

Calls for scholarship applications are made once a year in a large number of cases, although programmes also exist with multiple calls per year and others in which applications are open on a permanent basis. In the collaboration scholarships mentioned above, the call for applications depends on the financing organisation or country.

Argentina, Chile and Mexico, for example, have annual calls for applications. In Brazil, conversely, the CAPES and CNPq programmes for awarding foreign study bursaries are open continuously, accepting applications at any time; moreover, the foundations open their public applications process once a year. In Panama as well, the SENACYT is permanently open for applications. In El Salvador, applications are made once a year (conforming, in all cases, to the academic terms of the institutions receiving scholarship students). However, conversely, the country's Ministry of Foreign Affairs has applications for certain scholarship programmes permanently open.

In Ecuador's scholarship system, situations vary depending on the programme. For example, the Free Tender Scholarships and the GAR Scholarship Programme are open for applications once a year; conversely, the Outstanding University Scholarship Programme, Research Scholarships, Univeristy Lecturer Scholarships, Postdoctoral Scholarships and Academic Merit Recognition Scholarships are open for applications on a permanent basis.

In cases like that of the Dominican Republic, call for applications generally take place twice a year, depending on the agreements with the foreign education institutions, which dictate their frequency, and also on the yearly budgets set by the Dominican Government through the MESCYT. In Paraguay, Carlos Antonio López scholarships are open to applications three times a year.

However, there are also countries in which calls for applications to scholarship programmes do not occur at regular intervals. In this way, in Venezuela there are no specific periods in which calls are made for applications, but rather various scholarship programmes are posted throughout the year. In Costa Rica, the scholarships available to academic staff are

posted in accordance with the criteria of the different public higher education institutions in their academic support and improvement plans and are awarded and announced by the international cooperation offices of their respective universities.

As for disseminating calls for applications, it is worth noting the impressive efforts made by Colombia in publicising scholarships abroad for postgraduate studies. Thus, COLCIENCIAS presents a yearly plan of calls for applications for grants in education, innovation, research and internationalisation. Through the ICETEX, the calls are effectively publicised, via the notice and information points and new technologies. In all cases, call for scholarship applications are posted through the web pages of the institutions responsible or through e-mails to the members of the higher education institution in charge of the applications.

5.1.3. Requirements for scholarship applications

The most widespread criterion when it comes to applying for scholarships is nationality, which appears in practically all cases. The applicant must be a citizen of the country responsible for the programme. In some cases, certain age-based criteria are also present. For example, in Ecuador, the Open Tender Scholarships are open only to persons of up to 35 years of age; for specialisations, Master's and doctorate programmes, the limit is 55 years of age; meanwhile, for medicine and dentistry specialisations and sub-specialisations, there is no age limit. Likewise, in Jamaica limitations of this sort exist in some cases.

Along with these requirements, all the programmes outline some sort of requirement relating to academic qualifications. In Chile, the key requirement for an application for a postgraduate scholarship is possession of a teaching or education qualification issued by the Normal Schools[28], national universities or by foreign academic institutions duly validated by the country. In certain programmes in Ecuador, applicants must hold a professional qualification or an enabling academic degree verified by the system of the Secretariat of Higher Education, Science, Technology and Innovation (in the case of a qualification obtained abroad, the necessary steps must be taken to have it recognised). In Peru, as indicated by the particular call for applications, it is necessary to hold an academic degree, professional qualification or *licenciatura*. In Uruguay, Venezuela and the Dominican Republic as well, it is necessary to produce the corresponding academic qualification.

Another of the aspects considered in the various scholarship application processes are the academic level of the applicants. So, in Argentina, public postgraduate mobility scholarships (the only kind which exist) consider the academic records of the applicants. The criteria for awarding grants is meritocratic, although over the years a geographic criterion is also considered, which is to say, scholarships are distributed based on the address of the applicant, although this is not required by regulations. In Chile, where the different categories of scholarships for postgraduate study abroad require certain average grades, in certain programmes, the final average grade must be at least five out of seven and fall within the top 30% of marks for the year. This country, additionally, demands work experience for the fields of medicine and healthcare.

28 In the UK, 'Normal Schools' are more commonly referred to as 'Teacher Training Colleges.

In El Salvador, although spending justifications and minimum grades in academic records are not required, these do make a difference to the final decision. As in practically all of the countries analysed, the majority of scholarships which exist in this country are aimed at postgraduate studies. In Peru and the Dominican Republic, the academic record is again critical when it comes to awarding scholarships. In the latter case, postgraduate scholarships require the applicant to be a *licenciado* graduate with a minimum grade average of 80 points or three points. To access postgraduate scholarships in Brazil applicants must have completed the compulsory subjects and must have a qualified research project; likewise, scholarships are awarded to the students with the best academic performance. Lastly, in Uruguay as well applicants are required to show their academic history (in addition to a curriculum vitae within the CVU System and accrediting the relevance of the programme before the ANII). The academic record and level of qualifications are also factors considered in Venezuela.

Another condition which is relevant to a good number of programmes is accreditation of a certain level of proficiency in a second language (that of the destination country). This is seen in Brazil, in Colombia for the ALECOL Agreement (broad knowledge of English or an acceptable level of German), in Mexico and in Peru. In this last case, if the applicant does not have the language-level required by the host institution, the scholarship programme will subsidise no more than ten weeks of language study in the receiving country. Ecuador, El Salvador, Uruguay, Mexico and Peru require, in the majority of their programmes, that the scholarship applicant is accepted onto the programme which they wish to study or by the institution in which their stay will occur. In countries like Venezuela and El Salvador, letters of recommendation are also required.

In addition to all the above, we must also consider cases in which applicants must, additionally, pass a written assessment to access scholarships (this is the case for some grants in Ecuador). Moreover, on some occasions, having received a scholarship from a certain programme precludes applying for it again (e.g. ICETEX scholarships in Colombia). Similarly, certain incompatibilities exist when receiving funding from another institution (or at least, this situation must be reported, as in Mexico).

Both Ecuador and Mexico require a report or specific project to be presented on the activity to be carried out abroad (length of the programme, curriculum, or number of credits, and a research project in the case of doctorate studies, which must sometimes be countersigned by lecturers or tutors at both the home and destination institutions). In some cases, the applicant is also asked to present an estimated budget for the cost of the scholarship. Along with this, Research Scholarships in Ecuador require the sponsorship of a university, polytechnic college, Public Research Institute in the country, the Air Force Research Centre (*Centro de Investigación de la Fuerza Aérea, CIDFAE*) or the Technological Innovation and Development Unit and Level III Electronic Maintenance Centre of the Defence Sector Naval Forces (*Unidad de Innovación y Desarrollo Tecnológico y Centro de Mantenimiento Electrónico Nivel III de la Fuerza Naval del Sector Defensa*).

Depending on the country, it may also be necessary to accredit a series of personal requirements (in Peru, evidence of a clean police, judicial and/or criminal record, as well as being in a state of physical and mental health conducive to completing the study programme; in Jamaica as well, medical certificates are sometimes requested).

It is notable that economic criteria are not generally apparent; they are taken into consideration only in Colombia, in Ecuador (with the exception of the Outstanding University Scholarships or High Achievement Group (GAR) Scholarships) and in Peru, where it is essential to demonstrate that the applicant's monthly income is insufficient to cover the costs of the postgraduate qualification.

Lastly, some countries also set conditions in relation to the students' return to their country of origin. For example, El Salvador and the Dominican Republic require students to return after completing their studies, and to remain in the country for at least two years following this. In Colombia, specifically for the ALECOL Agreement, participants are required to return to the country and comply with the residence requirements (at least two years after completing the scholarships) and with their obligations to COLCIENCIAS and the institution which supported them.

5.1.4. Types of studies able to opt into the scholarship system

A number of countries only offer scholarships at postgraduate level. This is the case in Argentina, Peru, almost all of El Salvador, Mexico (specialisation, Master's and doctorate), Paraguay (Master's and doctorate) and Venezuela (Master's and doctorate, essentially). In Chile, within the CONICYT scholarship programme, six scholarships are for postgraduate studies (specifically for medical specialisations, Master's or doctorates). In Uruguay as well, scholarships are intended for Master's and doctorates, and furthermore are clearly and specifically limited to face-to-face studies. In contrast, in the other countries, undergraduate level is also included (Colombia or the Dominican Republic). In Panama, postdoctorate is included alongside these levels.

The majority of the States do not show any clear preference for specific areas of expertise in their calls for grant applications, although in some cases limitations do exist on requesting grants based on the type of studies concerned. For example, in Chile, Master's scholarships are aimed specifically at education professionals and exclude all programmes linked to the fields of business, marketing and finance. In El Salvador, scholarships cover all areas of expertise. In Panama, the SENACYT opens applications to all fields and for all levels of education; however, when the scholarship programme in question is offered by a foreign entity, grants are generally confined to one area of expertise. Postgraduate applications for the CONACYT in Mexico are organised by areas of expertise each year and change based on the needs identified by the country. For example, 2016 favoured applications related to the fields set out in the Special Programme for Science, Technology and Innovation (*Programa Especial de Ciencia, Tecnología e Innovación, PECITI*), which is to say, Pure or Natural Sciences, Engineering, Environmental Sciences, Biotechnology and Agricultural Sciences, Health Sciences and Energy. The Dominican Republic operates in a similar way, with the Ministry of Higher Education, Science and Technology setting priority areas each peIn Trinidad and Tobago also, the fields of study to which scholarships can be awarded are based on the National Development Human Resource Needs List, and include, among others, Agriculture, Energy, Health, Transport and Communications, Construction, Aviation, Education, Sports, Culture, Community Services and Tourism. In Venezuela, the situation depends on the type of programme being applied to; for example, the Cuba-Venezuela agreement of 2005 confines itself to practicals for the study of Medicine on the island. With regards to the other programmes, the information provided by both

Fundayacucho and the MPPEUCT states that there are no favoured fields; however, a recent cycle of applications for postgraduate studies in China was limited to Engineering and Technology, Basic Sciences, Agricultural and Marine Sciences and Sport Sciences.

In Peru we can see a clear leaning towards pure sciences (Life Sciences and Biotechnology, Material Sciences and Technologies, Environmental Sciences and Technologies), technological fields (Information and Communication Technologies), as well as towards Social Sciences. Uruguay does not finance studies related to the field of Administration. Lastly, in Paraguay, the areas of expertise which are encouraged are to do with developing Science and Technology, rather than Humanities, Social Sciences, Medical and Health Sciences or Agricultural Sciences.

In Ecuador, each of the existing scholarship programmes is focused on specific areas of expertise, although in reality they encompass numerous fields and almost no field can be said to be excluded. The sole exception is found in the Outstanding Universities Scholarship Programme, which does not finance fields or study programmes for Business Administration and related, Business and related, Marketing and related, Finance, Accounting, Project Administration, Business Law, Graphic Design and related.

5.1.5. Requirements for universities receiving scholarship students

Generally speaking, the countries consider aspects related to the education institutions receiving the students. To a greater or lesser degree, with or without regulated procedures and information, in all cases the aim is for these to bee prestigious universities and centres. El Salvador and Venezuela are exceptions, since they set no conditions in this regard.

For example, in Brazil, the receiving institution must be recognised as excelling in the specific area or expertise and as being equipped with the infrastructure permitting completion of the planned studies for the scholarship student. In Chile, the National Commission for Science and Technology refers to international rankings (Times, Academic Ranking of World Universities ARWU and Web of Science) to determine the quality of the receiving organisation.

In Costa Rica, consideration is given to prestigious universities with international recognition, and these are preferred. In Ecuador, where the Outstanding Universities Programme is concerned, it is considered positive for the university in question to feature on SENESCYT's list for the matter. Likewise, where the Open Tender Programme is concerned, SENESCYT writes and permanently maintains a list of accredited universities for applications each year. The Research Scholarships Programme also keeps a list of world universities which can receive scholarship students.

In Mexico, universities receiving scholarship students must be of international quality and acclaim, and to this end, university ranking in the destination country are considered. In Panama too, the institution must be internationally recognised; the aim of this to exclude low profile universities. In Paraguay's case, the university must be among the top 300 included in the QS international ranking. As for Uruguay, the institution must be one which recognises degrees from the University of the Republic. Lastly, in Trinidad and

Tobago, receiving universities must be accredited.

Peru, the Dominican Republic and Trinidad and Tobago also establish requirements, but in this case for universities within these same countries which wish to participate in the scholarship programmes. Thus, in order to participate in Peru's National Scholarship Programme, home universities must be duly certified by the SUNEDU. In the case of advanced technological institutes, these must be registered and revalidated by the Ministry of Education. In the same vein, the national universities of the Dominican Republic receiving scholarship students must be accredited by the Ministry of Higher Education, Science and Technology and by the student's country of origin.

5.1.6. Recognition of studies pursued abroad

In the majority of Latin American and Caribbean countries, studies which are undertaken abroad are recognised. Generally speaking, they are validated when the student returns to their home country, although in some cases the applicants must meet some minimum requirements, as Brazil and Colombia. In the case of Argentina, no formal recognition exists unless the interested party completes the necessary procedures.

In general, no specific criterion or requirement is apparent for recognition of studies undertaken abroad, but rather it seems to occur automatically upon the student's return. In any case, it is important to differentiate between various procedures such as recognition, standardisation and approximation. Each involves different requirements and timings, as is apparent in the case of Costa Rica, where approximation is standardisation to a course which exists in one of Costa Rica's public universities, and as such, if no similar course exists, the student may encounter significant difficulties.

Regional body scholarship programs: the case of the OAS

The Organisation of American States (*Organización de Estados Americanos, OEA*) is responsible for the majority of scholarship programmes covering the majority of countries of Latin America and the Caribbean (the majority of applications are open to the 35 Member States).

Its Academic Scholarship Programme (Regular Programme) awards grants for undergraduate or postgraduate study at a university forming part of the OEA's Consortium of Universities or, in any case, at a university of one of the member countries. There are priority areas for postgraduate study and programmes are not financed for the fields of medicine or foreign language learning. The programme has been running 1958. In 2017, for budget reasons, the OEA is not offering postgraduate scholarships. Another of the Organisation's programmes is that of Special Scholarships for the Anglophone Caribbean, which has been running since 1983 and is aimed at students from the Member states of the Anglophone Caribbean and from Surinam, to study the last two years of their undergraduate courses.

The Professional Development Scholarships finance courses of a week to a year in length both in the Member states and in those with permanent observer status. A series of courses are offered which, once again, are focused on the OEA's priority ares (social development

and creation of productive employment; education; economic diversification and integration, open trade and access to markets; scientific development and technological exchange and transfer; strengthening of democratic institutions; sustainable development of tourism; sustainable development and environment; culture).

The OEA also has three mobility programmes focused on specific countries: Brazil, China and Mexico. The Programme of Alliances for Education and Training (*Programa de Alianzas para la Educación y la Capacitación, PAEC*) between the OEA and the Coimbra Group (with support from the Brazilian Ministry of Foreign Relations and the Pan-American Health Organisation), already in its sixth edition, offers scholarships to citizens of OEA States for Master's and doctorate studies in Brazilian universities. In Mexico, the CONACYT-OEA-AMEXCID Programme awards scholarships for pursuing postgraduate studies in sciences and engineering at Mexican universities. A number of the scholarships are allocated to students from Central America and the Caribbean. Lastly, the China Scholarships are offered jointly with the Chinese Ministry of Education and the programme awards partial scholarships for any field of study available to international students in China.

5.2. Private scholarships

5.2.2. Private scholarship programs for the promotion of studies abroad

A subset of the countries analysed do not have any private scholarship programmes for the development of studies abroad; among these are Bolivia, Costa Rica, Panama, Cuba, the Dominican Republic, Trinidad and Tobago, Uruguay, Venezuela and Honduras. In the case of Bolivia, however, it must be noted that its private universities do have scholarships of a different sort for their own students.

In the remaining cases, the situation is very varied. We do not generally see large or multi-national companies with initiatives across a number of countries, but rather the initiatives are unique to each of them. Thus, in Argentina, the YPF Foundation supports scholarships for studies abroad. In Brazil we see the Study Foundation, which has awarded around 500 scholarships over 20 years; the Lemann foundation, which offers scholarships for universities such as Harvard and Stanford; and the Ling Institute, which awards scholarships at prestigious universities. Furthermore, *Santander Universidades* has a Brazilian-Portuguese Scholarship programme. Various *Santander Universidades* programmes are now present in other countries of the region.

In Colombia, we see the scholarships-credit programme from COLFUTURO, an organisation which receives support from the national government through COLCIENCIAS and from Colombian companies and which finances postgraduate studies abroad. In the case of El Salvador, Nicaragua and Guatemala, the Heinrich Böll Foundation awards scholarships to pursue Master's studies in recognised centres in Mexico. In Mexico there are private scholarships from *Nuffic Neso Mexico* or *Universia Mexico*, among others. Jamaica has private scholarships at the University of Birmingham

and the Jamaica National Foundation Legacy Scholarship and Grace Scholarship Fund programmes or funds.

In El Salvador, along with the aforementioned foundation, is a Scholarship Fund from the Central Reserve Bank, administered by the Corporate Foundation for Educational Development (*Fundación Empresarial para el Desarrollo Educativo, FEPADE*), a private foundation specialised in education. As for Peru, it has scholarships supported by private entities such as FUNIBER (in Mexico as well), the Ford Foundation, IPFE, ANKAY, the La Salle Scholarships or the Lima city hall scholarships.

5.2.2. Frequency of publication of calls for applications

In the vast majority of cases in which private scholarships exist, these tend to be open for applications annually. Private universities in Bolivia, for example, award them at the start of the academic year and, subsequently, students may renew them so long as they meet the requirements. Brazil, Chile and Colombia also have yearly application periods. In the case of Mexico, the frequency varies based on the institution, but applications tend to open every semester or every year. Lastly, in Paraguay, as with the previous cases, postings are made once a year, taking into account the offers available in the various institutions. Calls for applications generally occur at the start of the academic year (February).

As for the publication methods of the various calls for applications, many countries have web pages which display the offers which exist in a centralised way, besides publications by each of the institutions concerned, so as to facilitate access to the information for those involved.

5.2.3. Requirements for scholarship applications

As is to be expected of applications financed by a range of private foundations and companies, the application requirements are typically very varied. The nationality requisite continues to be very common, just as in the case of public scholarships. Likewise, if the scholarship is for a country whose language is different from that of the home country, certification is required of a certain level of proficiency in said language or, in some cases, applicants are required to pass a test at a specific level.

As for other types of requirements, consideration is given to academic performance, by setting certain grade levels, possession of certain university qualifications (an undergraduate degree to access a Master's scholarship, for example), recommendation letters or explicit acceptance from the institution or programme in which the scholarship will take place. On some, rare, occasions the applicant's socio-economic conditions may also be considered.

Apart from these general requirements, each programme sets its own criteria, be they age, ability, or excellence in certain fields.

5.2.4. Types of studies able to opt into the scholarship system

Though similarities are seen between the countries, each of them has its own characteristics

with regards to the level of studies or areas of expertise which can access private scholarship systems. For example, in the case of Argentina no regulation exists relating to the private sector: although the majority of scholarships on offer are for postgraduate studies abroad, it depends on the financing entity. Scholarships in Colombia and Mexico are also exclusively for postgraduate studies.

In other countries, private scholarships extend to other levels of study, as is the case in Brazil and Peru. In Chile, these sorts of scholarships are also limited to postgraduate studies and the fields of medicine and foreign language learning are excluded. In the case of Honduras, scholarships include undergraduate studies and favour studies in Engineering and Social Sciences.

5.2.5. Requirements for universities receiving scholarship students.

It is clear that, in this sense, no specific criteria exist for all the countries which, again, is to be expected given the nature of these scholarships. In some cases, no regulations or restrictions exist in this regard. In others, the conditions required of higher education institutions receiving students depend on what is outlined by the financing entities, be these private companies or foundations, or private universities with their own scholarship schemes.

Conversely, in Peru, Mexico and Colombia receiving universities are required to have a certain level of quality or excellence, this being measured through various international rankings.

5.2.6. Recognition of studies pursued abroad

Once again, we see a considerable variety of situations. For example, in Argentina, as was seen with public scholarships, formal recognition is generally not given unless the scholarship student, upon completing their studies, initiates the necessary procedures. It is, however, very clear that, even if not officially recognised, postgraduates qualified abroad are highly valued. They are also recognised in Brazil, following the procedures established for this purpose. Ecuador does recognise studies abroad, so long as these are official degrees and not proprietary degrees. There is also recognition in Haiti, although no clear processes exist in this regard.

What we do see (and this is a point which has been mentioned elsewhere in the report) is that many countries place great importance on studies pursued abroad; in some cases, more than on those pursued within the country (refer, in this sense, to chapter 7, on professional practice, where it is explained how in El Salvador a qualification obtained in the United States exempts the professional in question from needing to be registered to practise).

Remarks and recommendations

Remark 1.

One of the main remarks to be made regarding the public and private scholarships which exist in the region is that they are concentrated in postgraduate studies and, to a much lesser extent, extend to undergraduate studies. In some cases theses are decisions made by the selfsame countries responsible for the scholarship programmes; but in many others, those whose choose to dedicate funds to postgraduate education are private companies and international organisations or institutions from countries beyond Latin America and the Caribbean through cooperation mechanisms.

It is also surprising to see that, despite it being seen that in many cases studies or placements abroad are well regarded and even valued when it comes to professional employment, we encounter countries with practically no national scholarship systems. In this situation, only those people with sufficient means can afford the cost of studies or research stays in other countries. Initiatives like the various scholarship programmes of the OEA help mitigate this situation.

Recommendation.

A point in favour of potential standardisation of the grant systems is the fact that the criteria assessed are generally fairly similar (grades, languages, etc.); however, it must also be taken into consideration that these aspects may favour students coming from private or elite centres of education, in which language teaching is generally of higher quality than in public centres. Indeed, it is in order to identify these sorts of problems that it is important to closely study programmes like that of the OEA, both because of the number of countries involved and because of its longevity. An analysis of data from these scholarships could allow for identification of trends (countries of origin and reception, types of institutions preferred, profile of scholarship students, etc.) which would prove of great value for coordinating or broadening mobility programmes, as well as for identifying weaknesses (zones, institutions, students or lecturers not able to apply) which it would be necessary to work on amending so that no member of the higher education systems is deprived of the opportunities which would arise from the common bi-regional area.

Recommendation.

The main difficulty to be confronted if we aim to implement a regional scholarship programme would be financing it. The countries that lack their own public scholarships or whose initiatives are clearly limited would struggle to make an extraordinary contribution. In other cases, where such resources do exist, a change in priorities would be needed, making education a key goal. This is an element that must feature in any design. Likewise, private participation should be valued and encouraged.

6. Mobility of students, academics and administrative staff from HEIs in Latin America and the Caribbean

The creation of a European, Latin American and Caribbean Area for Higher Education, Science, Technology and Innovation must necessarily involve creation and development of mobility schemes for the students, lecturers and administrative staff of the different countries and regions. This is one of the aims of creating a common area and, moreover, the standardisation of the characteristics of education systems implicit in a project of this nature would encourage the already existing institutions. It is important, therefore, to understand the current situation of mobility programmes in the various countries, focusing on points such as which institutions safeguard them, whether mobility is recognised in any way or how the processes of standardising studies or professional development are carried out.

In this sense, the information presented corresponds to the following structure. Firstly, we examine student mobility programmes, both the initiatives within the home country and those for international mobility, differentiating between public systems and those financed by the private sector. Secondly, we look at mobility programmes for lecturers (again, both national and international), distinguishing between public and private initiatives. In all cases, the following points are considered:

- Requirements for mobility programme candidates.
- Whether there are countries or zones which receive candidates more regularly.
- Value placed on mobility in the vocational tPromotion of mobility by the higher education institutions themselves.

6.1. Student mobility

In analysing the existing initiatives for higher education student mobility, we have taken into account elements such as whether these are public or private undertakings, whether the foster mobility within the home country or to other countries and, in the latter case,

whether certain destinations are prioritised over others for receiving students. In the same vein, we delve into the requirements for participating in these sorts of educational processes and, lastly, into the ease or difficulty of attaining recognition of education received in other institutions upon returning to the home centre.

6.1.1. National and international mobility initiatives of a public nature

a) National mobility initiatives

Public initiatives for mobility of university students within their own countries are fairly widespread in the countries of Latin America and the Caribbean. Bolivia, Brazil, Chile, Colombia, Ecuador, Guatemala, Mexico, Peru, Paraguay, the Dominican Republic, Trinidad and Tobago, Uruguay and Venezuela have schemes geared towards facilitating student mobility between HEIs in the same State, although many differences exist between them. For example, Colombia has adopted a credit system which is geared towards promoting mobility through certain guarantees, given that it facilitates the recognition process for the education received. Cuba also falls into this first subset, but it should be pointed out that the internal mobility initiatives are not generalised across all studies, but rather are limited to certain Master's and doctorate courses. Uruguay, in turn, establishes elective credits which may be obtained through study in a higher education institution other than the home institution.

Ecuador opts, as outlined in the Academic Regulation of 2013, for "encouraging student national and international mobility with a view to integrating the Ecuadorian academic community into the sharing of knowledge at a regional and world level". Equally apparent is the interest in these sorts of schemes in Peru, where a Network of Peruvian Universities has been created, including 13 of the country's institutions, and promoting integration, exchange and creation of expertise between universities, with activities encompassed within student and lecturer exchange programmes, research programmes and conventions at national level. Of a similar nature is the Ñanduti Network[29], created by the Association of Public Universities of Paraguay, which enables mobility of students and lecturers between the various universities which comprise it. Finally, it is important to note that Venezuela covers the question in article 123 of the Law on Universities, in which it is stated that "Universities shall promote exchange of students with other institutions within the country and abroad; shall foster rapprochement among students and between students and lecturers; and shall expedite relations between student organisations through groupings similar to those seen in other countries or internationally".

There is, however, a group of countries consisting of Argentina, Costa Rica, El Salvador, Haiti, Honduras, Jamaica and Panama, which do not have institutionalised schemes for mobility within the country (they do have some specific schemes or agreements between HEIs, although of a marginal nature). In any case, once again, the approaches are not uniform. In Costa Rica they are beginning to include internships with credits in other universities within the country at doctorate level. In Panama, where no initiatives of this

29 For more information on this network, see chapter 9.

type exist, universities do not impede those persons who wish to study for a limited time in another area of the country, if they finance it themselves.

b) International mobility initiatives

When it comes to examining public programmes for international student mobility, we can again differentiate two groups of States. Firstly, a set of countries in which schemes are to be found that favour this sort of mobility, which includes Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Ecuador, El Salvador, Guatemala, Jamaica, Mexico, Nicaragua, Peru, Paraguay, the Dominican Republic, Trinidad and Tobago and Venezuela. In all these cases, a common thread can be seen: the idea that international student mobility is one of the requirements for internationalisation of higher education and that, furthermore, it serves to demonstrate the quality and efficiency of the institutions themselves.

As for the existence of countries or geographical areas which feature more frequently in mobility programmes we see that, although each application process has its own features, certain countries are prioritised as destinations for students. In this sense, the majority of Spanish-speaking countries included in this study possess operational public programmes which encourage mobility of their students to Spanish-speaking countries, an similarly in Haiti the priority destinations tend to be francophone. The majority language in the receiving country is, therefore, a relevant factor.

Furthermore, also relating to the most frequent destination countries, another fact comes to light upon digging deeper on the question, and that is that it is desirable for students to be educated in countries considered to be developed, leaders in economy and research. As such, not all destinations are given equal consideration. Additionally, the close historical, commercial and cooperative relations which exist between Latin America and the Caribbean and Europe make European countries important destinations for student mobility from higher education institutions.

In a second group of countries, the international mobility programmes either do not exist or are limited to undertakings which are neither systematised nor generalised across all higher education curricula, levels, or institutions. Haiti, for example, finds itself in this situation, with Medical students from certain private universities able to undertake placements in France and Belgium, or students at the Haitian Doctoral College able to study in other universities thanks to financing from Caribbean Office of the Francophonie University Agency. The situation is the same in Honduras, Panama and Uruguay, where we encounter individual actions, but no cases of systematised processes in university activity.

- Requirements for applicants

The access requirements for the various mobility programmes are extremely diverse, as are their features. Even within a single country, the initiatives which exist do not always have the same requirements, but rather they vary between different application processes. Furthermore, discrepancies exist in the access conditions for mobility programmes depending on the level of higher education to which they relate.

We see, in almost all the countries, the requirement of citizenship and/or permanent residence in the country and of having completed a certain number of credits or courses, as well as grades demonstrating the merit of the applicant; in several cases letter of recommendation are also requested. As for mobility of postgraduate students, a requirement which has occasionally been seen is a certain number of years of professional experience. Additionally, not in all countries nor all application processes, but in certain cases, a condition for benefiting from these systems is falling within a certain age range.

- **Recognition of studies pursued.**

Generally, the existence of these programmes implicitly entails recognition of the education to be received at the destination centre, which will be done through collaboration and cooperation agreements between the various higher education institutions. Some countries, such as Chile or Colombia, find this certification of studies easier than others thanks to the implementation of a credit system. Along with this, the similarities between the study plan contents must be verified, independently of the level of education in question, relating the subjects studied in the destination HEI with those which would have been studied in the home HEI.

6.1.2. National and international mobility initiatives of a private nature

As was seen in the case of public programmes, the countries analysed fall into two extremes when it comes to national mobility initiatives financed by the private sector. On the one hand, there are the cases in which these sorts of schemes do not exist or are so minor that they can be considered as non-existent. On the other, are those countries which do have a number of initiatives aimed at encouraging student exchanges between HEIs in the same state.

a) National mobility initiatives

In the first group, which lacks privately financed national mobility programmes, are Argentina, Brazil, Costa Rica, Cuba, Honduras, Jamaica, Panama, Paraguay, Trinidad and Tobago and Uruguay. Nor, in some of these cases, does finance exist in the public sector for these sorts of initiatives; in others, it is not considered a priority for improving education, with it being preferable, where possible, to dedicate the funds to international mobility.

Bolivia, Chile, El Salvador, Guatemala, Mexico, the Dominican Republic and Venezuela are at the other extreme, with national mobility initiatives of a private nature. Some examples which demonstrate the projects underway in this respect are the initiatives developed in the Dominican Republic through, first of all, the Brugal Fund, which encourages and promotes academic excellence in university education through the means of scholarships for those fields considered a priority for the country's development; other examples are the initiatives run by the Hazoury Foundation, such as those known as Leaders of Tomorrow Scholarships, which seek to identify talented young Dominicans who have demonstrated, over the course of their secondary education, high academic performance,

social commitment and leadership skills, with the aim of providing them with the means to carry out their higher education studies at the Ibero-American University.

b) International mobility initiatives

With regards to international mobility supported by the private sector, Panama, Honduras, Trinidad and Tobago and, of course, Cuba, are countries in which no private initiatives exist dedicated to encouraging mobility of university students. In the other countries, initiatives do exist, but upon examining the reality of the situation we see that they are sparse and that for the most part they relate primarily to postgraduate studies. This, indeed, is the case in, for example, Argentina.

Venezuela is one of the countries which has private funds for promoting student mobility to other countries, chiefly through agreements signed between private higher education institutions and other public or private institutions in foreign countries. To cite an example, the Association of Universities Entrusted to the Society of Jesus in Latin America (*Asociación de Universidades Confiadas a la Compañía de Jesús en América Latina, AUSJAL*) network promotes student mobility between jesuit universities and offers inter-university undergraduate and postgraduate programmes with possibilities for student exchanges or of studying subjects digitally in some universities of the Society. In Uruguay, the two largest private universities have agreements with foreign universities and encourage students to study a semester of their undergraduate course abroad. In Mexico there are initiatives originating from the Banamex Social Commitment Programme which aims to provide support to outstanding young people.

In many areas, the international mobility to be seen includes the various Santander Bank Scholarship programmes; for example, the programme of Ibero-American Scholarships for Undergraduate Students, whose beneficiaries are undergraduate students in various HEIs of Argentina, Brazil, Chile, Colombia, Mexico, Peru, Puerto Rico and Uruguay, and whose mission is to finance six-month placements in various Ibero-American universities so as to move forwards its objective of developing and consolidating the Ibero-American Area of Expertise.

- Requirements for applicants

In the same way as in the public mobility programmes, in those run by private enterprises, the requirements and characteristics vary. The overlaps in the conditions to be met by people interested in participating in these programmes are limited to the applicants needing a certain level of academic merit, proficiency in another language, to have attained a number of credits or studied and passed a percentage of subjects for their qualification (the percentages are not consistent). The requirement of holding a specific citizenship is still found, but with much less frequency than for the public mobility applications.

- Recognition of studies pursued.

With regards to the procedures carried out in order to validate studies pursued in another centre and financed by the private sector, regardless of whether within the country

or abroad, no regulation is apparent for governing such validations. As such, will not know for certain, until returning upon completely their placement, whether there will be problems with attaining recognition of their education. In any case, it is usual to take into account the similarities in the course contents at the home HEI and at the receiving HEI; furthermore, in some cases the candidates for these mobility programmes are assessed by teaching staff from their home centre, although this is not regulated. This fact clearly indicates a level of uncertainty and this can lead some students to not be interested in or demand these sorts of initiatives, which may result in a loss of interest from private financing entities, who might then decide to terminate the programmes, which would be a great loss for all sectors involved.

The final question to be considered is whether there are areas which appear more frequently in private enterprise mobility programmes. Given that these are in most cases very specific initiatives and dependent on a large variety of private agents, the countries offered as destinations for students are also very different. For example, in Uruguay the ORT University encourages exchanges with universities in Israel; in Costa Rica we see agreements with institutions in the United States, Mexico, Brazil and Europe in general; Chile favours Asia-Pacific and Ibero-America.

6.2. Teaching staff mobility

Along with student mobility, which has already been noted as a key element in the creation of a common higher education area, the mobility of the teaching body is, in the same vein, fundamental in establishing inter-university relationships which allow networks to be created, joint projects to be undertaken and for experiences and methodologies that have been successful in other territories to be understood, adapted and put into practice.

6.2.1. National and international mobility initiatives of a public nature

a) National mobility initiatives

Many Latin American and Caribbean countries have public initiatives or programmes which are designed to encourage mobility of university teaching staff to other centres of Higher Education, Science and Technology within the same country. Examples of this are Brazil, Chile, Colombia, Cuba, Paraguay and Venezuela. In the same vein, in Mexico similar initiatives are being developed within the Programme for Improvement of Educational Quality or through the annual application period for investigation projects, participation in courses, workshops and academic mobility activities run by the UNAM. Peru is the final member of this group, it being outlined in the Peruvian General Law on Education (Law N.º 28.044, 2003, art. 70) that it is necessary to encourage the creation of educational networks for cooperation, exchange and mutual support, among whose activities is the publication of various scholarships, funded by the state, to attain high-level qualification of the country's teachers. In the same country, the Peruvian University Network (*Red Peruana de Universidades, RPU*) promotes, just as it does for the student

body, mobility and placements for teaching staff among the signatory universities, for the purposes of supporting national development by encouraging research projects aimed at developing the home institution or region of the lecturers receiving the scholarships.

Among the States which do not finance placements at other teaching or research centres within the same country is Argentina, where lecturers tend to undertake multiple and varied collaborations as part of their own professional development as university teachers and researchers, but without systems for promoting or financing in whole or in part these sorts of collaborations. This is also the case in Bolivia, Costa Rica and Ecuador. In this last country, inter-regional mobility of university lecturers, formerly very poor, has benefited from agreements and conventions between universities for postgraduate studies or, more commonly, through lecturers at the country's universities being directly invited to teach subjects or modules in postgraduate courses organised by higher education institutions.

In this country, the current Academic Regulation and the Regulation of Careers and Hierarchies for Lecturers and Researchers in the Higher Education System present lecturer mobility as a right; although this has not yet been realised, there are hopes for progress in this direction. The final pieces in the list of countries for which no strong public support exists for internal mobility of lecturers are Guatemala, Haiti, Honduras, Jamaica, Nicaragua, Panama, the Dominican Republic and Uruguay. This is, therefore, an unresolved issue for a fair number of the Latin American and Caribbean countries.

b) International mobility initiatives

The situation is very different when it comes to international mobility initiatives. In this case, very few of the governments involved do not adopt these initiatives; in this sense, the exceptions to the norm are found in Honduras, Panama and Bolivia, countries in which international mobility seems only to exist through the personal initiative of lecturers and through access to international scholarships which can defray the costs involved.

In the remaining States, we see a clear interest in international lecturer mobility, although the initiatives and programmes developed are not always the same. In Jamaica, for example, in exchange to bilateral agreements for exchange of teachers, there are, among others, programmes like the Caribbean-Pacific Island Mobility Scheme (CARPIMS), created by the European Union to facilitate mobility of teaching staff and students between higher education institutions in the Pacific and Caribbean regions with the aim of developing their institutional capabilities; or the Emerging Leaders in the Americas Programme (ELAP), conceived by the Canadian government and which involves promoting short academic stays in Canadian higher education and research institutions.

In the Dominican Republic, the Ministry of Higher Education, Science and Technology has a specific department for International Scholarships for encouraging lifelong learning through the development of scholarship programmes in concert with cooperating international organisations and governments of partner countries, which include Japan, the Republic of Korea, China and Israel. Other countries which promote mobility of the university teaching body as a key tool for achieving a complete internationalisation of higher education are Argentina, Brazil, Chile, Colombia, Costa Rica, Cuba, Ecuador, El Salvador, Mexico, Paraguay, Peru, Trinidad and Tobago, Uruguay and Venezuela.

- Once again, we note that there are certain areas which feature more frequently as placement destinations for Latin American and Caribbean lecturers, and that these vary depending on the country in question. Brazil sports three clearly defined areas for mobility of its lecturers: Europe, North America and Latin America. Mexico, in turn, prefers to send its teaching staff on training activities in the United States, Japan, Great Britain, France, Germany and Spain. There is a small group of countries, including Cuba, Panama, Venezuela and Ecuador, where no single geographic area can be identified as being a frequently chosen destination for lecturer

- Requirements for applicant

The requirements demanded of applicants to these programmes cover a great variety and diversity depending on the organiser. Requirements range from a certain amount of professional experience (expressed as a number of years of practice) to having nationality in one of the countries benefitting from the grants, to being active upon applying to the programme, to demonstrating a certain level in the language of the destination country. We should highlight at this point the case of Venezuela, whose National System for Lifelong Training of University Staff is being developed following its set-up in June 2015. This is a system which can bring greater transparency to the whole process and which, should it be successfully implemented, could be exported to other areas in which national and international mobility of higher education lecturers is a priority.

- Recognition of mobility

With regard to recognition of the lecturer mobility in their professional careers, it can be seen that it is generally sparse. In Argentina, although lecturer mobility is positively valued, it is not explicitly encouraged, given that, generally speaking, there is no planning for human resources in Argentinian universities. Salaries for university lecturers are low and external mobility proves very expensive in economic and professional terms. As such, although considered to be positive, it is generally only accessible to those lecturers able to cover the costs. As for arrival or recruitment of academic professionals from other countries, it should be emphasised that in Argentina there is a programme of University Quota Systems which consists of assigning the quotas which national universities distribute annually among foreign applicants. Another programme is that of the Promotion of the Argentinian University in the World, which arranges and coordinates promotion of university studies in the country (note, in chapter 9, that Chile has a similar initiative).

In Bolivia, recognition of mobility depends on the academic culture of university institution. Thus, in some cases it is promoted, encouraged and required. In other institutions, however, it is not institutionalised, nor is it part of the academic culture of the higher education institution concerned and, as such, is more for the benefit of specific people or academics seeking mobility opportunities for the purposes of professional and academic improvement. In Brazil, each university defines the assessment criteria used to evaluate the improvements seen from lecturer mobility.

In Chile, lecturer mobility is valued from two perspectives: both from the point of view of the professional development of the lecturer and from that of its contribution to the scientific and technological development of the country; in the latter case, it is promoted by the institutions themselves. Costa Rica also takes this approach, with international

mobility being seen as an opportunity for professional development, although it is not sufficiently valued when it comes to climbing the teaching hierarchy in public universities, which limits the number of university professionals interested in a placement abroad. The same occurs in Mexico, where lecturer mobility brings no benefit for the teacher's professional career, although it is considered a very important contribution to the HEI internationalisation process and to strengthening research. Lastly, in Venezuela, lecturer mobility is promoted informally in the various institutions. This is not helped by the absence of regulated mechanisms to govern and give value to this sort of lecturer mobility, since in reality these initiatives depend on each institution and on the conventions and agreements made with its own lecturers and with other university institutions.

In Colombia, the mobility programmes are highly valued by lecturers, given that they aim to encourage development of the selfsame lecturer's skills and expertise, and of the HEIs in terms of curriculum updates, teaching method, technological transfer, and development of inter-institutional research projects linked to strategic themes for the country's competitiveness and development. In the case of Honduras as well, it can be seen that there is a lot of interest in these programmes, given that these sorts of initiatives encourage leadership of professional commitment to the institution, while also encouraging lecturers to continue involving themselves directly in the act of teaching.

The reasons for which some countries do not value lecturer mobility are varied. For example, Honduras neither values nor has any experience with such programmes. In other cases, such as Panama, Uruguay and Ecuador, mobility has recently been recognised as a right for lecturers, but this right has yet to be put into practice. Jamaica another State in which, generally, mobility of teaching staff is not considered to be valuable when it comes to determining the competence of a lecturer, despite the fact that it is widely used by these professionals and that it leads to improvements for HEIs and society in general.

In the case of Paraguay mobility is valued in the sense that there is an ongoing effort to better train teaching professionals so as optimise their performance in the workplace, and, lastly, in the Dominican Republic, whether or not a lecturer's mobility is valued depends on the university to which they belong. Generally, all the countries place very positive value on their lecturers going abroad, being conscious of the enrichment which comes from this, but this does not translate to their fostering public-private cooperation in this regard.

6.2.2. National and international mobility initiatives of a private nature

a) National mobility initiatives

In the Latin American and Caribbean area, there are generally no private initiatives or programmes favouring or promoting mobility of university lecturers to other centres within the same country (for example, Argentina, Honduras, El Salvador, Panama, Trinidad and Tobago, etc.). In some cases, in fact, there is no recognition of these sorts of initiatives in the

legislation or related regulations for lecturers in the private system (Argentina, Jamaica, Mexico, Honduras, etc.). It is no surprise therefore that there is a certain lack of information in this regard, given that there are also no records made of private programmes for lecturer mobility and exchanges at a national level (the case in Paraguay).

Nonetheless, there are, in some cases, various formulae and mechanisms which in some way facilitate conventions or agreements in this regard in private universities (Colombia, Costa Rica, Ecuador, Paraguay, Venezuela, etc.). Generally, their implementation is limited or restricted and is carried out through bilateral and multilateral networks which support teaching and research placements for academics, on the basis of areas of specific interest, prioritised by the universities themselves. This is frequently left to the selfsame university institutions involved in each country, through the signing and implementation of bilateral agreements with other foreign universities. It is not unusual, on the other hand, for some countries to have lecturers working in more than one university, due to private universities having very few regular or full-time teachers (consider Bolivia, among other cases). This mobility, if it can be seen as such, does not stem from a coordinate programme, but rather from the lecturer's own needs.

What we do see is the existence of lecturer mobility and exchange programmes by the private universities themselves. The main aim of these initiatives is to foster relations with other institutions, research centres, government and non-government organisations and cooperation agencies for the purposes of creating and pioneering cooperation networks to meet various goals. One sort of initiative we see is promotion of teaching mobility within the country through the notion of guest lecturers, as is seen in Colombia. In Venezuela, some private universities provide mobility opportunities for their university lecturers. These opportunities are published by connecting those academics who are interested with their interested counterparts in other institutions or research centres at international level. In other States, such as Costa Rica, lecturer mobility aims to meet academic needs in the various campuses of the same universities.

In cases like that of Ecuador, lecturer mobility is a right which is even reflected in legislation, and which also includes private universities. However, in practice, it depends on agreement between the deans of the various institutions. Sometimes, the fact that universities have a high degree of autonomy makes it easier to create private programmes for lecturer mobility and exchange. That is to say, that this autonomy makes it possible for each institution to develop its own mobility programmes (for students or lecturers, national or international).

b) International mobility initiatives

Where international lecturer mobility programmes are concerned, it can be said that in a fair number of countries these initiatives do not exist, nor are they provided for in either the public or private sphere. These sorts of privately funded initiatives are non-existent in countries such as Argentina or Bolivia, among others. In other countries, both public and private universities have access to international lecturer mobility programmes through international agreements, as members of Ibero-American or International university networks; however, as has already been noted, these are only really in a developed state for postgraduate-level studies.

The general aim is to foster and develop an international culture in the academic university community, encouraging communication and international academic services and, in this way, attaining better international recognition through an effective notification service for academic opportunities of an international nature. This is the case for the Ibero-American Scholarships for Young Lecturers and Researchers from Santander Universities (the student mobility version of which has already been mentioned). The project is focused on supporting lecturers in their research, so as to provide opportunities to complete this training and scientific specialisation, to collaborate on updating and improving the level of expertise and allowing, moreover, the compilation of additional and specific information required for the studies or research which lecturers are pursuing (Chile, Brazil, etc.).

Another widespread form of mobility in the private sphere (and also present in the public) consists of inviting and hiring lecturers from abroad to come teach, especially at postgraduate level. This transpires in the framework of inter-university agreements, or directly with the required lecturers. In some countries, moreover, universities form networks for the internationalisation of higher education, with the aim of facilitating these processes by fostering cooperation between institutions. It should be stressed that, at times, lecturers who have received education or training abroad have done so through their own means and out of their own interest in possessing the best academic training so as to provide sound and extensive knowledge to students in their particular fields of academia.

In Bolivia, some institutions benefit from these sorts of initiatives more frequently and these are generally the larger and more important universities in the country, which in general are located in large urban centres and which assemble more academics in different areas of expertise. It should be noted that male academics in this country are favoured in these initiatives over their female colleagues. In Brazil, the three regions which appear most frequently as destinations for mobility programmes are Europe (the UK, France, Germany, Spain, Italy and Portugal), North America (Canada and the USA) and Latin America.

In the case of Colombia, the mobility programme included offerings for the Ibero-American region, the initiatives run by Mercosur and the Pacific Alliance, as well as with universities in the United States, Canada, Japan and Israel, among others. Two examples are the Student and Academic Mobility Platform run by the Pacific Alliance (which includes Chile, Peru, Colombia and Mexico) and the lecturer mobility arranged by the Corporation for the Integration and Development of Education in South-West Colombia (*Corporación para la Integración y el Desarrollo de la Educación en el Sur Occidente Colombiano, CIDESCO*). In Costa Rica, the regions which have mobility programmes are those containing institutions with which agreements are signed. The most frequented are North America and Europe. In El Salvador, mobility programmes send students to less economically developed countries and to more developed countries such as those in Europe. Other destinations are the United States, Central America and South American countries.

In general, the countries analysed which have mobility programmes favour Europe, the United States and the rest of Latin America as the main destinations. Some of them depend on existing agreements with various universities; others favour countries which are less economically developed and some prefer to focus on Spain due to the common language.

- Requirements for applicants

If we consider the requirements which must be met by candidates in order to participate in these types of private mobility programmes, we see conditions related to nationality, qualifications (doctorate), academic grades, commitment to university teaching and sponsorship from the university institution to which they belong or to which they are linked. Another thing which is usually set is a specific age limit (for example, not exceeding 37 years of age in the case of Master's, 40 for doctorates and 42 in the case of post-doctorates) along with, for example, the characteristics of the research project or training proposed and its suitability for the destination institution. A key requirement at times is that the candidate be registered and represented or sponsored, by higher education institutions, research centres or educational institutions which develop programmes of innovation and technological development. In some cases, it is also required that they have an active contract during the validity period of the scholarship and some application procedures are even exclusively geared towards ordinary personnel with exclusive or research contracts.

Other agreements state that participants must have the agreement of their home department or laboratory and that of the hosts. In many cases, knowledge of English, or the language of the country in which the placement is to occur, is required, sometimes demonstrated with an international exam for language level accreditation. In addition to this, as is to be expected, are the selection regulations and criteria specific to the programme in question. For example, some educative institutions have to commit themselves to engaging the scholarship holder once their studies are complete. The lecturer, for their part, commits themself, on occasion and where appropriate, to certify their return and residence in the country for at least two years following completion of the scholarship.

6.3. International or cooperation agencies mobility programs

Along with the public or private mobility programmes of the various countries analysed, it is important to note the presence of initiatives run by bodies foreign to the region or by international organisations present in many of the states of Latin America and the Caribbean. These initiatives represent a crucial starting point when it comes to putting into practice mobility programmes or a regional and bi-regional nature.

Erasmus Mundus

Erasmus Mundus is a programme for mobility and cooperation in higher education which seeks to improve the quality of European higher education and encourage dialogue between people and cultures through cooperation with non-European countries. In this way, it contributes to the development of human resources and the cooperative capability of European higher education institutions with non-European countries, increasing mobility between the European Union and these States. In 2014, Erasmus Mundus was subsumed into the Erasmus+ programme.

According to the data in the report from the European Commission (2015), from 2004 to 2014 a total 696 initiatives were undertaken within the scope of Erasmus Mundus and 2,243 higher education institutions participated in them.

Table 15.
Erasmus Mundus program figures (2004-2014)

Projects and clusters	
Joint programmes	285
Alliances	305
Promotion projects and National information structure projects	98
Clusters	5
HIGHER EDUCATION ORGANISATIONS	
Higher education organisations in European Union countries	820
Higher education organisations in other countries	1.423

Adapted from the European Commission (2015): 22

Only in three Latin American and Caribbean countries appear among the 20 countries which sent the most students and personnel to Europe between 2004 and 2014: Brazil, Argentina and Mexico, in that order, although only Brazil had figures comparable to the countries with the most involvement (India, Russia and China).

According to the statistics from the European Commission's Education, Audiovisual and Culture Executive Agency (*Agencia Ejecutiva de Educación, Audiovisual y Cultural, EACEA*) on academic year 2013/2014[30] a total of 214 Master's students originating from the countries being studied were selected as candidates for this scholarship programme. In the case of doctorate studies, there were a total[31] of 48 candidates. The following table outlines the distribution of selected students by countries.

Table 16.
Candidates for Erasmus Mundus program grants.

	Master's	Doctorate
ARGENTINA	14	1
BOLIVIA	5	1
BRAZIL	48	10
CHILE	4	2
COLOMBIA	28	11
COSTA RICA	1	1
CUBA	5	1
ECUADOR	9	2
EL SALVADOR	5	0
GUATEMALA	1	2
HAITI	2	0
HONDURAS	2	1
JAMAICA	4	1
MEXICO	59	8
NICARAGUA	5	0
PANAMA	0	1
PARAGUAY	1	1
PERU	11	1
DOMINICAN REPUBLIC	1	0
TRINIDAD AND TOBAGO	3	1
URUGUAY	0	3
VENEZUELA	6	0
TOTAL	214	48

Prepared by the authors. Source: EACEA.

30 Last year for which statistics are available.

31 EACEA provides information on student candidates for the main list, the waiting list and those were not accepted to start with. We have chosen to only consider those candidates who could be certain of benefiting from the scholarship.

Along with the mobility grant application figures from Erasmus Mundus, the period between 2010 and 2013 saw a total of 37 projects with involvement from some of the countries studied, either as associations or alliances between universities, or within the initiative for promotion of European higher education.

Table 17.
Erasmus Mundus projects with involvement from Latin American and Caribbean countries (2010-2013).

Project	Type of initiative
EURICA - EURope and latin ameRICA: Enhancing University Relationships by Investing in Cooperative Actions.	Alliances: institutions
IBRASIL - Inclusive and Innovative Brazil.	Alliances: institutions
KITE - Knowledge, Integration and Transparency in Education (EU-ACP Countries).	Alliances: institutions
FELLOW-MUNDUS - Fostering Education and Learning mobilities for Latin-American academics Outgoing Worldwide with ERASMUS MUNDUS - Strand 1, Lot 14 (Bolivia, Ecuador, Paraguay, Peru, Brazil, Colombia, Panama, Uruguay).	Alliances: institutions
CARIBU-Cooperation with ACP countries in Regional and International Bridging of Universities.	Alliances: institutions
CARIBU-*Cooperation with ACP countries in Regional and International Bridging of Universities.*	Alliances: institutions
EUREKA - Enhancement of University Research and Education in Knowledge Areas useful for Sustainable Development (EU - Latin America).	Alliances: institutions
AMIDILA - Academic Mobility for Inclusive Development in Latin America.	Alliances: institutions
PUEDES - University Engagement in Economic and Social Development in Latin America *(Participación Universitaria para El Desarrollo Económico y Social en Latinoamérica).*	Alliances: institutions
SUD-UE - Student Mobility (EU - Latin America).	Alliances: institutions
BE MUNDUS - Brazil Europe Mundus.	Alliances: institutions
Academic Networking, a gate for learning experiences (Angola, Cameroon, Cape Verde, East Timor, Fiji, Kenya, Madagascar, Mozambique, Republic of Congo, Senegal, Trinidad and Tobago).	Alliances: institutions
S1-L15 MUNDUS ACP II.	Alliances: institutions

Project	Type of initiative
S1-L15-MUNDUS ACP.	Alliances: institutions
S1-L16B Argentina Towards Europe for Social Sciences.	Alliances: institutions
European Union - Latin America Academic Links (Honduras, El Salvador, Guatemala, Nicaragua, Argentina, Chile, Colombia, Cuba, Mexico).	Alliances: institutions
A Double Degree in Europe, South American Leadership and Employability.	Promotion of European higher education
S1-L16A *EuroTANGO II.*	Alliances: institutions
S1-L16A Argentina Cooperation for International Research and Study.	Alliances: institutions
S1-L16B Europlata.	Alliances: institutions
Bringing the Erasmus Mundus community together to disseminate, exchange and act.	Promotion of European higher education
Promoting the international dimension of research in HEIs.	Promotion of European higher education
Science and Technology Education Teachers' Training International Network (Burkina Faso, Cameroon, Comoros, Dominican Republic, Equatorial Guinea, Gabon, Haiti, Côte d'Ivoire, Lesotho, Namibia, Senegal, Togo, Vanuatu, Zimbabwe).	Alliances: institutions
Building Academic Bonds between Europe and Latin America (Bolivia, Ecuador, Paraguay, Brazil, Peru, Uruguay).	Alliances: institutions
International Network of Urban Laboratories - Understanding urban dynamics, identifying future planning strategies, and strengthening education and research capacities.	Promotion of European higher education
Latin American Engineering and Information Technologies Network (Honduras, El Salvador, Guatemala, Nicaragua, Argentina, Brazil, Colombia, Mexico).	Alliances: institutions
Latin America International Network for the Development of Opportunities (Bolivia, Peru, Ecuador, Paraguay, Brazil, Chile, Cuba)	Alliances: institutions
Enhancing Studies and Practice of Social Economy and Social Capital in Higher Education.	Promotion of European higher education
Programme of Exchange and Cooperation for International Studies between Europe and South America (Bolivia, Peru, Ecuador, Paraguay, Argentina, Brazil, Chile, Uruguay, Venezuela).	Alliances: institutions

Project	Type of initiative
Project for European - Latin American Cooperation and Exchange (Honduras, El Salvador, Guatemala, Nicaragua, Argentina, Chile, Costa Rica, Panama, Uruguay).	Alliances: institutions
ARCHI-MUNDUS: Building up Quality in Architectural Education.	Promotion of European higher education
S1-L13B-MoE-A Move on Education (Argentina).	Alliances: institutions
Creating Relations between Europe & Central America in the area of Higher Education.	Promotion of European higher education
Joint Programmes: Quality Assurance and Recognition of degrees awarded.	Promotion of European higher education
Caribbean opening to Erasmus Mundus.	Promotion of European higher education
S1-L13A-EUROTANGO (Argentina).	Alliances: institutions
S1-L13A-EADICII (Argentina).	Alliances: institutions

Prepared by the authors. Source: European Commission http://ec.europa.eu/programmes/erasmus-plus/projects/

As has been noted, as of 2014 the Erasmus Mundus programme has been subsumed into Erasmus+, which groups together various formerly separate initiatives in education, training, youth and sport[32]. During the period 2014-2020, Erasmus+ is integrating three key measures (Mobility of persons for reasons of learning; Innovation and best practices; and Support for policy reforms), to which two special areas are added: Jean Monnet and Sport.

The first of the key measures, Mobility of persons for reasons of learning, seeks to encourage mobility for students, teaching and non-teaching staff, trainees, youth workers and even volunteers. It encompasses various types of initiatives:

- Students and staff in higher education.
- Students and staff in vocational training.
- Staff in the fields of pre-school, primary and secondary education.
- Staff in the field of adult education.

32 For a brief overview of the history of the Erasmus programme, see chapter 10.

- Youngsters and workers in the field of youth.
- Large scale actions by the European Voluntary Service.
- Erasmus Mundus joint Master's.
- Erasmus+ Master's loans.

The second measure, Innovation and best practices, aims to modernise and consolidate the education, training and youth systems of the participating countries. The third, Support for policy reforms, seeks to support the European Union's policy agenda, within the Education and Training 2020 cooperation framework and the Strategy for young people.

As for the special areas, the Jean Monnet activities include a total of six initiatives, whose common goal is promoting excellence in teaching and research in European Union studies across the world.

The following table presents the Erasmus+ projects in which one or more of the 22 countries analysed in this study is participating, from 2014 to the present day, based on the available information on the programme.

Table 18.
Erasmus+ projects with participating Latin American and Caribbean countries.

Project	Initiative	Type of action	Year	Countries
International Master of Science in Rural Development	Mobility of persons	Joint Master's	2015	Belgium, France, Germany, Netherlands, India, China, South Africa, Ecuador, Italy, Slovakia
International Master in Innovative Medicine	Mobility of persons	Joint Master's	2015	Netherlands, Mexico, Chile, Colombia, Brazil, Germany, Sweden
Jeunes Ambassadeurs du Commerce Equitable	Innovation and best practices	Strategic alliances for education	2015	France, Belgium, Peru, Portugal
Urbane Dynamiken: Globale Perspektiven für ein soziokulturelles Stadtmanagement	Innovation and best practices	Strategic alliances for education	2015	Germany, Spain, Brazil, France, Argentina

Project	Initiative	Type of action	Year	Countries
Lernen Helfen Lernen	Innovation and best practices	Strategic association in the area of youth	2014	Liechtenstein, Germany, Italy, Bolivia
I'VE – I Have Experienced. Recognition and Validation of volunteering through peer support and open source tools	Innovation and best practices	Strategic association in the area of youth	2014	Italy, Belgium, Spain, France, Germany, Mexico, Serbia and Montenegro, Finland, Ukraine, Czech Republic, Russia, South Korea, Denmark, Turkey
Community of Entrepreneurs - Action Learning Program	Innovation and best practices	Strategic association in the area of youth	2014	Netherlands, United Kingdom, Germany, Spain, Belgium, Brazil
Go Deep!	Innovation and best practices	Strategic association in the area of youth	2015	Italy, Netherlands, United Kingdom, Spain, Brazil
Transforming higher education to strengthen links between universities and the livestock sector in Argentina and Peru	Innovation and best practices	Developing capabilities in the field of higher education	2015	Austria, Argentina, France, Spain, Peru
Citylabs: Engaging Students with Sustainable Cities in Latin-America	Innovation and best practices	Developing capabilities in the field of higher education	2015	Belgium, Italy, France, Argentina, Colombia, Spain, Mexico, Venezuela, Peru, Brazil, Denmark
Harmonization and Innovation in Central American Higher Education Curricula: Enhancing and Implementing the Regional Quality Framework	Innovation and best practices	Developing capabilities in the field of higher education	2015	Spain, Guatemala, Costa Rica, El Salvador, Honduras, Nicaragua, Panama, Belgium, Germany, Italy, Ireland
Transatlantic Open Government Virtual Education	Innovation and best practices	Developing capabilities in the field of higher education	2015	Spain, United Kingdom, Italy, Argentina, Mexico
EU Quality Standards Aligned Modernisation of Renewable Energy Engineering Curriculum for Bachelor and Master students and Improving Skills Development of PhD students in Universities of Latin America	Innovation and best practices	Developing capabilities in the field of higher education	2015	United Kingdom, Colombia, Italy, Brazil, Cuba, Spain

Project	Initiative	Type of action	Year	Countries
Disability and modernity: Ensuring quality education for disabled students	Innovation and best practices	Developing capabilities in the field of higher education	2015	Chile, Mexico, Argentina, Spain, United Kingdom, Italy
Educational Modules for Electric and Electronic Circuits Theory and Practice following an Enquiry-based Teaching and Learning Methodology supported by VISIR	Innovation and best practices	Developing capabilities in the field of higher education	2015	Portugal, Sweden, Austria, Argentina, Brazil, Spain
Latin American University Research and Doctoral Support	Innovation and best practices	Developing capabilities in the field of higher education	2015	United Kingdom, Colombia, Panama, Slovenia, Germany, Spain
Spin off Lean Acceleration	Innovation and best practices	Developing capabilities in the field of higher education	2015	Spain, Italy, Brazil, Colombia, Portugal
Programme for Internationalisation of Universities in Chile and Peru	Innovation and best practices	Developing capabilities in the field of higher education	2015	España, Austria, Peru, Chile, Portugal
Adoption of strategies for quality, accessibility and innovation in Latin American higher education	Innovation and best practices	Developing capabilities in the field of higher education	2015	España, Argentina, Colombia, Guatemala, Nicaragua, Italia, Finlandia
Latin American Social Innovation Network	Innovation and best practices	Developing capabilities in the field of higher education	2015	Reino Unido, Alemania, Chile, Colombia, Brasil, Panama, España
Professionalization on Result-based Healthcare Management through Distance Education and Simulation-Based Training	Innovation and best practices	Developing capabilities in the field of higher education	2015	Argentina, Italia, Paraguay, Francia, Eslovenia, España

Project	Initiative	Type of action	Year	Countries
ACACIA: Centros de cooperación para el fomento, fortalecimiento y transferencia de buenas prácticas que Apoyan, Cultivan, Adaptan, Comunican, Innovan y Acogen a la Comunidad Universitaria	Innovation and best practices	Developing capabilities in the field of higher education	2015	Colombia, Chile, Brazil, Peru, Nicaragua, Portugal, Spain, Romania
Internationalization of Latin American peripheral Universities through sustainable integration and inclusive implementation of International Relations Offices	Innovation and best practices	Developing capabilities in the field of higher education	2015	Spain, Argentina, Bolivia, Brazil, Colombia, Ecuador, Paraguay, Peru, Uruguay, France, Portugal, Poland
The international Learning Network of networks on Sustainability	Innovation and best practices	Developing capabilities in the field of higher education	2015	Italy, Netherlands, Brazil, Mexico, India, China, United Kingdom, Finland, South Africa
MOOC-Maker: Construcción de Capacidades de Gestión de MOOCs en la Educación Superior (Construction of Management Capacities of MOOCs in Higher Education)	Innovation and best practices	Developing capabilities in the field of higher education	2015	Spain, Portugal, Chile, Colombia, Guatemala, Austria
Development of quality system through Energy efficiency Courses	Innovation and best practices	Developing capabilities in the field of higher education	2015	Italy, Guatemala, Uruguay, Argentina, Spain, Cyprus
Change! ¡Cambia! - Management and training tools for international volunteering	Innovation and best practices	Desarrollo de capacidades en el ámbito de la juventud en Estados ACP[5], América Latina y Asia.	2016	Italy, Nicaragua, India, Uruguay, Argentina, Hungary

Project	Initiative	Type of action	Year	Countries
Calling Youth to Action in a Global Visibility Drive	Innovation and best practices	Desarrollo de capacidades en el ámbito de la juventud en Estados ACP, América Latina y Asia.	2016	Germany, Finland, Denmark, Slovakia, Poland, France, Kenya, Venezuela, Ghana, Mozambique, Nepal, India, Colombia, Bolivia, Brazil, Costa Rica, Chile, Iceland, United Kingdom, Austria, Nigeria
Quality Network Cooperation II	Innovation and best practices	Desarrollo de capacidades en el ámbito de la juventud en Estados ACP, América Latina y Asia.	2016	Slovakia, Honduras, China, Venezuela, Philippines, Myanmar, Austria, Czech Republic, Indonesia
Global Recognition	Innovation and best practices	Developing capabilities in the field of youth in ACP States, Latin America and Asia.	2016	Italia, Ecuador, Mexico, Peru, Francia, Países Bajos, Bélgica
Arts Without Borders. “Building Bridges”	Innovation and best practices	Developing capabilities in the field of youth in ACP States, Latin America and Asia.	2016	United Kingdom, Togo, France, Brazil
PatH-ER-ways: Creating pathways for political participation of young women	Innovation and best practices	Developing capabilities in the field of youth in ACP States, Latin America and Asia.	2016	Portugal, Cape Verde, Mozambique, United Kingdom, East Timor, France, Peru
Green Entrepreneurship as an Opportunity for Youth	Innovation and best practices	Developing capabilities in the field of youth in ACP States, Latin America and Asia.	2016	Argentina, Portugal, Slovenia, Ghana, Indonesia, Nepal
Equality training network: EU contributions to gender mainstreaming and citizenship	Jean Monnet	Jean Monnet Networks	2014	Argentina, Chile, Costa Rica, Germany, Spain, Guatemala
Policy Making in the European Union	Jean Monnet	Jean Monnet Networks	2014	Chile
Interdisciplinary European Studies in Latin America	Jean Monnet	Jean Monnet Networks	2014	Costa Rica

Project	Initiative	Type of action	Year	Countries
Jean Monnet Chair - University of Havana	Jean Monnet	Jean Monnet Networks	2015	Cuba
Teaching European Union as a model of integration	Jean Monnet	Jean Monnet Networks	2015	Brazil
Die soziologischenund politikwissenschaftlichen theoretische Perspektiven über die Europäische Integration	Jean Monnet	Jean Monnet Networks	2015	Mexico
Support to Caeni/IRI/USP to integrate EU issues into research & training for Brazilian civil servants & civil society	Jean Monnet	Jean Monnet Networks	2015	Brasil
Programa de Direito da União Europeia FGV Direito Rio	Jean Monnet	Jean Monnet Networks	2015	Brasil
UNINTER - Oficina Jean Monnet	Jean Monnet	Jean Monnet Networks	2015	Mexico
Theory and Policy in the formation of the European Union: a model for economic integration?	Jean Monnet	Jean Monnet Networkst	2015	Brazil
Policy Learning Revisited, the European Union and Latin America	Jean Monnet	Jean Monnet Networks	2014	Chile

Prepared by the authors. Source: European Commission http://ec.europa.eu/programmes/erasmus-plus/projects/

Marie Curie Actions

Another initiative which bears mentioning is the Marie Curie actions (Marie Sklodowska-Curie since 2014), focused on the training and professional development of researchers. This European Union programme finances international and inter-sectoral mobility initiatives, with scholarships covering all phases of the research profession, from doctoral students to experienced researchers. The main aim of these actions is to equip researchers with new qualifications, to broaden their skill-sets and and to provide them with stimulating working conditions, while at the same time promoting international mobility and trying to break down barriers between the academic sector and other sectors, particularly business.

Four types of actions can be differentiated. On one hand, the support which it provides to innovative research networks which contribute to the development of new researchers. On the other, the individual grants supporting international mobility of researchers (open to other countries). In addition, it includes exchanges of research and innovation staff for international and inter-sectoral cooperation and co-funding of regional, national and international programmes of training or research grant which involve mobility to or from another country.

Lastly, we should mention the various mobility schemes run by the European Research Council (ERC), both for countries in the European Union and for non-member countries, with various kinds of grants for researchers with certain numbers of years of experience.

Mercosur

The Regional Academic Mobility Programme for courses accredited by the Accreditation System for University Courses in the Mercosur and associated States (Marca Programme) is a programme for mobility between the Mercosur countries for undergraduate students, limited to undergraduate courses accredited by the organisation's system. Its first round of applications took place in 2006. In 2015, reforms were introduced to the operating scheme, establishing academic association programmes between HEIs with accredited courses, in order for them to jointly develop student and teaching staff exchanges for qualification in the first cycle of accreditation (Agronomics, Architecture, Veterinary Medicine, Nursing, Engineering, Medicine and Dentistry).

One interesting Mercosur initiative is the Regional Exchange Internship System run by the Support Programme for the Mercosur Education Sector (*Programa de Apoyo al Sector Educativo del Mercosur, PASEM*), which takes place in institutions in Argentina, Brazil, Paraguay and Uruguay with the aim of discovering and analysing training and development practices for teaching staff. The receiving bodies or institutions should stand out for their innovative or high-quality practices. The internships are geared towards officials working in management for the Teacher Training System or to directors or coordinators of training institutions in the said countries. In the academic year 2014-2015, a total of 349 interns participated in 25 internships.

Ibero-American Secretary General (Secretaría General Iberoamericana, SEGIB)

The Pablo Neruda Academic Mobility Programme was approved as an Ibero-American Initiative at the XVIII Ibero-American Summit of Heads of State and Government (Chile) in 2007 and as a programme at the XIX Ibero-American Summit in 2008 (El Salvador). In the frame of the Ibero-American Area of Knowledge, this postgraduate mobility programme seeks to encourage regional integration initiatives through inter-institutional cooperation, and encouraging and improving postgraduate education. The participants in the programme are Argentina, Colombia, Cuba, Chile, the Dominican Republic, Spain, Mexico, Paraguay, Peru and Uruguay. In the second run of the programme (July 2013-December 2014), 236 individuals made use of this mobility.

The XXIV Ibero-American Summit, held in 2014 in Veracruz (Mexico), entrusted the SEGIB, the OEI and the Ibero-American University Council (*Consejo Universitario Iberoamericano, CUIB*) with advocating mobility of students and of teaching and research staff. From this emerged the Alliance for Ibero-American Mobility. Since then, work has been ongoing on its design and implementation. A total of 40 bodies in 18 Ibero-American countries have joined the initiative, in addition to companies like the Santander Bank, Indra or Iberia.[33]

Alongside these initiatives we see the OEA programmes, covered in the previous chapter. Additionally, initiatives like those of the Carolina Foundation (a Spanish public-private foundation which aims to promote cultural and cooperative relations in the areas of education and science between Spain and the countries of the Ibero-American Community of Nations) which allow hundreds of students from this community to undertake their Master's or doctorate studies in Spain each year.

Conversely, along with these sorts of regional and national programmes, we see a large number of initiatives between specific institutions, as has already been mentioned. To try to illustrate the situation, which varies from institution to institution, consider the example of the University of Salamanca (Spain), an institution with around 23,000 undergraduate students and more than 6,500 postgraduate students in academic year 2014-2015.[34] The following table shows the number of students from other countries studying at the institution during academic year 2016-2017 thanks to the different programmes.

33 Complete list of subscribed organisations available at http://segib.org/wp-content/uploads/OrgAdheridos-MovilidadAcademica-2017.pdf

34 Academic report for the year 2014-2015 from the University of Salamanca. Available at http://campus.usal.es/~memoria/1415/index.html

Table 19.
Mobility programs for students at the University of Salamanca.

Programme	Benefiting students
Exchange Scholarship Programme	92
Erasmus Mundus Programme	25
International Undergraduate Scholarship Programme	24
International Master's Scholarship Programme	148
International Doctorate Scholarship Programme	29
ProUni Scholarship Programme	31
PCI Conventions Programme	278
Simón Patiño Foundation Scholarship Programme	6
Coimbra Group Young Researchers Latin America Scholarship Programme	2
BecAr Scholarship Programme	2
Dominican Republic Agreement Scholarships	87
Carolina Foundation Master's Scholarship Programme	6
Carolina Foundation Doctorate Scholarship Programme	4

Source: University of Salamanca.

Remarks and recommendations

Remark 1.

If we see one thing in analysing student and lecturer mobility in the various countries of Latin America and the Caribbean, it is the diversity of their characteristics and of their access requirements. The underlying issue is that in a large number of cases no programmes exist at a national level for promoting mobility (be this within the country or internationally), promoted, financed and implemented by governments.

Student and lecturer mobility therefore relies, in the majority of cases, on the agreements and conventions which higher education institutions establish, individually, with their counterparts in other parts of the world. In some cases, we do see university networks

encompassing these efforts and guaranteeing mobility between their members. Furthermore, given the lack of any national public programmes, mobility depend, in many cases, on programmes run by international organisations (Mercosur, OEA, the European Union) or by private enterprise.

Recommendation.

These sorts of agreements between institutions exist all over the world, and also within the EHEA itself. However, they should be supplemented or developed in the frame of those national or regional programmes in which the greatest possible number of higher education institutions are able to participate. Otherwise, the possibility of accessing these programmes is entirely determined by the university at which the prospective candidate studies or works. Without a national mobility programme, the students, lecturers and researchers interested in placements abroad are reliant on their own economic means to finance them, which introduces a substantial element of unequal opportunities.

It is possible to broaden a model inspired by the Erasmus programme in order to encourage bi-regional exchange. This model brings the advantage that agreements are signed between the two institution which exchange students. However, in order for this to work, it is critical that university quality be accredited, so as to guarantee a certain level and thus facilitate subsequent recognition of studies pursued. Institutions which do not participate in these accreditation processes can be excluded from these sorts of initiatives.

Recommendation.

Once again, it is important to establish a mechanism for centralising information (note how, in chapter 9, one of the elements highlighted as negative for mobility in the EHEA is the lack of information). The multitude of offerings makes it all the more important for interested persons and institutions to be able to access the application procedures. This system could prove even more useful if it were planned around a supply and demand dynamic, so as to allow creation of communication channels between the various institutions interested in participating in the programmes.

The HEIs and international bodies with experience in mobility programmes must take the lead in this task. Likewise the networks of institutions which are to be analysed in chapter 9, many of which boast mobility programmes.

Remark 2.

Just as will be seen in chapter 8 on R&D&I, private sector involvement in these sorts of activities is sparse and, at times, non-existent.

Recommendation.

It is necessary to establish public-private collaboration programmes: if not, at least initially, at national level, then by higher education institutions. The positive experiences which would no doubt arise could serve as an incentive for other private companies when considering whether to finance these initiatives. Private enterprise must also be considered when it comes to ensuring financing for the programmes.

Remark 3.

There is a notable lack of value placed on lecturer mobility when it comes to hiring lecturers or promoting them between categories in most of the cases analysed.

Recommendation.

If mobility is really a priority for governments and universities, and a bid for internationalisation of the university and research system, these placements abroad ought to be recognised in the career progression of lecturers and researchers, which would no doubt increase the interest in them.

7. Professional practice and recognition of qualifications obtained abroad

One of the goals of implementing a common higher education area, whatever its member countries may be, is increasing the international mobility of students, researchers and lecturers. Already, various initiatives exist with regards to Latin America and the Caribbean, spearheaded by the governments or the higher education institutions themselves, although, as was seen in the previous chapter, there is still much room for improvement. Without a doubt, these experiences will multiply and by systematised following implementation of a European, Latin American and Caribbean Area for Higher Education, Science, Technology and Innovation. However, in order for mobility between countries to expand, it is critical for students to have assurance that their studies in other countries be recognised after completing their placements.

This chapter is split into two sections. The first of these concerns the conditions needed for professional practice, which is to say, the educational requirements to practise a profession and whether or not it is necessary to be registered. Registration refers to la membership or affiliation of a professional college, an organisation whose main function is to ensure adequate performance in the profession in question, for example, by requiring a certain level of higher education qualification in order to practise it. The second section assembles the information relating to higher education qualifications obtained abroad, examining:

- The administrative procedures required for recognition of the qualifications.
- Whether or not any regulations exist on the matter.
- The bodies responsible for these procedures.
- The possibility of identifying studies or universities with automatic recognition.

7.1. Conditions for professional practice

There are, in all the countries of Latin American and the Caribbean, professions whose practice requires possession of a higher education qualification. It can safely be said that, without exception, practising Medicine requires a qualification at this level, as does working professionally as a Lawyer. For the other professions, we see that those related to Health Sciences (from Medicine to Dentistry, Pharmacology or Veterinary Medicine)

or Engineering, in any of its specialisations, are generally most regulated, followed be Teaching at its various levels, Public Accounting, Architecture, Psychology and Journalism or Social Communication.

As for the situation in the various countries, the landscape closely resembles what was found for other subjects covered in this report. Theres are some states in which legislation governing the practice of certain professions is practically non-existent and affects very few of them (for example, Cuba, Guatemala, Haiti and Bolivia), others which only have specific regulations for a certain number of professions (Argentina) and others in which a single law governs whether it is mandatory to hold a higher education qualification to practise any of a significant number of professions (Ecuador). In cases such as those of Panama or Venezuela, it is noted that the professions which require a higher education qualification to practise are essentially those offered in their universities. In turn, the Dominican Republic makes use of the '*Exequátur*', an authorisation by decree to practise in the country those professions which require a qualification (be it national or foreign and appropriately validated). All graduates wishing to practise in the Dominican Republic must complete this procedure.

Registration, that is, membership of a professional college with certain entry requirements, may be an additional requirement for the practice of some professions, but it is not mandatory in all countries, nor for all professions. In this sense, a clear distinction can be made between two groups in Latin America and the Caribbean: one the one hand, countries in which belonging to a professional college is not required in order to practise a profession; on the other, those in which there is a requirement to belong to a college in order to practise as a professional. In the second group, we can clearly see varying degrees: from those which only require registration for some professions (Medicine or Law, for example, which are in fact the two most regulated in terms of the requirement of a higher education qualification in order to practise them), to those which stipulate membership of a professional college for a wide variety of activities. The following table outlines the classification of the countries based on the above.

Table 20.
Membership requirements in Latin American and Caribbean countries

Countries without registration requirements	Chile, Cuba, Ecuador, Mexico, Panama, Paraguay.
Countries with registration requirements	Only some progressions: Bolivia, Colombia, Haiti, Jamaica, Nicaragua, Trinidad and Tobago, Venezuela.
	Many or all professions: Brazil, Costa Rica, El Salvador, Guatemala, Honduras, Peru, Dominican Republic.

This table gives a general overview of the situation, but a simplified version, as with any classification. It is important, therefore, to clarify some points concerning the situation of the different countries in order to complete the information.

Where concerns the group where registration is not required to practise a profession (Chile, Cuba, Ecuador, Mexico, Panama, Paraguay), it should be noted that in two countries, attempts have been made to introduce legislation in this regard. Since 2009, the National Congress of the Republic of Chile has been discussing a bill on professional colleges which, although it does not establish registration requirements, has been discussed and debated by the Federation of Chilean Colleges for University Professionals in order to make registration mandatory rather than voluntary. In the case of Panama, no legislative project is underway, but we do see unsuccessful attempts by the professional guilds to introduce registration requirements; in this case, these were opposed by the public university students themselves.

As for the countries which do stipulate registration requirements to practise a profession, it should be highlighted that in some of them we see that the existence of professional colleges or requirements for professionals to belong to these same does not necessarily imply that this is how it works in reality, that is, that these colleges have effective control over practice of the profession.

For example, in El Salvador, generally speaking, all professions require registration with the corresponding professional college or with their respective Supervisory Board. These latter bodies, which only exist for the professions of psychologist, physician and veterinary surgeon, do exercise control over professional practice, although their enforcement capability is limited. With regard to the remainder of the professions, it is common to encounter cases on unregistered professionals; likewise, it can be seen that a qualification obtained abroad (especially in the United States) can obviate the need for registration due to the reputation it affords to the holder.

Similarly, in Haiti there is a College of Engineers, but thus far it has been ineffective in enforcing compliance with the legal provisions. In Honduras, all holders of valid professional qualifications must be registered to practise their professions. However, there is no certainty that the law is complied with outside occupations such as Law, Pharmacology, Medicine, Microbiology, Engineering, Architecture, Public Accounting, Teaching or Business Administration.

A special case which cannot be placed in any of the categories above is Argentina. As with many other aspects analysed in this report, no regulation exists at national level. Historically, undergraduate degrees issued by Argentinian universities (those whose study plans have been recognised by the Ministry of National Education) empowered the graduate to practise as a professional in accordance with the peculiarities stipulated for each profession by laws or ministerial rulings. In the same way, university *licencias* gradually became *licencias* acceptable for other forms of professional practice.

The State delegates the registration procedure to the professional colleges, or the various jurisdictions come into play, depending on the profession concerned. However, in addition to this national delegation to colleges, there are, in some cases, regulations created by provincial professional colleges. These provincial colleges, in turn, consist of regional profession colleges (whose area of competence includes zones, divisions or departments within the provinces).

The 1995 Law on Higher Education stipulates, in article 42, that "Qualifications with official recognition certify the academic education received and empower the graduate

for the corresponding professional practice throughout the national territory", but adds: "… without prejudice to the power to police professions afforded to the provinces". There are not, therefore, any national general requirements for the different professions.

7.2. Recognition of higher education qualifications obtained abroad

As indicated at the start of this chapter, international mobility is one of the goals of implementing a higher education area. However, in order for a student or researcher to evaluate the possibility of pursuing certain studies abroad, they would have to have the necessary information on recognition of these studies in their home country or in other countries. The current situation of the Latin American and Caribbean countries makes it clear that, although there are already procedures and legislation for recognition of studies pursued abroad, experiences with these vary.

Concerns over recognition of studies pursued in other countries has led the UNESCO to encourage regional conventions on the matter. In the case analysed here, the Regional Convention on Recognition of Studies, Certificates and Diplomas in Higher Education in Latin America and the Caribbean (1974). It came into force in 1975 and until 2005 had been ratified by Panama, Mexico, Chile, Venezuela, Colombia, Cuba, El Salvador, Ecuador, Brazil, Surinam, Nicaragua, Peru and Bolivia. Brazil and Chile signed and ratified the convention, but withdrew from it in 1998 y 1987 respectively. Thus, it currently includes the Latin American and Caribbean countries mentioned as well as the Netherlands, the Holy See, Slovenia, Macedonia, Serbia and Montenegro. Just as indicated by UNESCO-IESALC (2014: 20), "this instrument, which could contribute, in significant fashion, to internationalisation of higher education in the region, currently covers only 28% of the total 33 countries and 6 independent territories of the region".

The reasons for which the various States decide whether or not to rationalise any given international treaty are generally ascribed to matters of internal politics or of priorities in their agenda. What can be identified are the motives which the signatory States have publicly declared as reasons for the Regional Agreement never having been put into practice, and these are explained below.

One of the goals of the Agreement was to simplify the situation of students pursuing some or all of their studies abroad and, in this sense, it went "beyond the proceedings of bilateral agreements or agreements between small groups of countries to resolve the complex situation of qualification validation and the recognition of partial studies" (UNESCO-IESALC 2014: 22). However, application of the agreement has been fraught with difficulties which essentially relate to two aspects: firstly, that the necessary requirements to obtain validation of studies were not made explicit; and secondly, that the agreement did not distinguish between recognition for purely academic purposes and recognition for professional practice. This is due to the very same situation which the Agreement sought to overcome, that of bilateral agreements or agreements between small groups of countries, and which is currently seen in Latin American and Caribbean countries.

Zarur Miranda (2008: 195-196) explains that the main barriers identified by the signatory countries of the X Ordinary Meeting of the Intergovernmental Committee held in Paris in 1998 were "the lack of information on current standards and procedures for recognition of studies and qualifications (…); the diversity of regulations relating to validation and the lack of common criteria for academic purposes and for authorisation of professional practice; the absence of comparable, reliable and up-to-date data on validation devices, the absence of equivalency tables to support approximation of qualifications and credits, based on regulations and criteria; the growing diversity of institutions in the region, which rendered comparison and legibility of qualifications considerably more difficult; the lack of reliable accreditation mechanisms in some countries". These barriers to the implementation of a regional convention for recognition of qualification, identified by the States themselves, represent a valuable guide as to what will be the main obstacles in the project to integrate the education systems.

As General Secretariat of the Convention, IESALC has spent the last few years working both on consultations with the various governments and on collecting data on the current situation of the recognition processes in the various countries. For the first point, a certain disinterest has been seen from the governments, which rarely respond to petitions. With regard to information on the various agreements and procedures for recognition of studies, IESALC is designing a "database available to the community allowing study of the alternatives to bilateral, multilateral or inter-institutional cooperation" (2014: 26). Besides this, at the XII Ordinary Meeting of the Intergovernmental Committee (El Salvador, 2006) a series of modifications to the Convention were agreed upon, which have yet to move beyond the draft phase.

At the Meeting of Government and University Representatives of 18 Latin American and Caribbean countries in Brasilia in 2015, it was agreed to form a workgroup which would outline a revision proposal for the current Regional Convention, which should be ready by 2018. If the aforementioned difficulties are overcome, it would be the chance to establish a regional agreement on recognition of qualification, and essential tool in coordinating the common bi-regional area.

As has been indicated, the current situation in Latin America makes it necessary to examine each country to see with which countries and institutions it has agreements on recognition of studies, and with which not. Besides this general impression, notable differences exist between cases. Firstly, not all the countries have regulation governing recognition of higher education qualifications obtained abroad. This is the case in Argentina, Cuba, Jamaica, Haiti, Mexico, Dominican Republic and Trinidad and Tobago. The other countries do have legislation, more detailed for some than for others, to carry out these recognitions. Costa Rica, El Salvador and Nicaragua stipulate in their national legislation that this sort of process is up to each individual higher education institution; as such, each of these has its own regulation on the matter.

The authorities or institutions responsible for recognitions are generally the Ministries of Education of the respective countries or the universities. The fact that a national regulation exists concerning regulation of qualifications does not necessarily mean that proceedings are centralised in the Ministry of Education: this is the case in Venezuela, Peru and Brazil, countries where the procedure is in the hands of those universities authorised to perform it.

Nor when the requirements for recognition of qualifications are set by individual universities is it always the latter which carry out the administrative procedures: this is the case in Nicaragua, but in Costa Rica it is the task of the Office of Degree and Qualification Recognition of the National Council of Deans and in El Salvador, of the Ministry of Education. In Cuba, Mexico and the Dominican Republic, where there is no national regulation, the respective ministries or secretaries of Education are responsible for the process. In Haiti, conversely, it is the responsibility of the country's State University.

There are two cases in which the recognition processes are carried out before different authorities depending on the situation. Both in Argentina (without standardised regulation at national level) and in Chile (where it does exist) a distinction is drawn between recognition of qualifications obtained in countries which have international conventions with the country and qualifications obtained in countries without conventions; in the first case, in the first case, the procedures are carried in the respective ministries of Education; in the second, the Argentinian national universities or the University of Chile perform the recognition. Jamaica and Trinidad and Tobago are special cases, given that qualification recognition requests are handled by the University Council and the Accreditation Council, respectively. In neither of the two cases does national regulation exist on the subject.

As is to be expected, the administrative procedures for recognition of university qualifications obtained abroad differ from country to country; some may even include examinations allowing confirmation of the education level of the person requesting recognition. In general, the documents required include study plans, certificates of grades obtained, etc.; all of them with the corresponding apostille allowing their legality to be verified. In any case, the differences entailed in obtaining recognition of a qualification obtained in a country with which a convention exists compared to obtaining it for one earned in a country without such an agreement are apparent in all the countries. This is not to say that, where a convention does exist, recognition will be automatic every time, but often the existence of a convention avoids the procedures of checking equivalencies between subjects or the quality or prestige of the institution issuing the qualification.

The key is that, currently, recognition of foreign qualifications Latin America and the Caribbean depends on bilateral agreements between countries, but no international agreement exists that all or many of them are part of. In this sense, an example to follow in improving the operability of the recognitions would be the Andrés Bello Convention, comprising Bolivia, Chile, Colombia, Ecuador, Spain, Panama, Paraguay, Venezuela and Cuba (Argentina is in the process of joining), which establishes that these countries "shall recognise the diplomas, degrees or qualifications which accredit academic and professional studies issued by institutions in each one of them, for the purposes of admission to specialisation, Master's and doctorate studies". Although this Convention refers only to primary or basic and middle or secondary education, unlike the UNESCO Convention, it has established a table of equivalencies (2013) which facilitates the recognition procedures at these levels. In this way, despite the fact that qualifications obtained in a state party to the Convention do not automatically imply the right to practise professional in the other countries (that is, that the obligation to standardise the qualifications remains), it is an important step forward when it comes to enabling international mobility.

The second successful attempt by a group of countries in the region is that of Mercosur. According to the Protocol on Educational Integration for the Pursuit of Postgraduate Studies

in the Universities of Member States (1996), university undergraduate degrees issued by the recognised universities of each country are recognised, although this recognition if purely for the purposes of postgraduate studies, not for professional practice. According to art. 2 of the Protocol, "undergraduate degrees are considered to be those obtained from courses with a minimum length of four years or two thousand seven hundred hours of study". The student will be subject to the same admission requirements for postgraduate studies as those who pursued their studies within the country. The competent authority in each of the States may request information to identify the qualification concerned and, if no equivalent exists, will assess whether the education received allows access to postgraduate study. Lastly, where a bilateral agreement exists with conditions that are more favourable for recognition, the interested party may invoke these rather than this protocol.

The second measure by Mercosur in this respect is the Agreement on Acceptance of University Qualifications and Degrees for the Practice of Academic Activities (1999), which supposes recognition of qualifications at graduate and postgraduate level that are recognised or accredited in the signatory States for practice as a teacher or researcher. All the member states are signatories except Uruguay, whose ratification is outstanding. For the purposes of this agreement, undergraduate degrees are considered to be "those obtained from courses with a minimum duration of four years and two thousand seven hundred contact hours", and postgraduate degrees are considered to be "both specialisation courses with no fewer than three hundred and seventy contact hours, and academic Master's and doctorate degrees" (art. 2 of the Agreement), and in all cases, the qualifications must be valid in the signatory States. Once again, the interested party may invoke a more favourable bilateral agreement, should one exist.

Remarks and recommendations

Remark 1.

Registration is compulsory in all the States for professions in the medical field such as Medicine and Nursing or for Engineering, Architecture or Law (lawyers[35]). In the remaining cases, differences exist between both countries and professions. It can be seen that, in some States, there is no compliance with the regulation established on various aspects of registration. Thus, although registration was created to provide a guarantee of the education and professionalism of those practising a profession, in this specific case it could prove a limitation in moving towards a common bi-regional area.

Remark 2.

There are countries in which recognition of qualifications obtained abroad is a unified procedure at national level; in other cases, it is the remit of each university to establish and apply its own regulations.

35 The Spanish term 'abogado' is somewhat more specific than the English 'lawyer'. Specifically, it refers to a practising lawyer who defends clients.

Recommendation.

In the first case, it will be simpler to begin a process of establishing equivalencies with other countries. In the second, it will first be necessary to standardise the system between the universities (or, at least, to establish some general procedures and requirements) which would allow progress towards a certain standardisation of the procedures.

In this case, and in any other in which legislative standardisation is needed, the SEGIB's experience should be borne in mind. Although the countries in the bi-regional strategic partnership are far more numerous than the members of the SEGIB, the organisation's experience in judicial coordination projects, among others, will prove interesting if it comes to initiating similar processes, even if they refer to other topics and affect more States.

Remark 3.

In some cases, recognition of qualifications involves completing an exam to actually check the applicant's depth of knowledge and, in some cases, completing supplementary training courses.

Recommendation.

Establishing qualification recognition agreements would eliminate these requirements in a fair number of cases, facilitating and streamlining the process both for the applicant and for the institutions responsible for assessing and issuing the recognition.

It is a question, once again, of establishing mechanisms based on mutual trust between governments, institutions and quality systems. In this sense, precisely because of its operability, establishing a credit system could prove a great help. If a student studies a Nursing degree in one country and one institution in which it involves, for example, 210 credits, and subsequently applies for it to be recognised in a country in which the same qualification consists of 240 credits, they can expect to complete the appropriate supplements. However, it is vital that an equivalencies system exists that allows it to be confirmed, simply and without delay, that the remaining 210 credits have the same value. Nonetheless, the arrangement which thus far encompasses the largest number of countries, the Mercosur agreements and protocols, is based not on a credit system, but on hours or years of study.

Recommendation.

Accordingly, it is of great interest that the interested parties know, in advance if possible, how studies pursued abroad will be recognised. It is a question of reducing the level of uncertainty involved in pursuing studies in other countries and of encouraging mobility of professionals between countries. Recognition of university qualifications is at times a difficult task, which takes some time and whose final result is not certain for the applicant. This can, without a doubt, discourage the interested party from practising their profession abroa.

Recommendation.

Although its design is currently being revised, in a move to simplify these sorts of procedures, the EHEA's European Degree Supplement represents an experience worth examining. This document does not replace the degree, but provides detailed information on the subjects studied and on the institution at which the studies were pursued (see chapter 10). Having automatic access to this information would be a great help in accelerating the degree recognition procedures.

Remark 4.

Recognition of foreign qualifications in Latin America depends on the bilateral agreements between countries being current. The existing supra-national initiatives do not include all the countries and the UNESCO Regional Convention was never put into practice.

Recommendation.

Efforts to reform and improve the Regional Convention are producing important information which should be taken into account. The countries themselves have declared that its failure is due, among other things, on the lack of information on qualification recognition standards and procedures, to the lack of equivalencies allowing comparisons to be drawn between qualifications and credits and to the lack of confidence in the accreditation mechanisms of some States. It will be necessary to form workgroups with representatives from all the countries in which information exchange mechanisms are being created and an equivalencies document is beginning to be created (or, at least, to determine whether the differences are so notable that another kind of measure must be envisaged). Circulating information may, in turn, contribute to increasing trust between the different countries. These workgroups may also prove of great use in establishing a regional credit system or common quality accreditation standards. In any case, it would be advisable to await the results of the workgroup on the Regional Convention, which will be published in 2018.

Similarly, it would be advisable to encourage exchange of experiences (Mercosur, Andrés Bello) in order to, once again, identify the possibilities which these projects hold and to understand the difficulties they face so as to establish mechanisms with which to overcome these.

8. Analysis of the public and/or private financing system for R&D&I

Creation of a common bi-regional higher education area must also take action, necessarily, on Research, Development and Innovation (R&D&I). It has already been seen in chapter 2 how the designs of institutions in the various countries are envisaged based on a close connection between education in its strict sense and research and innovation processes.

This chapter presents a general view of the relevance of R&D&I in the countries of Latin America and the Caribbean. We consider not only its presence in legislation, but also the budget allocated to it as an indicator of the real effectiveness of the regulatory provisions. Likewise, we analyse the involvement of the private sector in supporting and financing research efforts. To this end, the authors of the reports were asked to provide information on the public budget envisaged for this area and on private funding, as well as an appraisal, based on their knowledge of the systems, on whether research is a relevant topic in the educative policies of each State, with a rationale for their answer.

According to the data from the Ibero-American and Inter-American Network of Science and Technology Indicators (*Red de Indicadores de Ciencia y Tecnología Iberoamericana e Interamericana, RICYT*) which is presented in the following table, the countries of Latin America and the Caribbean (compiling those for which information is available) are a long way, in terms of number of researchers, from both the United States and from Spain, two countries with available data which is included so as to have points with which to make comparisons.

Table 21. Percentage of full-time researchers per 1000 people in employment

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
ARGENTINA	1.8	1.7	1.7	1.7	1.8	2.0	2.1	2.4	2.5	2.5	2.7	2.9	2.9	2.9
BOLIVIA	0.1	0.3	0.3	...	...	...	...	...	...	0.3	0.3	...	...	...
BRAZIL	...	0.9	0.9	1.0	1.0	1.1	1.1	1.1	1.1	1.2	1.4	...	...	...
CHILE	...	...	...	...	...	...	...	0.7	0.8	0.6	0.7	0.7	0.8	0.7
COLOMBIA	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.3	0.3	0.3	0.2	0.3
COSTA RICA	...	...	...	0.3	0.2	0.2	...	...	0.5	2.1	2.8	2.9	0.7	0.7
ECUADOR	...	0.1	0.1	0.1	...	...	0.2	0.1	0.2	0.2	0.3	0.4	...	...
MEXICO	0.5	0.5	0.7	0.8	0.9	1.0	0.8	0.8	0.8	0.9	0.8	0.8	0.8	
PANAMA	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	...	0.2	...	...

PARAGUAY	…	0.1	0.1	0.1	0.1	0.1	…	…	0.1	…	…	0.0	0.3	…
URUGUAY	0.6	…	0.8	…	…	…	…	…	0.5	1.0	1.1	1.0	1.0	1.0
VENEZUELA	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.4	0.4	0.6	…
IBERO-AMERICA	1.2	1.1	1.1	1.2	0.9	1.0	1.6	1.6	1.6	1.7	2.0	1.9	2.0	2.6
UNITED STATES	6.8	6.9	7.1	7.6	7.4	7.3	7.3	7.3	7.6	8.0	7.7	8.0	7.9	…
SPAIN	4.2	4.4	4.4	4.7	…	…	5.3	5.4	5.6	5.7	5.7	5.5	5.4	5.3

Source: adapted from the Ibero-American and Inter-American Network of Science and Technology Indicators (*Red de Indicadores de Ciencia y Tecnología Iberoamericana e Interamericana, RICYT*). Available at www.ricyt.org/indicadores

This indicator reflects the small percentage of full-time researchers per 1000 working people in the various countries of Latin America and the Caribbean. Despite the notable differences between States, even those with the best data are far from equalling the figures from other countries. Moreover, as mentioned in chapter 4, research is rarely taken into consideration when it comes to promoting university lecturers within their profession.

Before moving to an analysis of the R&D&I situation in the countries studied, it is important to point out the changes made in this area in the bi-regional partnership during recent years, change which is in fact intended to improve figures like those mentioned above. From the initial situation, of a dependence on funding from the European Commission for international cooperation in Latin America and the Caribbean, progress has been made towards a co-funding scheme through the framework programmes. It is important to cite, in this regard, the Latin America, Caribbean and European Union Network on Research and Innovation (ALCUE NET).[36] This project, launched in December 2012 and whose planned completion date is May 2017, has a budget of 4.29 million Euros, of which 3.75 million come from the European Union (specifically, from the Seventh Framework Programme).

The main objective of ALCUE NET is establishing a bi-regional platform bringing together the agents involved in R&D&I, in both the public and the private sectors, along with other actors in civil society, through bi-regional or bilateral associations or partnerships. In doing so, this operation aims to reinforce the Science, Technology and Innovation side of the Europe 2020 Strategy, as well as the Innovation Union Flagship Initiative. ALCUE NET supports the process of consolidating bi-regional cooperation through implementation of the Joint Initiative for Research and Innovation (JIRI) in the Senior Officials Meetings. In the same vein, it contributes to the definition and implementation of joint strategic agendas for research, development and innovation, with the focus on a series of defined priorities: Energy, Information and Communication Technologies; Bioeconomics; Biodiversity and Climate Change.

36 For more information, see http://alcuenet.eu/about-alcue-net.php

8.1. Budget estimate or allocation for research in State budgets

A key indicator for understanding the effective and real importance of research and innovation in the various countries is its presence in budgets. Whether or not a distinct section exists within the budget estimates of the various States implies the implementation of concrete and specific actions which let us see whether, in reality, R&D&I is a priority. This implies a commitment from the governments to initiating, maintaining and strengthening scientific processes, research and innovation, and to improvement in all fields of knowledge.

In cases in which no section exists in the government budget dedicated to research, multiple interpretations are possible. The first is that these may be States whose basic needs are not met; in this case, they are faced with the need to make these matters their top priorities, leaving all other concerns as secondary, among them, scientific and technological research (despite the fact that this potentially means abandoning the search for answers to the populace's pressing needs). The second interpretation for the lack of specific funding for research is that this may be due to an outlook which does not consider this to be of use to the State and its populace, such that science and the professionals dedicated to it are, to some extent, undervalued.

It is not possible, if the intention is to work on development and innovation, to limit the bid for research to political debate and not to invest in it. Without any doubt, research, technology, and innovation involve and require a significant economic investment (staff remuneration, materials, equipment, travel, publications, administrative costs, etc.); but the benefits obtained will also be plentiful if research in education and science ceases to be seen as a cost and begins to be viewed as a medium- or long-term investment.

We see this exact dissonance between what is said and the actual budgetary allocation in a fair number of the countries. Although in many cases a chapter on projected expenditure appears in the state budgets, the subsequent nuances leave it clear that the situation is not so positive. Guatemala, Trinidad and Tobago and Haiti do not have sections of the budget specifically for R&D&I. In the first two cases, although provisions are made for funding scientific development, these are included in sections covering various matters, which indicates that this is by no means a priority matter. In the case of Haiti, these amounts cover only the salaries or personnel undertaking these sorts of activities, which is clearly not enough for us to conclude that the country views this area as significant.

In the 19 other countries, we do see that governments are involved in scientific development by allocating certain funds to financing, at least in part, the development of scientific and technological research. The manner of doing this, the amount assigned, who is responsible for distributing it and which institutions or individuals are eligible for these funds are points which differ hugely from case to case.

In some States only universities of research centres can access this funding, there being an express prohibition on using public funds to support any activity whatsoever connected to private education, independently of the level concerned and with this restriction applying equally to private research centres.

In various countries, government finance for these sorts of activities are gathered together under the heading "funding for Science, Technology and Innovation"; in other cases, it is encompassed within other departments or areas in which research plays a significant role, but where this is not their only function or aim. In this last group, given that it is a non-specific investment and is not intended entirely for research, the economic value is indivisible and it is very possible that the final amount effectively allocated will not be as great as originally projected.

Various case studies carried out within the frame of the IESALC's Observatory on Academic and Scientific Mobility (*Observatorio de Movilidades Académicas y Científicas, OBSMAC*) reveal the fragility of the science and technology systems, often only recently formed, of the Latin American and Caribbean countries.[37]

This is evidence that, at a global level, ever more countries are engaged in developing legislation and regulations which govern and guarantee public investment in the area of science, technology and innovation. Latin America and the Caribbean follow this same tendency, albeit at a different rate. Equally, it is increasingly common to see public funding for scientific and technological projects in these countries, thus demonstrating that awareness is building in the States of the importance of investing in science and technology as a future source of income and, at the same time, to meet the needs of the populace.

In the countries analysed, regulatory development comes, in many cases, from the actions of the appropriate ministry, primarily the ministries of Education. Among the countries with laws on science and technology, Venezuela and Paraguay stand out, with their regulations establishing the importance of the existence of national budgets for these spheres for the purposes of augmenting the efficacy and efficiency of public spending in this area.

In another group of countries, we see, since 2000, the creation of a kind of national trust intended for scientific development. These trusts are governed, in each of the States, by a science and technology commission (whatever specific name may be given to it) which counts among its objectives guaranteeing the correct and effective distribution of economic funds between all the initiatives which present their candidacy for co-funding or funding with public resources. The creation of a body for management and guaranteeing equity is pertinent, because it has been seen that, in recent years, some States and their citizens demand accountability from their governments on costs assigned to science and innovation, in order to understand how and on what the funds have been spent.

Both actions are of great importance because they simultaneously encourage transparency and publication of results in research processes and regulate their functioning through clear regulations on the subject. It must be borne in mind that research is not only fostered and financed from the ministries, but that there are increasing numbers of institutions created for this purpose, additionally aiming to develop some specific area of expertise, for which reason the processes, the fund management and the results achieved should be public knowledge. The better part of public funds for research are similar in that the greatest percentages of them are geared towards specialised grants, research projects (facilities and materials), salaries and various scientific and technological activities serving to share the progress achieved.

37 Studies available at http://www.iesalc.unesco.org.ve/index.php?option=com_content&view=article&id=1786&Itemid=1147&lang=es

The area which has always been considered as the core of research, from which the main scientific investigations emerge, as do those responsible for them, are the universities, the institutions of higher education. Thus, in cases like Costa Rica, we see that the public universities themselves have special funds for financing their research projects.

When it comes to the amounts which different countries assign to research, we see large differences between them, in the same way that we see a wide range of scientific activities being developed through economic support from the government, which should be considered an improvement over previous periods. This differentiation in activities financed corresponds, as is to be expected, to the needs of the populace in the said countries but also, in some cases, to risky bids to be pioneers in certain specialisations or fields of expertise.

The increase in budgets allocated to Science, Technology and Innovation in these countries in recent years is a point worth highlighting, given that in an economic downturn situation, continuing to support development, for expertise and, thereby, for the future, is not often a priority; this, therefore, is a decision which speaks to the efforts being made by the various States. This is one of the trends which can be seen in the following table, which outlines investment in R&D in the countries analysed (of those for which there is data available) from 2000 to 2013.

Table 22. Percentage investment in R&D relative to GDP

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
ARGENTINA	0,43	0,42	0,38	0,41	0,36	0,37	0,40	0,40	0,42	0,51	0,51	0,53	0,61	0,62
BOLIVIA	0,27	0,27	0,25	...	...	...	...	...	...	0,15	...	...	...	...
BRAZIL	1,01	1,04	0,98	1,00	0,96	1,00	0,98	1,08	1,12	1,12	1,15	1,14	1,15	1,23
CHILE	...	...	...	...	...	...	...	0,31	0,37	0,35	0,33	0,35	0,36	0,38
COLOMBIA	0,10	0,10	0,11	0,18	0,15	0,15	0,15	0,18	0,19	0,19	0,19	0,20	0,20	0,25
COSTA RICA	0,38	...	...	0,35	0,37	...	0,43	0,36	0,39	0,54	0,48	0,47	0,57	0,56
CUBA	0,44	0,52	0,52	0,54	0,56	0,50	0,41	0,43	0,50	0,61	0,60	0,27	0,40	0,47
ECUADOR	...	0,05	0,06	0,06	...	...	0,14	0,15	0,25	0,39	0,41	0,34	...	...
EL SALVADOR	...	...	...	...	...	...	...	0,08	0,10	0,07	0,06	0,03	0,03	0,05
GUATEMALA	...	...	...	...	...	0,03	0,04	0,06	0,06	0,05	0,04	0,04	0,04	...
MEXICO	0,37	0,39	0,38	0,40	0,39	0,40	0,37	0,36	0,40	0,43	0,45	0,42	0,43	0,49
NICARAGUA	...	...	0,04	...	...	...	...	...	...	...	...	...	...	...
PANAMA	0,39	0,40	0,36	0,36	0,24	0,27	0,28	0,18	0,19	0,13	0,14	0,18		
PARAGUAY	...	0,08	0,10	0,08	0,08	0,08	...	...	0,06	...	...	0,05	0,08	...
PERU	0,10	0,10	0,10	0,10	0,15	...	...	...	...	...	...	...	...	...
URUGUAY	0,23	...	0,23	...	...	...	0,36	0,42	0,37	0,42	0,35	0,35	0,33	0,32
IBERO-AMERICA	0,45	0,42	0,37	0,44	0,46	0,47	0,48	0,46	0,48	0,52	0,54	0,48	0,52	0,63
UNITED STATES	2,61	2,63	2,54	2,54	2,48	2,49	2,54	2,62	2,76	2,80	2,72	2,75	2,79	2,72
SPAIN	0,90	0,91	0,98	1,04	1,11	1,18	1,26	1,32	1,36	1,30	1,35	1,31	1,24	1,23

Source: adapted from the Ibero-American and Inter-American Network of Science and Technology Indicators (*Red de Indicadores de Ciencia y Tecnología Iberoamericana e Interamericana*, RICYT). Available at www.ricyt.org/indicadores

Economic crises, of any sort, affect education and research: in some cases, we can see throughout history that they have brought budgetary reductions for public universities, with this negatively affecting their quality and causing them to lose value as instruments for social mobility and advancement; in other cases, despite a difficult economic situation, an effort has been made to maintain the percentage of GDP allocated to research and promoting higher education in all its forms. When governments sacrifice or abandon science and innovation, involvement is required from other sectors, the private sector in this case, to continue making progress in this area. The UNESCO (1995) already stated that higher education (and research as one of its cornerstones) should have support or funding not only from the public sector, but also from the private and from all the actors involved, encompassing society in general and all its public and private institutions, if the aim is to advance along the path towards development.

Furthermore, as can be seen in the table, despite the efforts made, a large difference exists between the average for the region and other countries like the United States. On the other hand, there is clearly a diverse array of situations, with some countries spending almost 1.25 % of their GDP on investment in R&D, compared to others which spend barely 0.1 %.

8.2. Funding originating from the private sector

As has just been noted, bodies like UNESCO have been calling, since last century, for involvement by all agents, individually or as a society, from the public sphere to the private, in financing science, research, and technology, with the aim of making progress in all innovations and improvements for the people. It is, therefore, a question of private enterprise also involving itself in these processes.

In Latin America and the Caribbean, we see, in this regard, two very distinct groups: firstly, those countries in which private sector participation in R&D&I is non-existent or so minimal as to be no more than a symbolic gesture. In the other group of countries, comprising, among others, Brazil, Colombia, Costa Rica, Ecuador, Haiti, Jamaica, Peru, Trinidad and Tobago, Uruguay and Venezuela, private funding plays an important role in the overall funding received by R&D&I and, moreover, we see that the economic value of this funding is increasing annually. These resources serve, to a large extent, to cover the costs arising from investigations carried out in centres of higher education.

Due to their peculiarities in some specific element of private funding, the situations in some countries bear describing. Thus, Paraguay has a national system of Science and Technology which consists of public and private bodies, as outlined in the law which created it and which governs its functioning. The said regulation does not establish that funding can originate from both sectors, and thus excludes the private sector from the economic responsibility of funding the development of these activities.

The case of Peru is of great interest, because the Government offers tax deductions as a tool to encourage investment of private capital in R&D&I. Also noteworthy is the case of Venezuela, where the National Fund for Science, Technology and Innovation (*Fondo*

Nacional para la Ciencia, Tecnología e Innovación, FONACIT) receives contributions from all the public and private entities which form part of it, which is certainly logical considering they also benefit from the initiatives which they finance. In Mexico we see that the largest amounts of private investment originate from multinational companies which are not owned or based in this region. Despite the existence of multinationals founded in Mexico itself, we can see that they do not share this commitment.

On the basis of these data, we have attempted to further investigate the possible reasons for the lack of greater involvement from the private sector in funding R&D&I in the various countries. When questioned on this topic, the collaborators responsible for determining the situation in the various States indicated, at times, that a there may be a negative image in the countries of scientific and technological research performed within them, regardless of whether publicly or privately funded. This situation can lead to an endless spiral, given that the lack of trust in research is hard to overcome without making an investment, in order that this negative perception might be changed through qualitative actions which require minimal funding, a investment in training, personnel, equipment, resources, etc. Polino and García Rodríguez (2016) analyse the interest in Science and Technology in various countries based on the studies available. The results vary greatly between States and it is not possible to identify a common trend in Latin America and the Caribbean (nor in Europe): Panama has a level of interest in science of around 75% which is exceeded only by Sweden, while in Mexico it only just passes 40%, the worst percentage in all the countries analysed. The study does reveal differences in the information-interest profiles (information on Science and Technology, and interest) among respondents in Ibero-America and Europe, which "could be a symptom of similarly unequal conditions in the financial structure of the cultural industry around science and technology, or of formulation of institutional policies for them promotion of scientific culture" (Polino and García 2016: 80-81).

Another possible motive suggested to explain why the private sector has distanced itself from funding science, technology and innovation is its disconnect from the production sector; this latter employs few researchers to improve its products or the processes for manufacturing them, which is cause to consider the importance of establishing research networks connecting the higher education and industrial sectors and which demonstrate the possibilities offered by maintaining these relations; this would lead, in many cases, to an increase in private investment in R&D&I and would lead to an improvement of both manufacturing processes and results and of research quality.

8.3. The importance of research in educative policy

It has already been noted that State involvement is a crucial factor in developing research in the various countries and that government finances must support these scientific processes in order for them to emerge. However, as has also been noted, it is important to delve into the political debates on the topic, so as to identify whether the public statements and even the existing regulations are actually represented in the policies being implemented and in the economic funding allocated to these.

In order to obtain information, the collaborators responsible for each country were questioned on the topic, thus obtaining the assessment of national specialists on the situation in each of the States. The responses given essentially fall into two types. On one hand, those in which there is a governmental responsibility reflected in speeches and legislation in the field of science, technology and innovation, among which are found Brazil, Chile, Colombia, Cuba, Ecuador, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, the Dominican Republic, Trinidad and Tobago, Uruguay and Venezuela. However, when it comes to detailing the arguments supporting this responsibility, the commitment is not so clear.

The first noteworthy case is that of Ecuador, which outlines in its Constitution that support for scientific and technological research is a principle or obligation for the State to society and its constituents. Similar to this is the Brazilian example, where the constitution includes an entire chapter, the fourth, dedicated to Science, Technology and Innovation. With regards to other governments, the main indicator of the commitment to research is the approval of new laws which directly affect this point, not limiting themselves to promoting research in/by universities, but rather encouraging the creation of national and international research networks composed of public and private institutions.

University policies have also made important steps forward in this regard, with the creation of posts of vice-rectors for research within the organisational charts of some universities, thus affording research its own place within the organisational structure of higher education institutions. We should not forget that, at least in theory, research and, in general, the creation of expertise have been considered the ultimate aim of universities: research has been and is a key and vital function for higher education institutions everywhere in the world.

As such, research must be the core of the university; still more so if we aim to carry out complete and efficient internationalisation processes for higher education, because these must step from the momentum of scientific activities and from the development of research projects, but also from communicating the advances and setbacks which occur, as well as the training of new human resources. In this regard, in Cuba it is certain that research cannot be seen as a separate chapter of university life, but rather as another part of education, and is therefore a day-to-day requirement for the teaching body and for the students. Several of the countries studied take similar approaches to this, considering research and development as core goals for education, to which they have dedicated significant efforts in recent years and which continue to be seen as priority areas for intervention and improvement in the immediate future.

Within this first group of countries there is a view, as has been seen, that research, science and technology are cornerstones in government policies; however, it is also apparent that this presence in discourse does not translate to the same level of presence in reality. In policies, these concepts do appear; funds are contributed, but in some cases they are considered so insignificant as to be deemed invisible and, as such, do not result in a true boost to research and quality, and we see no recognition of the work done. In this sense, a commitment in future ought to be training scientists and researchers in various areas of expertise capable of raising the quality level which seems to be, in some cases, the Achilles heel in research.

On the other hand, it is also apparent that another of the unresolved questions for some governments is bridging the gap between science, technology and innovation and the populace, to allow it to meet existing needs more precisely and appropriately. As has been noted, this would lead to better appreciation and recognition of the efforts and processes undertaken.

Argentina, Bolivia, Costa Rica, El Salvador and Guatemala are the countries comprising a second group with regards to the responses received when asked about the importance of research in educational policies, given that all of them highlight that their States show interest in R&D&I, but not as a priority. They affirm that the governments have other priorities besides research which are addressed first, in such a way that its potential for solving problems and offering alternatives of a different nature is undervalued. Likewise, it is noted that their is more willingness than political support or economic funding or that there is much legislation governing these actions, but few efforts made to develop them.

Another argument presented, of vital importance due to the serious consequences it entails for the progress of science, technology and innovation in general, is that research, is some countries, carries no incentives for lecturers, in the sense that neither is it recognised nor are lecturers afforded any support for having it count towards their professional careers. This makes it easily understandable that some university lecturers do not involve themselves in any process beyond simply training and educating students, which is damaging and harmful for higher education institutions, but still more so for future generations, who are being denied the scientific vision and skills for the realities they will face.

Remarks and recommendations

Remark 1.

As with the other questions considered in this report and, perhaps to a much greater extent, where R&D&I is concerned there is clearly a large difference between the provisions or their representation in legislation and the measures which actually exist to effect this promotion of scientific work. Furthermore, it must be highlighted that the varying levels of development in the countries studied make it truly difficult for some of them to establish R&D&I as a priority when simply meeting the needs of the populace is so difficult. The differences in the indicators for investment and for researchers are notable, both when comparing Latin America and the Caribbean to other countries, and within the region.

Recommendation.

The clear inequalities make it critical to devise mechanisms for cooperation between countries and between regions. The ongoing development of cooperation between the European Union and Latin America and the Caribbean, moving from total funding from the EU to a co-funding scheme, represents an interesting model which allows progress to be made in the creation and improvement of Science and Technology systems in the countries with the worst current performance. Creation of networks allowing resources and infrastructures to be shared (see chapter 8 for examples in the Caribbean) should be considered as an option for boosting R&D&I in the States facing the greatest difficulties.

Remark 2.

Another element which is seen is a clear disconnect between the public and private sector where research and innovation are concerned, with a general absence or an extremely sparse presence of private enterprise in these processes. As was seen in chapter 2, in various countries the ministries of secretariats of Economy or Industry have authority over research.

Recommendation.
It would be interesting to consider the prospect of these departments putting into practice measures for encouraging public-private cooperation which could lead to benefits for both parties and, in general, for society as a whole. In another vein, universities could explore implementing business-funded professorships which would allow them to begin establishing and improving the links between the university, research and the private sector.

Remark 3.

We see varying levels of interest in Science and Technology in public opinion depending on the country (in Europe also). As for its recognition in education and teacher promotion systems, we see that this is sparse.

Recommendation.

It would be advisable for all procedures of research fund allocation to follow strict transparency standards; moreover, it is advisable to continue along the path of plans for communicating and disseminating Science and Technology which we see in the majority of Latin American and Caribbean countries, in order that better understanding might lead to a more positive impression of research work.

Recommendation.

Similarly, given that research and creation of expertise is one of the key purposes of higher education institutions, there is a need for recognition of this sort of work in the teaching profession, so as to encourage the involvement of teaching staff in R&D&I projects. Without a doubt, in any sort of accreditation of teaching staff quality which might be implemented (see chapter 2), the research component would need to be considered. The course of action suggested is similar to that adopted by Ecuador in regulating the categories of university lecturer and promotion between these, which considers participation in research projects as a key element.

9. Internationalisation procedures and permanent university networks in the field of Higher Education, Science, Technology and Innovation

In a globalised world, more than just economies or markets have seen changes in how they act and interact. Societies have undergone numerous modifications where concerns their population structures, manufacturing processes, communications, education, science and expertise. This society requires us to face uncertainties which weren't even imagined decades ago. At a global level, ever more people are studying, working and interacting in a global context. All of this makes it critical to bear this reality in mind and to act accordingly. Connections between students, lecturers and institutions in different countries have multiplied since last year, and predictions and new developments in science, technology and communications show that this trend will continue.

When it comes to facing unknown situations and tackling new problems, the teaching-learning process is critical. As such, it is interesting to analyse some internationalisation experiments put into practice by various countries and institutions in Latin America and the Caribbean in relation to Higher Education, Science and Technology. We must begin with the fact that this internationalisation of education conforms, first of all, to the universal nature of learning and research and the need for a joint creation of expertise as a tool to face the problems of society. Secondly, this internationalisation is supported by the current processes of political and economic convergence and integration, as well as the growing need for intercultural understanding; Delors' "learning to live together".

Latin America and the Caribbean, or at least a fair number of the countries in the region, are making progress in this regard. In general, the 22 countries analysed are all carrying out some sort of internationalisation policy; what varies is how this concept is viewed, the objectives they are aiming to achieve and their methods for accomplishing them. What they all share is the view and the understanding that these processes must necessarily include the cooperation of the all the agents involved.

In many cases, the internationalisation processes are built on university collaboration networks which aim to connect and strengthen relations between the institutions within the same country or with other States, on the same continent or otherwise, with the ultimate goal of incorporating into the scientific community the most advanced knowledge and the

latest thinking. Some of these networks aim, as a priority, to encourage student mobility between the various higher education institutions in the country, as well as encouraging mobility for teaching and administrative staff (see chapter 6). In doing so, their goal is better training of the human resources available to them, making use of the transferred expertise and best practices from other States to reach an adequate implementation of procedures and methodologies derived from a strong cooperation strategy, regionally to begin with and internationally in future.

In fact, as can be seen from the descriptions of some of the networks and internationalisation experiments in Latin America and the Caribbean which are presented below, the initiatives drive a fair number of the scholarships and mobility grants available in the countries of the region, be it at national or international level. In other cases, the goal being pursued in creating networks is the internationalisation of research projects developed in the country, providing publicity and recognition to research groups and activities undertaken in the fields of Science, Technology and Innovation.

Many of these cooperation and exchange relationships, which later become permanent knowledge networks, stem from the determination of individual Higher Education, Science, Technology and Innovation professionals and institutions, who make the first steps be themselves, and generally altruistically and who receive institutional support, recognition and even funding a posteriori. It is also true that some political and government bodies, generally unconnected to the field of science, but perhaps with related interests, have provided agreements and signed conventions between the various States to make progress in understanding and development of certain questions or prWithout any doubt, all of the higher education cooperation networks are of use in strengthening or creating new ties and exchanges between counterpart institutions, and are also convenient for determining the responsibilities of each of them when defining instruments and policies for advancing knowledge and in social commitment to progress.

Analysing the evolution of the processes of internationalisation and knowledge network creation in Latin America and the Caribbean, it can be noted that cooperation links have primarily been established between bordering countries or between those with some common identifying feature (history, language, etc.). Which is to say that, first of all, internationalisation followed the path of creating Ibero-American and Central American knowledge networks, then moving on to more intercontinental, global networks. In this regard, Haiti's case is clear. The primary permanent knowledge networks in which its higher education institutions participate are of francophone origin, as a result of their shared language and history.

These strategic alliances which have been created -with or without mediation by the corresponding ministries or other government representatives, but always relying on the firm determination of those people involved in the advancement and progress of knowledge, of science and of technology- have served, both now and in the past, to create in some cases, or, to consolidate in other, more advanced cases, collaboration programmes which encourage knowledge transfer, training of human resources and the creation of high-level research networks, in a commitment to promoting student and teacher exchanges which increase academic quality and competitiveness at international level and which provide opportunities to develop joint research projects.

It must be understood that any sort of activity aimed at achieving internationalisation of institutions and of expertise may become a guarantee of quality in higher education and, more specifically, of the research being pursued. A serious drawback encountered in the area of permanent knowledge networks is the lack of registries listing these sorts of cooperation and scientific connection initiatives, which makes them difficult to access and precludes the inclusion of new institutions into them. This could be an aspect to bear in mind for completing and broadening the internationalisation processes carried out by all the countries in the field of higher education, science, technology and innovation.

In accordance with this wide range of perspectives, some countries are starting to create official qualifications with international honours, which increase awareness and recognition of studies at global level (see chapter 3, on joint degrees with foreign institutions). These initiatives are of particular relevance when it comes to possible advancements and improvements in recognition of studies or research stays abroad, a key aspect in the construction of a common area for education and science.

Ultimately, it can in no way be said that Latin America and the Caribbean has been shown to be excluded from the higher education internationalisation process which is occurring at global level, but we can say that the pace at which these initiatives are being implemented is slower than in other parts of the world, to a certain extent due to the fact that the majority of initiatives implemented to this end thus far have focused on encouraging mobility of students, and of academic and administrative staff from the home country to various foreign universities and, to a lesser extent, on the recruitment of their foreign counterparts to stay in the countries of the region, a goal which has, however, acquired ever more relevance and momentum.

9.1. Experiences of internationalisation and creation of university networks

The reports from the 22 countries compiled information on any successful internationalisation experiment carried out, either by governments and public institutions and by private entities. The most noteworthy initiatives are presented below. Along with the experiments gathered from the reports, it is essential to mention the Observatory on Academic and Scientific Mobility (*Observatorio de Movilidades Académicas y Científicas, OBSMAC*) of the Internation Institute for Higher Education in Latin America and the Caribbean (*Instituto Internacional para la Educación Superior en América Latina y el Caribe, IESALC*). Created by an agreement of the Regional Conference on Higher Education in Latin America and the Caribbean in 2008 and authorised by UNESCO's World Conference on Higher Education (2009), it became operational in 2010 to study questions related to academic mobility, the brain drain from the region, and university education.

Currently, it has six thematic observatories in Argentina, Costa Rica, Ecuador, Mexico, Panama and Venezuela, which cover various aspects related to internationalisation of the university and science systems. By 2014 it had produced a total of 226 promotional materials and five books on its research. A fair number of the research documents, some

of them case studies on the various internationalisation initiatives developed in the countries of the region, can be consulted in their document repository.[38]

The OBSMAC has been financed with funds provided successively by the Spanish Cooperation Agency for Development (*Agencia Española de Cooperación para el Desarrollo, AECID*), the Mexican UNESCO Cooperation Commission (*Comisión Mexicana de Cooperación con la UNESCO, CONALMEX*), the Ford Foundation, the Support Programme for the Development of Higher Education (*Programa de Apoyo al Desarrollo de la Educación Superior, PADES*) run by the Secretary of Higher Education in Mexico, the Mexican research centre Cinvestat and CONACYT.

National Association of Universities and Higher Education Institutions (Asociación Nacional de Universidades e Instituciones de Educación Superior, ANUIES, Mexico)

Date created: 1950.

Members: 187 public and private higher education institutions in Mexico.

Goals: to promote the complementarity, cooperation, internationalisation and academic exchange of its members be creating national and regional thematic cooperation networks.

Initiatives: ANUIES-CRUE student exchange programme; Mexico-Argentina Exchange Youth Programme; ANUIES-CREPUQ student exchange programme; ANUIES-DAAD short research stay programme for Mexican and German scientists; Higher Education Institution Quality Improvement Programme; Brazil-Mexico exchange programme (Bramex) and the Mexico-Argentina Academic and Administrator Mobility programme (MAGMA).

ANUIES is not an association dedicated exclusively to internationalisation, but this is one of the areas in which it works. According to its 2013 Annual Activity Report,[39] this year saw 102 people make use of mobility in the Mexico-Argentina Exchange Youth Programme, 30 in the Brazil-Mexico exchange Programme (Bramex) in concert with the Coimbra Group of Brazilian Universities and 80 mobility activities were undertaken for researchers and doctorate students between Mexico and France, among other initiatives.

Website: www.anuies.mx

ANUIES-CSUCA Academic Exchange Programme

Creation date: 1998, as one of the initiatives in the Meso-American Cooperation Programme (*Programa Mesoamericano de Cooperación, PMC*) at the III Meeting of Heads of State and of Government of the Tuxtla Dialogue and Agreement Mechanism.

38 See http://www.iesalc.unesco.org.ve/index.php?option=com_content&view=article&id=1786&Itemid=1147&lang=es

39 Available at http://consejo12014.portal.anuies.mx/wp-content/blogs.dir/8/files/sites/8/2014/03/10_Informe_Anual_de_Actividades_2013.pdf

Members: aimed at higher education institutions which are part of the Mexican National Association of Universities and Higher Education Institutions (*Asociación Nacional de Universidades e Instituciones de Educación Superior de Mexico, ANUIES*) or of the Central American Universities Higher Council (*Consejo Superior Universitario Centroamericano, CSUCA*).

Goals: to establish and consolidate collaborative relationships in Mexican and Central American higher education.

Initiatives: three types of projects are provided for. Joint research projects are developed by Central American and Mexican researchers around the defined priority areas. Secondly, in the teaching staff support projects, the Mexican side lends support and advice to create or renew higher-level education programmes, as well as to train the teaching staff and keep them up to date. Finally, the institutional improvement and technical support projects consist of training provided by Mexican experts for members of Central American universities on a wide range of topics (accreditation, new technologies, etc.). This last kind of project ceased receiving funding in 2004.

This project is financed by the Mexican Secretary of Foreign Affairs (with the exception of the first year, in which funding was provided by the Organisation of American States' Mexican Fund). Through yearly application periods, the universities present their research, teaching or technical support programmes. After being assessed by experts from Mexico and Central America, the highest scoring programmes receive funding intended to cover the mobility costs of the participating lecturers. In the first application periods, student mobility was also funded. Similarly, although initiatives from all areas of expertise were assessed initially, subsequently, priority topics have been established, focused primarily on solving the region's problems.

According to the data gathered in Morones (2011), from 1998 to 2010, this exchange project has funded a total of 237 research and teaching exchanges in which Central American and Mexican universities have participated, 75 of which have lasted the whole time. From 1998 to 2002, a total of 92 students benefitted from this support (42 from Mexico and 50 from Central America). As for the lecturers, the number of beneficiaries reached 1,538 between 1998 and 2000 (726 from Mexico and 812 from Central America). The number of universities which benefited is 40 in Mexico and 15 in Central America.

Montevideo Group University Association (Asociación de Universidades Grupo Montevideo, AUGM)

Creation date: 1991

Members: universities in Argentina, Bolivia, Brazil, Chile, Paraguay and Uruguay.[40]

Goals: to contribute to the improvement and consolidation of a critical mass of high-level human resources, harnessing the comparative strengths offered by the facilities

40 Complete list of member universities available at http://grupomontevideo.org/sitio/universidades-miembro/

installed in the region, namely:

- Scientific and technological research, including processes for innovation, adaptation and technological transfer in strategic areas.
- Lifelong learning, included in the comprehensive development of the citizens of the subregion.
- The administrative structures and functions of the Association's member universities.
- Interaction of its members with society as a whole, spreading the advances in knowledge which aid its modernisation.

Initiatives: exchange and mobility initiatives for students and lecturers from the member universities. The ESCALA Lecturer Programme promotes academic mobility of lecturers and researchers and has become an important instrument for guaranteeing the effective creation of the "regionally extended common academic area" which the Association calls for in its Founding Aims Charter. A version of this same programme exists for undergraduate students (ESCALA Undergraduate Student Programme), in which the student studies for a semester in another university from the group located in a country other than their own. The studies pursues are recognised as their equivalent in their own course's curriculum. Similarly, the ESCALA Postgraduate Student programme promotes mobility for regular Master' and doctorate students to spend an academic term studying in a country other than their own, with full recognition of the activity undertaken. Finally, AUGM has an ESCALA Management and Administrator Programme, with the same aim for directors, managers and administrators. Additionally, the AUGM has other initiatives or groups for the purposes of fostering cooperation between the member institutions (disciplinary hubs, academic committees, Young Researcher Days, University-Society-State International Seminar; AUGM Cities and Universities Network).

The AUGM was created in August 1991 to meet the challenges faced by the university as an institution at the close of the 20th Century. At that point, a group of universities and students from the region began working outside the governmental policies of the countries to complete a project promoting excellence, quality and relevance and, in this way, to fill the role required of public higher education. This internationalisation task was consolidated as the years went by, mutually sharing highly qualified academic staff, material resources, facilities, equipment, laboratories, libraries, etc.; definitely creating an expanded common academic area in which obstacles are overcome and scope for action is increased. The member universities have a shared calling and public nature, and are similar in their academic structures and in their service levels. These characteristics put them in a position to develop cooperation activities with viable approaches.

Website: grupomontevideo.org

Inter-American University Organisation (Organización Universitaria Interamericana, OUI)

Date created: 1980

Members: institutions and associations in the Antilles, Argentina, Bolivia, Brazil, Canada, Chile, Colombia, Costa Rica, Cuba, El Salvador, Ecuador, the United States, Europe (Erdely Foundation and the European Foundation for R&D&I in Environmental Sciences, Spain), Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Puerto Rico, the Dominican Republic, Uruguay and Venezuela.

Goals: to promote cooperation between the associated university institutions and development of higher education in Latin America. The OUI aims to become a reference and an ally for HEIs in their task of becoming the driving force behind social change, overcoming social inequalities and promoting the society of knowledge and learning.

Initiatives: it offers training programmes for university leaders, acts as Executive Secretary for the Conference of the Americas on International Education and, among other roles, encourages participation and promotes collaboration between universities and industry in the Americas at an international level through various missions and activities.

Website: www.oui-iohe.org

Tordesillas Group

Creation date: 2000

Members: 55 universities (29 Brazilian, 18 Spanish and eight Portuguese).[41]

Goals: to promote collaboration between universities in Science and Technology, considering scientific and educational cooperation to be a key part of the role of higher education institutions.

Initiatives: in 2006, it created the Tordesillas Group Nursing Programme with the aim of building links and encouraging exchange of information between centres issuing Nursing qualification in associated universities. Subsequently, in 2009, the creation of the Tordesillas Doctoral Colleges was anounced, which must include at least one institution from each on the countries. There are currently four doctoral colleges: Nursing, Organisational Psychology, Environmental Sciences and Global Changes and Organisational Engineering.

The Tordesillas Group arose from the I Meeting of University Rectors from Brazil, Spain and Portugal, which commemorated the 500 year anniversary of the discovery of Brazil. It is sponsored by the Santander Bank. The deans of the member universities meet once a year, and it is the general assembly, the supreme body of the Group, which makes the relevant decisions in these meetings.

Website: www.grupotordesillas.net

41 Complete list available at http://www.grupotordesillas.net/miembros/

Latin American University Cooperation Network (Red Latinoamericana de Cooperación Universitaria, RLCU)

Creation date: 1997

Members: private universities in Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Nicaragua, Panama and Puerto Rico.[42]

Goals: to promote Latin American integration through inter-university collaboration, academic excellence, deepening university-business relations, creating knowledge and contributing to the dissemination of thought in Latin America, or collaborating to achieve integration for research efforts and reinforcing the assets of the Network members.

Initiatives: it holds meetings with researchers, videoconferences, and debating tournaments. In the II Assembly of the Network creation of an International Accreditation Agency was approved, although in 2003, to avoid duplicates, the RLCU approved the possibility of establishing standardisations with accreditations from other associations.

In 2011, at the XXV Assembly of the RLCU, a series of workshops were held which solidified into the design of an Executive Plan with four strategic axes for the Network to work on: RLCU Members, Academic community, Society in general and International bodies linked to higher education.

Website: www.rlcu.org.ar

Network of Latin American and Caribbean Macro-universities

Creation date: 2002

Members: 37 universities in 20 countries (Argentina, Bolivia, Brazil, Colombia, Costa Rica, Cuba, Chile, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Puerto Rico, the Dominican Republic, Uruguay and Venezuela).

Goals: to create a mechanism for dialogue with the States, and the national and international organisations; to establish a mechanism for dialogue, exchange, cooperation and joint action on topics relevant to the macro-universities of Latin America and the Caribbean; to enable mechanisms allowing sharing of infrastructures and information; to facilitate mobility of students and academics, etc.

Initiatives: Mobility Programme for Postgraduate Students (Master's, doctorate and specialisation students). The benefiting student is exempt from paying fees and the loan is financed by the Santander Bank.

The Network was created by a joint initiative by the UNAM and Central University of Venezuela, under the auspices of the IESALC-UNESCO. The aim was to implement

42 Complete list available at http://www.rlcu.org.ar/miembros.php

cooperation and mobility programmes, all centred on the macro-university phenomenon in Latin America and the Caribbean.

Website: www.redmacro.unam.mx

Association of Caribbean Universities and Research Institutes (UNICA)

Creation date: 1967

Members: universities and research centres in Puerto Rico, the Dominican Republic, Venezuela, Trinidad and Tobago, Jamaica, Colombia, Granada, Guadalupe, the United Kingdom, Haiti, the United States, Guadalupe, Surinam, Aruba, Guyana, Curaçao and Saint Thomas.[43]

Goals: to foster cooperation between higher education centres in the Caribbean region.

Initiatives: N. R.

This is an independent organisation which brings together the senior officials of the region's universities. These officials participate in a yearly meeting, which serves as the highest authority of the Association. UNICA promotes projects which unify institutions and academics from across the region. It supports the regionalisation of higher education in the Caribbean acknowledging the strength of the local cultural history and taking into accounts the needs of a region which is multinational, multilingual and multicultural.

Association of Caribbean Tertiary Institutions (ACTI)

Creation date: 1990

Members: 95 members from 20 countries.

Goals: to facilitate cooperation between higher education institutions or academic, administrative or other training centres; effective use of resources to facilitate access to tertiary education, the quality thereof and mobility; coordination and development of specific programmes and services between institutions; identification and meeting of the needs of the region and specific countries with regards to tertiary education; and creation of a professional forum for decision-making and problem-solving.

Initiatives: projects to standardise curricula between member universities; technical support for institutionsWebsite: www.acticaribbean.org

43 Complete list available at http://www.unica.uprm.edu/infounica.html

The Caribbean Knowledge and Learning Network (CKLN)

Creation date: 2003

Members: countries of the Caribbean Community (CARICOM).

Goals: to improve the Caribbean's global competitiveness through modernising and diversifying the skills and expertise of human resources in the region, through greater collaboration and regional connectivity.

Initiatives: development and management of C@ribnet; creation and strengthening of the institutional capacities of HEIs; establishment of regional mechanisms for accreditation, quality assessment, technical support, training, etc.

This is a CARICOM intergovernmental agency. It is the first Caribbean regional network for research and education and is a member of the global community of education and research networks. After completing the initial mandate from the CARICOM heads of State and of Government (to implement C@ribnet, connecting the member states and allowing connection to the rest of the world), its mission is now to support development of national research and education networks in these countries.

C@ribnet, in turn, is a broadband research and education network implemented by the Caribbean Knowledge and Learning Network in 2012 and officially created in 2013. This network connects all the CARICOM countries and is in turn connected to the global research and education community: to North America through AMPATH; to Europe though Géant and to Latin America through RedCLARA. The network was financed by a ten million Euro contribution from the European Union.

The Caribbean Sustainable Development Solutions Network

Creation date: 2014

Members: open to all the Caribbean countries, along with institutions dedicated to sustainable development in the region.

Goals: its goals are those of the United Nations Sustainable Development Solutions Network, that is, to mobilise global scientific and technological expertise in pursuit of practical solutions to the problems of sustainable development.

Initiatives: definition of the Sustainable Development Objectives, applications of these objectives, creation of indicators. Solution implementation.

Launched in 2014 at the University of the West Indies, where it has its headquarters, this is one of the member networks of the United Nations Sustainable Development Solutions Network (SDSN). It focuses on matters of energy, adaptation to climate change and other topics related to the economies of the countries in the region. The UWI acts as the regional hub and coordinates the activities of a network of governments, universities, research centres, civil society groups and businesses, focusing on identifying and promoting solutions for sustainable development in matters affecting

the Caribbean Small Island Developing States (SIDS). To more SDSNs exist in Latin America: the Amazonian and the Andean.

Among these matters are those relating to establishing competitive industries and generating employment; reduction of inequality; adaptation to climate change and reduction of greenhouse gas emissions; marine pollution, loss of biodiversity, overfishing and urban development.

Website: http://unsdsn.org/what-we-do/national-and-regional-networks/regional-sdsn/regional-sdsn-for-the-caribbean/

Colombian Network for the Internationalisation of Higher Education (Red Colombiana para la Internacionalización de la Educación Superior, RCI)

Creation date: 1994

Members: –

Goals: the main goal is to support, promote and enable inter-institutional and international cooperation activities and projects in the higher education sector.

Initiatives: training HEIs on how to improve their internationalisation processes, development of internationalisation activities, creation of knowledge on the subject, projects for HEI cooperation with government bodies and private sector entities. Holding the Latin American and Caribbean Conference for the Internationalisation of Higher Education (together with the Colombian Government, the Colombian University Association and the Colombian Institute of Educational Credit and Studies Abroad).

This organisation coordinates higher education institutions in its mission to stimulate, promote and facilitate internationalisation and, thereby, the improvement of higher education quality, linked to Research, Science, Technology and Innovation through cooperation between institutions and bodies within Colombia and between these and the rest of the world. It is divided into nine regional nodes which have freedom to define their own working structures.

Website: www.rci.org.co

Academic Missions for the Promotion of Higher Education (Misiones Académicas de Promoción de la Educación Superior, MAPES, Colombia)

Creation date: 2012

Members: created by the Ministry of National Education and the Ministry of Foreign Affairs. Among the institutions united by the 2012 initiative are the ICETEX, Proexport, the Presidencial Cooperation Agency (APC Colombia), Colciencias, the CNA and the

Caro y Cuervo Institute.

Goals: promotion of Colombian higher education for the improvement of educational cooperation and the internationalisation of higher education in the Latin American and Caribbean region.

Initiatives: missions to Panama, Ecuador, Peru, Bolivia, Brazil, Mexico, Turkey and New Zealand.

The MAPES aim to present, to the government entities in the education sector, the higher education institutions in Latin American and Caribbean countries, and to other partners, the structure and functioning of the Colombian higher education system, as well as the educational cooperation opportunities which Colombia provides for fostering internationalisation of its education system. This strategy also aims to increase mobility of Latin American and Caribbean students to Colombia, making the country an attractive and competitive destination for higher education and Spanish teaching.[44]

Colciencias International Group (Colombia)

Creation date: N. R.

Members: N. A.

Goals: to tighten relations and to identify opportunities for cooperation and collaboration in Science, Technology and Innovation and to build or strengthen international networks in subject areas of strategic interest for the country's development.

Initiatives: development of strategies and instruments for harnessing sources of bilateral or multilateral cooperation or support in order to construct international thematic networks through international mobility for researchers and innovators. Studies on scientific emigration and international cooperation in the frame of the Young Researchers programme. It participates and contributes to the creation of an integrated migration policy within the Colombia Unites Us programme (*Colombia Nos Une*) and the RedEsColombia platform of the Chancellery of the Republic. It works to increase participation by Colombian researchers, innovators and entrepreneurs in the Seventh European Union Framework Programme.

This group has an internationalisation strategy whose objective is to consolidate internation protection of Colombian Science, Technology and Innovation, making it easier for the country's technological research and development groups and centres to access resources, both intellectual and financial, national and international, contributing to their insertion in international networks.

In its internal policy goal for 2019, Colciencias concerns itself with training doctors and social appropriation of knowledge; as such, it is currently moving forward with a Scientific Emigration Programme which aims to use this specialised social

44 More information available in the case study from the Ministry of National Education (2014): Fostering internationalisation in Higher Education: lessons from experiments in Colombia. Available at http://redes.colombiaaprende.edu.co/ntg/men/pdf/Promocion_y_consolidacion_de_Colombia.pdf

capital outside the country as an input and tool to be incorporated into the various Science, Technology and Innovation dynamics which contribute to strengthening and innovating with the State's productive apparatus on its academic and business platforms.

In 2007, Colciencias attained recognition as a Focal Point of the VII Framework Programme by the European Commission's Research Directorate. The aim of this Focal Point is to reveal the structure and objectives of the VII Framework Programme, as well as increasing the management capabilities of the institutions wishing to participate in its international cooperation opportunities.

Website: http://legadoweb.colciencias.gov.co/programa_estrategia/internacionalizaci-n-de-la-cti

Ñanduti Network (Paraguay)

Creation date: proposed by the Law on Higher Education N.º 4.995/2013.

Members: public universities from the country.

Goals: to promote student mobility between the country's public universities, for undergraduate and postgraduate courses, as well as encouraging mobility of academic and administrative staff, facilitating training of human resources. In the same vein, it aims to stimulate transfer of knowledge and experiences of best practices between the members of the network, to simplify how mobility is organised and to implement a strong strategy of regional cooperation and internationalisation.

Initiatives: N. R.

This is a network created by the Association of Public Universities in Paraguay (*Asociación de Universidades Públicas de Paraguay, AUPP*) which aims to promote exchanges between these universities in order for the participants to understand not only other working methods, but also other social and cultural situations in the country.

Cooperation Network between Higher Education Institutions (Red de Cooperación entre Instituciones de Enseñanza Superior, ACCINET)

Creation date: 2015

Members: private higher education institutions in Argentina, Bolivia, Brazil, Chile, Paraguay and Portugal.[45]

Goals: to coordinate and carry out activities related to education programmes and international encounters in the education sector, supporting initiatives for training and educating the population and the associated entities.

45 Complete list available at http://acinnet.net

The ACCINET network views academic mobility programmes as a stimulus for societal evolution and, as such, is working to find innovation and research partnerships which allow the advancement of knowledge and the application of the results to society.

Initiatives: discussion forums for educative matters, promotion of cultural exchange, mobility and internship programmes, among others.

The ACCINET network views academic mobility programmes as a stimulus for societal evolution and, as such, is working to find innovation and research partnerships which allow the advancement of knowledge and the application of the results to society.

Website: http://acinnet.net

Learn Chile (Chile)

Creation date: 2011

Members: 21 Chilean higher education institutions.[46]

Goals: to better promote the country as a destination for students wishing to complete part of their education abroad.

Initiatives: promotion projects at sector-based fairs and conferences and presentation in various countries. Its website compiles information on the academic offerings in Chilean universities, the necessary steps to study in Chile, etc.

Website: http://learnchile.cl/sobre-learnchile/

Learn Chile is a sectorial framework project run by ProChile, part of the Ministry of International Relations. It aims to increase the presence and visibility of the framework and to establish partnerships and discover areas which allow the number of foreign students in Chile to be increased.

Remarks and recommendations

Remark 1.

We can essentially distinguish two groups, on the basis of their approaches. One group is dedicated to fostering internationalisation in its countries' education systems: these are governmental initiatives which aim to publish and promote the higher education offerings in their countries (Learn Chile, MAPES and RCI, among others). A second group consists of networks, in the strict sense, of HEIs from various countries seeking to face shared challenges as a group and to establish cooperation channels for academia and research (for example, Coimbra Group, ACTI and the Macro-university Network).

46 Complete list available at http://learnchile.cl/sobre-learnchile/

Recommendation.

The government initiatives for promoting the academic offerings from certain countries may prove useful as models for allowing coordination of efforts and optimisation of resources for HEIs which wish to make themselves known abroad. A regional area could use similar strategies to broadcast the educational offerings of the member countries to the rest of the world, avoiding duplicated effort.

Recommendation.

The majority of the networks mentioned are the framework for grant and mobility programmes. They are, therefore, experiments which should be analysed in depth when it comes to implementing broader-reaching initiatives (regional or bi-regional programmes), identifying the difficulties encountered in implementing these projects and how they were resolved. It would be wise to analyse the possibility of establishing a forum in which the driving forces behind these initiatives (the Tordesillas Group doctoral colleges, involving at least one institution from each of the three member countries in an interesting project) can explain in detail their characteristics and achievements.

Remark 2.

There is no centralised registry of all these cooperative initiatives for academic and research. Information on grants and mobility opportunities is sparse and difficult to find, which renders it an obstacle for both mobility and internationalisation. As is expressed by the European Commission, AECEA and Eurydice (2015: 245) on the basis of the data gathered from the various member states of the EHEA, one of the primary impediments "for both incoming and outgoing mobility (…) is the lack of information and encouragement".

Recommendation.

It would be advisable to create a registry or database that centralises information on these sorts of networks, as well as their application periods for grants and mobility programmes. This would make it simpler for institutions, lecturers, researchers and students to identify the options available to them, to locate already existing networks with similar interests, etc.

10. European Higher Education Area

10.1 History and institutional structure of the European Higher Education Area

The creation of the EHEA is a process which began with the Sorbonne Declaration (1998), signed by the ministers of Education of France, Germany, Italy, the United Kingdom and a further 25 European countries and was consolidated and expanded by the Bologna Declaration in 1999. The Bologna Process constitutes a reform of the higher education systems in the 28 countries of the EU, with the primary objective of creating the EHEA so as to create a Common Framework for Higher Education in Europe. It currently unites a total of 47 countries (the 28 EU member states plus 19 others), the European Commission and a series of advisory members (Council of Europe; UNESCO; The European University Association, EUA; European Students Union, ESU; European Associations of Institutions of Higher Education, EURASHE; European Association for Quality Assurance in Higher Education, ENQA; Education International and BUSINESSEUROPE).

Since the Bologna Declaration, ministerial conferences have been held every two to three years to evaluate the progress made in the EHEA and to debate and propose new steps to take.

- Bologna Conference (Bologna Declaration), 1999.
- Prague Conference (Prague Communiqué), 2001.
- Berlin Conference (Berlin Communiqué), 2003.
- Bergen Conference (Berger Communiqué), 2005.
- Longon Conference (London Communiqué), 2007.
- Leuven/Louvain-la-Neuve Conference (Leuven/Louvain-la-Neuve Communiqué), 2009.
- Budapest/Vienna Conference (Budapest/Vienna Communiqué), 2010.
- Bucharest Conference (Bucharest Communiqué), 2012.
- Yerevan Conference (Yerevan Communiqué), 2015.

The EHEA is an arena for integration and cooperation in higher education systems with

the aim of creating a unified scheme of education levels across the continent, allowing accreditation and mobility of students and workers throughout Europe.

The Bologna Declaration of 1999 establishes the main objectives geared towards achieving standardisation of European higher education for the purposes of fostering free movement of students and of increasing the international appeal of European education. Additionally, it proposes, as strategic objectives, to increase employment in the European Union and to convert the European Higher Education System into an attractive destination for students and lecturers from elsewhere in the world.

It specifically outlines the following goals:

- To restructure the education system based on three levels: a first level, in which an undergraduate degree will be attained and skills will be acquired to access the labour market; a second level, aimed at obtaining a Master's degree; and a third level aimed at obtaining a PhD, with the second and third levels guaranteeing that the education is more specialised.
- To establish a common credit system, allowing guarantees to be made that all students put in the same amount of effort to obtain a qualification.
- To deploy a European Diploma Supplement which describes in detail the skills acquired by the student during their studies and for promoting adoption of a standardisable and comparable system of higher-level qualifications, so as to enable the same employment opportunities to all graduates.
- To encourage student and lecturer mobility within the EHEA.
- To promote European cooperation so as to guarantee the quality of higher-level studies according to comparable criteria.

The Bologna Declaration does not assign any legally enforceable duties to the signatory countries. It set a timeframe, until 2010, for creation of the EHEA, with biennial implementation phases, each of which concludes with the corresponding Ministerial Conference which reviews what has been accomplished and sets directives for the future.

The first conference for monitoring the Bologna process took place in Prague in May 2001. In it, the ministers adopted a Communiqué which endorsed the actions taken to date, indicated the steps to be taken in future, and admitted Croatia, Cyprus and Turkey as new members of the process. The Prague Communiqué of 2001, the Berlin Communiqué of

2003, the Bergen Communiqué of 2005, the London Communiqué of 2007 and the Leuven Communiqué of 2009 ratified all the processes carried out. In the Yerevan Communiqué, of 2015, four priorities were established for the future: improvement of the quality and appropriateness of teaching and learning; fostering employability for graduates during their working lives; working towards more inclusive systems; and applying the agreed structural reforms.

The following table sets out the main advances made by topic for each of the declarations issued following the corresponding ministerial conferences.

Table 23.
Principal decisions adopted in the ministerial conferences.

Sorbonne Declaration (1998)	Bologna Declaration (1999)	Prague Communiqué (2001)	Berlin Communiqué (2003)
Student and lecturer mobility.	Mobility of students, lecturers, researchers and administrative staff.	Social aspect of mobility.	Transferability of loans and grants. Improvement of data on mobility.
Common two-cycle degree system.	Easily understandable and comparable degrees.	Comparable recognition. Development of recognised joint degrees.	Inclusion of doctorate level in the third cycle.
		Social aspect.	Equal access.
		Lifelong Learning (LL).	Coordinate national LL policies
Use of credits.	Credit system (ECTS).	ECTS and the Diploma Supplement (DS).	ECTS for credit accumulation.
	European cooperation in the field of quality assurance.	Cooperation between quality assurance and recognition professionals.	Quality assurance at institutional, national and European level.
The Europe of Knowledge.	The European aspect of higher education.	The EHEA as an attractive space.	Links between higher education and research.

Source: adapted from the European Commission, EACEA and Eurydice (2015): 25.

Bergen Communiqué (2005)	London Communiqué (2007)	Leuven Communiqué (2009)	Bucharest Communiqué (2012)
Focus on visas and work permits.	The challenge of visas and work permits, pensions system and recognition systems.	Goal for 2020: 20% student mobility.	Explore ways of achieving automatic recognition of degrees.
Adoption of the EQF and the EHEA. Implementation of the National Qualification Frameworks.	National Qualification Frameworks for 2010.	National objectives for the social aspect to be assessed in 2020.	New roadmap for countries which have not established a national qualifications framework.
Reinforcement of the social aspect.	Commitment to draw up and effectively follow national action plans. Collaboration agreements to improve employability.	National objectives for the social aspect to be assessed in 2020.	Reinforce policies for broadening access and improving completion rates.
Flexible training itineraries in higher education.	The role of higher education in lifelong learning	Lifelong learning as a public responsibility which requires solid collaboration agreements	Improve employability, lifelong learning and entrepreneurial skills by improving cooperation with companies. peration with companies.
	Need for a coherent use of recognition tools and practices.	Continue with implementation of the Bologna tools.	Ensure that the Bologna tools are based on results of learning.
Adoption of European Standards and Guidelines for Quality Assurance.	Creation of the European Quality Assurance Register (EQAR).	Quality as a central principle of the EHEA.	Registrations in the EQAR. Developing its activities throughout the EHEA.
International cooperation based on values and sustainable development.	Adoption of a strategy for improving the social aspect of the Bologna Process.	Encouraging dialogue on global policy through Forums on Bologna Policy.	Evaluate implementation of the 2007 strategy on the global aspect, in order to establish directives on future actions.

As creation of the EHEA has progressed, the legislatures of the various member states have been adapting to this new reality, reflecting everything from the new three-cycle structure for the higher education system to the national qualification frameworks. The extent to which different agreements have been translated to internal regulations in each country varies, giving rise to a scenario in which some countries are closer to the objectives planned by the various conferences and others still have significant work to do: either because they joined the European area later, because the structures they started with were more difficult from those planned, or because of a greater or lesser degree of involvement in the process.

Besides the ministerial conferences themselves, the EHEA has various structures dedicated to following up on the implementation of the decisions adopted in the conferences. Foremost among these is the Bologna Follow-up Group (BFUG), which meets at least once every six months. It is formed by representatives of all the members of the Bologna process and of the European Commission, as well as the EHEA advisory bodies (here as well, in an advisory role). This Group is responsible for designing a work plan until the next ministerial conference. Between the annual meetings of the Bologna Follow-up Group, the work is supervised by the Council with support from the Secretary, which provides the country which will host the next ministerial conference. The Bologna process is presided over by the country which holds the Presidency of the European Union (rotated every six months).

The main role of the Secretary is to provide support to the Follow-up Group at various levels, as well as designing the agendas and providing the reports and notes required for preparing the meetings at the request of the Group's Co-chair. In the same vein, the Secretary is responsible for providing up-to-date information on the Bologna process and for maintaining an electronic archive.

In practically all of the countries, it is the Ministry of Education (regardless of the exact name it may adopt) which is responsible for Higher Education. The corresponding minister is responsible for representing their country in subsequent ministerial conferences and their department has the task of implementing the agreed reforms following the meetings of all the members of the EHEA.

10.2. Quality assurance systems

Quality assurance for university institutions, their courses and their teachers has been one of the key goals of the EHEA since the Bologna Declaration. The documents arising from previous ministerial conferences have been refining the criteria and establishing common standards in the countries party to the Bologna process in such a way that, once again, it facilitates comparison of qualifications.

In this sense, the existence of the European Association for Quality Assurance in Higher Education (ENQA) is vital. The following table outlines the bodies responsible for tasks related to the higher education quality assurance systems which comprise the ENQA.

Table 24.
ENQA member agencies

Countries	Agencies
AUSTRIA	AQ Austria – Agency for Quality Assurance and Accreditation in Austria (Vienna).
BELGIUM	AEQES – Agency for Quality Assurance in Higher Education (Brussels). VLUHR – QAU - Flemish Council of Universities and University Colleges – Quality Assurance Unit (Brussels).
BULGARIA	NEAA – National Assessment and Accreditation Agency (Sofia).
CROATIA	ASHE – Agency for Science and Higher Education (Zagreb).
CZECH REPUBLIC	Czech Republic Accreditation Commission (Prague).
DENMARK	Danish Accreditation Institution (Copenhagen).
ESTONIA	EKKA – Estonian Agency for Quality in Higher and Vocational Education (Tallinn).
FINLAND	FINEEC – Finnish Council for Assessment of Education (Helsinki).
FRANCE	CTI – Engineering Degrees Commission (Paris). HCERES – High Council for Assessment of Research and Higher Education (Paris).
GERMANY	ACQUIN – Accreditation, Certification and Quality Assurance Institute (Bayreuth). AHPGS – Accreditation Agency for Curricula in Social Sciences and Health (Freiburg). AQAS – Agency for Quality Assurance through Accreditation of Curricula (Cologne). ASIIN e. V. – Accreditation Agency (Dusseldorf). EVALAG – Baden-Württemberg Assessment Agency (Mannheim). FIBAA – Foundation for International Accreditation of Business and Administration (Bonn). GAC – German Accreditation Council (Bonn). ZEyA – Central Agency for Assessment and Accreditation (Hannover).
GREECE	HQA - Hellenic Quality Assurance and Accreditation Agency (Athens).
VATICAN CITY	AVEPRO – Agency for Assessment and Promotion of Quality in Ecclesiastical Faculties (Rome).
HUNGARY	Hungarian Accreditation Committee (Budapest).
IRELAND	QQI – Quality and Qualifications Ireland (Dublin).
KOSOVO	KAA – Kosovo Accreditation Agency (Pristina).

LITHUANIA	SKVC - Centre for Quality Assurance in Higher Education (Vilnius).
NETHERLANDS	NVAO – Netherlands and Flanders Accreditation Organisation (The Hague). QANU - Quality Assurance in Netherlands Universities (Utrecht).
NORWAY	NOKUT - Norwegian Agency for Quality Assurance in Education (Oslo).
POLAND	Polish Accreditation Committee (Warsaw).
PORTUGAL	Agency for Assessment and Accreditation in Higher Education (Lisbon).
ROMANIA	ARACIS – Agency for Quality Assurance in Higher Education (Bucharest).
RUSSIA	AKKORK – Agency for Quality Assurance in Higher Education and in Professional Development (Moscow). NCPA - National Centre for Public Accreditation (Yoshkar-Ola).
SERBIA	CAQA – Commission for Accreditation and Quality Assurance (Belgrade).
SLOVENIA	SQAA-NAKVIS - Slovenian Agency for Quality Assurance in Higher Education (Ljubljana).
SPAIN	ACC-DEVA – Andalusian Knowledge Agency, Department of Assessment and Accreditation (Cordoba). ACSUCYL - Agency for the Quality of the Castile and Leon University System (Valladolid). ACSUG – Agency for the Quality of the Galician University System. ANECA – National Quality Assurance and Accreditation Agency. AQU - Agency for the Quality of the Catalonian University System. FCM – Madridmasd Foundation for Knowledge. Unibasq - Agency for the Quality of the Basque University System (Vitoria-Gasteiz).
SWITZERLAND	AAQ – Swiss Quality and Accreditation Agency (Bern).
UNITED KINGDOM	BAC – British Accreditation Council (London). QAA – Quality Assurance Agency for Higher Education (Gloucester).

Source: www.enqa.eu.

As can be seen from the table, of the 47 countries which currently comprise the EHEA, 27 of them possess some sort of quality control or accreditation agency within the ENQA. The majority take the form of an agency or council and there is not necessarily a single body responsible for all tasks related to quality assurance. In Spain, there are even agencies at a regional level. France is one of the few cases in which an agency accredits qualifications from a specific field of study, in this case Engineering.

The Bergen Communiqué (2005) already mentioned the need to establish criteria and directives for quality assurance in the EHEA. These were set out jointly by the ENQA, EUA, ESA and EURASHE. The last document containing quality standards and guidelines dates from 2015. As it notes, "commitment to quality assurance processes, particularly external ones, permits the European higher education systems to demonstrate their quality and to increase transparency, as well as helping to build mutual trust and better recognition of its qualifications, programmes and provisions" (ENQA et al. 2015: 6).[47]

These general guidelines rest on three pillars: on one hand, the internal quality assurance procedures; on another, the external procedures; and, lastly, the quality assurance agencies. The first two are related and the second is regarded as a means of ensuring the efficacy of the first.

With regards to the internal procedures, the EHEA outlines that universities must guarantee for their actions that they have complied with the objectives associated to the education they provide, while also continuously seeking to improve them. Among the elements to be considered and assessed by these internal policies are the internal quality policies themselves; the existence of established procedures for approval of new qualifications; aspects relating to students and to the services provided to them and with the teaching body. Moreover, it establishes that higher education institutions must undergo external quality assessment processes on a cyclical basis.

Among the standards for external assessment, procedures are established for groups of external experts (peer assessment); the visit to the institution; the transparency of assessment criteria and of the assessment results. Lastly, where quality assurance agencies are concerned, ENQA states that they should be independent and act autonomously, should have adequate resources, should publicise their findings and should themselves have quality assurance systems and submit themselves to periodic external assessments.

In addition to the ENQA, other institutions exist, such as the European Consortium for Accreditation (ECA), an organisation which in recent years has reflected on accreditation of European higher education programmes and institutions with the aim of making progress towards mutual recognition of assessment results from the various agencies.

47 Own translation.

10.3. Structure of higher education qualifications

Before covering the structure and levels into which higher education qualifications are divided in the EHEA, it is vital to stop to consider the design of the credit system upon which these studies are based, this way of organising academic activity having allowed the characteristics of qualifications to be standardised between the member states and, in this way, facilitated mobility and recognition of studies pursued abroad.

The European Credit Transfer System (ECTS)

The EHEA implements the European credit system, known as the European Credits Transfer and Accumulation System (ECTS). It was created and developed alongside student mobility programmes to answer the need to find an equivalencies and recognition system for studies pursued in other countries. Generalisation of this academic unit of measurement for all students was a key goal in creating the EHEA, so that work done by a student in any of the universities of the Member States would be easily recognisable in terms of level, quality and relevance. The European credit is defined as the value unit for academic activity including both theoretical and practical teaching, as well as other guided academic activities and the workload which the student must meet to meet the educational goals.

The ECTS system sets 60 credits as the total workload for a full-time student during one academic year. As such, one semester is worth 30 credits and a trimester is worth 20 credits. As a guideline, and considering approximately 40 weeks per year of academic activity and a workload of around 40 hours/week, the amount of work to one European credit is set at 25 to 30 hours (1,500-1,800 hours of work for the student per year).

Table 25.
European Higher Education Area ECTS credit syste

One academic year full-time = 60 ECTS (1,500-1,800 hours)	
• Semester I: 30 ECTS	• Semester II: 30 ECTS
Assuming: • 40 weeks/year • 40 hours/week, One ECTS credit = 25/30 hours	

The timetables for each of the subjects which make up an official qualification adhere to this unit of measurement, including allocating the number of credits corresponding

to each of the theoretical and practical teaching classes, to preparation for and sitting of exams, to study time, and to assignments that students must complete to achieve the learning objectives in the said subject. Moreover, recognition of teaching work by lecturers includes not only the number of hours dedicated to teaching, but also those which the lecturer spends organising, guiding and supervising the work done by students.

European Diploma Supplement (EDS)

The EHEA adopts an accessible and comparable qualification system, primarily through the European Diploma Supplement (EDS). This is a document which accompanies the university diploma (but does not replace it) and which provides information on eight aspects: the holder of the diploma; their qualification; the level of the qualification; the subjects studied and grades obtained; the certification of the supplement; details of the national higher education system and additional information. It was developed in 1998 by the Council of Europe, the European Commission and UNESCO's European Centre for Higher Education (UNESCO-CEPES) and included in the aforementioned Bologna Declaration of 1999. The goal of implementing the EDS is to improve transparency of qualifications and to contribute to facilitating academic and professional recognition through a document share by all the countries of the EHEA. In any case, it does not guarantee recognition of the qualification.

According to the aforementioned report from the European Commission, EACEA and Eurydice (2015: 76), only 31 of the EHEA member countries issue the Supplement automatically, at no cost and in a language widely used in the European Union. The main obstacle is seen, it is stated, in issuing it automatically. Nor is its implementation the same at different levels of education.

10.3.1. Graduate and postgraduate qualifications

The Bologna Declaration (1999) sets one of its objectives as designing easily comparable qualifications. Moreover, it makes a bid to establish a two-cycle system. The subsequent declarations opted to design a system of ranges or intervals with regard to the duration of these cycles: thus, the first cycle programmes have to fall between 180 and 240 ECTS credits, while for the second cycle, the requirement is 80 to 120 ECTS credits, with a minimum of 60. On top of this is a third cycle: that of doctorate studies, which lasts between three and four years in the majority of cases.

Undergraduate studies have an end goal of furnishing the student with general education, in one or more disciplines, geared towards preparation for professional practice. Undergraduate degrees include basic study, qualification-specific study, a final project and external placements (if the qualification includes them). The qualification obtained is an undergraduate degree and should be relevant to the labour market, at both national and European levels.

Master's studies conclude with the student acquiring an advanced education, of a specialised or multidisciplinary nature, geared towards academic or professional specialisation, or to promoting commencement of research work. Master's courses have a duration of between one and two years and consist of 60 to 120 ECTS credits. These

are, for the first time, official studies which allow access to doctorate training. Unlike previous Master's studies, these are officially regulated with regards to the maximum and minimum number of credits and also the structuring of their contents.

Doctorates represent the third cycle of official university studies, leading to acquisition of skills and abilities related to quality scientific research. For doctorate studies, an official Master's must have been completed in order to begin the research period. These are the only studies in which no maximum number of years is set for their completion, but for full-time students this varies between three and four years.

According to the document from the European Commission, EACEA and Eurydice (2015), the most widespread model for the first cycle has 180 ECTS credits (58% of programmes), although a trend moving away from this is seen. As for the second cycle, the most widespread model has 120 ECTS credits. Apart from this, in 31 countries we see qualifications which do not fit the model which the EHEA is trying to implement.

As outlined in the Communiqué from the Conference of Education Ministers in Berlin in 2003, Realising the European Higher Education Area, completing first cycle studies grants access to second cycle studies, and completing the second cycle grants access to the third cycle. There are cases, however, in which it proves necessary to sit an exam or some sort of supplementary course, often due to the difference between academic qualifications and professional qualifications.

What this makes clear is that the creation of a common higher education area is a process, the duration of which may be longer or shorter depending on the starting states of the countries involved, which certainly requires close involvement and a significant political commitment from its participants. In the case of countries which had a structure similar to that proposed by the Bologna process, the path was simpler. In others, it was necessary to apply reforms to the curricula in order to adapt to the EHEA's model and to facilitate the exchange of students between the various countries.

By way of example, in Spain's case, the reforms involved a gradual disappearance of the old diplomas, technical engineering, *licenciatura* and engineering degrees, all of which became undergraduate degrees with four-year durations and 240 ECTS credits. In the case of those pre-Bologna studies in which it proved necessary, "conversion courses" to degrees were offered, intended to complete the education of those students whose qualifications are perfectly comparable to those offered currently.

Moreover, the new organisation of university education is not only the result of structural modifications, but has also seen changes in teaching methodologies, now placing the focus of the learning process on the student, in the context of a student's entire life. Specifically, lifelong learning is another of the EHEA's lines of action (see Table 23), with initiatives intended to foster lifelong learning and recognition of education prior to entering the higher education system.

This new model views the study plan as an implementation project for university education. In order to be approved it must introduce new elements such as justification of the programme, its objectives, student admission procedures and contents. A plan is presented based on the skills which the student must acquire, broadening, without

excluding, the traditional approach based on content and contact hours. Emphasis is therefore placed on methods of learning the said skills as well as on procedures for assessing their acquisition. This new model also pays attention to selection of the human and material resources available to universities; they must specify the student access and admission system, decide the regulations governing mobility if this is envisioned as well as the student progress and duration of the stay, setting out the results expected upon completing studies. All this to ensure the quality standards specified in the internal quality assurance systems of the universities. The quality assurance systems, which are part of the new study plans, are essential for the new organisation of studies to function efficiently and to build the confidence on which a qualification accreditation process relies.

The new organisation of studies seeks to increase the employability of graduates while achieving its objective of guaranteeing compatibility with regulation governing the professional careers of public employees. The possibility of introducing external placements strengthens the commitment to employability of future graduates, enriching the education of students on undergraduate courses in an environment which provides, both they and those responsible for the education, with a deeper understanding of the skills that they will need in the future.

Furthermore, in the case of qualification which empower graduates to access or practise professional activities, it is expected that the respective governments will set the conditions that the study plans must conform to in order to ensure that the qualifications accredit possession of adequate skills and knowledge for said professional practice.

a) Graduate studies

Study plans leading to an undergraduate degree are drawn up by the universities, in accordance with the criteria indicated in the previous section, and after verification by the agencies of each ENQA member country are registered in the European Quality Agencies Registry (EQAR).

As has been mentioned previously, in drafting the study plans, the University prioritises basic and generalist education and not student specialisation. The study plans must cover between 180 and 240 credits and must contain all the theoretical and practical education which the student must acquire: basic aspects for the field, compulsory or optional subjects, seminars, external placements, guided projects, final degree project or other educative activities. In cases in which an undergraduate degree includes fewer than 240 credits, Universities will arrange mechanisms which supplement the number of undergraduate credits with the number of Master's credits, so as to guarantee that the undergraduate education is generalist and the contents of the Master's lean towards greater specialisation. These undergraduate studies conclude with writing and defending a final degree project, which is assigned a minimum of six credits and a maximum of 12.5% of the credit total for the qualification. The final phase of the study plan is carried out and is geared towards assessment of the skills associated with the degree.

The University proposes that the corresponding Undergraduate degree be allocated to one of the following fields of study:

- Arts and Humanities.
- Sciences.
- Health Sciences.,
- Social and Legal Sciences.
- Engineering and Architecture.

Said allocation will be equally applicable in those cases in which the degree is related to more than one field and is made based on the primary field.

The study plan contains a number of credits of basic education which covers at least 25 percent of the total credits for the degree. Of the basic education credits, at least 60 percent are credits linked to some of the subjects in the field of study to which the degree belongs and are finalised as subjects affording a minimum of six credits each, which are offered in the first half of the study plan. The remaining credits, if any, consist of basic subjects in the same field of study or others, or by other subjects so long as they can be justified as basic for the student's initial education or as cross-disciplinary. For the field of Health Sciences and for degrees which train students for healthcare professions, it is specifically envisioned that students will acquire skills common to various specialisations through a period of standardised training, called the core, corresponding to the specialised education structure in other member countries of the European Union.

This core system entails an evolution of the education system and an adaptation of teaching structures to new education programmes and to the corresponding accreditation requirements for teaching centres and units, in accordance with the terms, core and specialised, which comprise full education in Health Sciences specialities. The intention of the core system is that the healthcare professions, through the skills acquired in the core education period, learn, from the first stages of their specialist training, to handle health problems in a comprehensive manner and to work in the most appropriate way in order to provide healthcare geared towards effectively resolving patient processes, with the inter-disciplinary and multidisciplinary focus which modern science requires. In addition, the legislation governs key aspects of the procedures for re-specialisation of professionals providing services to the healthcare system for the purposes of acquiring a new specialist qualification from this same core.

Moreover, the various re-modellings of university teachings carried out to adjust to the EHEA criteria have emphasised the benefits of external placements for university students. These placements may take place in the university itself or in collaborating entities such as companies, institutions and public or private entities in the national or international spheres.

b) Master's programs

Master's studies conclude with the student acquiring an advanced education, of a specialised or multidisciplinary nature, geared towards academic or professional specialisation, or to promoting commencement of research work.

Official university Master's Degrees can include specialisations in their curricula which relate to their scientific, humanistic, technological or professional field, assuming that these have been outlined in the study plan report for the purposes of the verification procedure performed by the accreditation agencies. In any case, the Public Administrations ensure that the name of the degree corresponds to its content and to the specific regulation where applicable, likewise ensuring that no errors arise concerning its level or academic value, nor any confusion regarding its content and, where applicable, professional value.

To access official Master's studies applicants must hold an official university degree issued by a higher education institution belonging to the state in question or to another member state of the EHEA, and which authorises access to Master's studies in that state. Similarly, graduates from systems outside the EHEA can access studies without requiring ratification of their qualifications, upon confirmation from the university that they demonstrate a level of education equivalent to the corresponding official university degrees and which, in the country of issue, allows access to postgraduate studies. Access through this route does not entail ratification of the prior qualification held by the interested party, nor its recognition for purposes other than Master's studies.

Students may be admitted to a Master's programme according to the specific requirements and assessment criteria corresponding to the university Master's degree or those set by the university. The university includes the admissions procedures and requirements in the study plan, which may include additional training courses in some fields, based on the education previously demonstrated by the student.

Joint honours undergraduate or Master's degrees

The universities have established, based on their own interests, the possibility of students simultaneously studying two study plans in order to obtain two official degrees at the same academic level. Each of them regulates the procedure and decides which study plans have the potential to be combined. Joint honours do not , in any case, entail modification of the educational organisation of any of the degrees being combined. Students who complete the joint curricular itinerary obtain both degrees, thus guaranteeing that they will be accredited as having met the requirements for each.

The universities may offer institutional joint honours programmes or inter-university joint honours programmes with another university within the same country or in another. Institutional joint honours programmes are those proposed by the academic bodies of two official degrees of the same cycle in order that students may be admitted to study for both degrees at once. They must be approved by the University, for which purpose the universities themselves set their requirements. Inter-university joint honours degrees with other universities are established by agreements made by the University with other Spanish or foreign universities, for official degrees in the same cycle. The agreements determine the requirements for students applying to the said programme; ECTS recognition between the qualifications of both universities; regulation of student mobility from their home university where they study their first degree and the destination university where they will obtain the second, as well as regulation of the offering to students wishing to apply to the programme.

The joint honours offering includes a proposed curriculum with the structure of the joint degree, indicating the total number of credits to be studied, the number of academic years, equivalency tables for recognition and the yearly academic schedule. In the joint degree, the student studies the basic subjects for both degrees (with the sole exception of the corresponding examinations, if both degrees are from the same field of study); the compulsory subjects, unless these are common to both study plans or may be accumulated on the basis of the university's Credit Accumulation and Transfer regulations; the final project, which may be a single project so long as the skills associated with both degrees have been acquired. Otherwise, one must be completed for each degree. Students additionally study optional subjects, except for those recognised in the joint honours project due to their skills having been acquired in modules from the other degree; the undertake external placements, should these be compulsory modules for either of the study plans and not eligible for recognition. The modules for which recognition can be obtained are determined through a specific table of equivalencies between the two degrees.

c) Doctorate programs

Doctorate studies comprise the third cycle of official university studies and must lead to the acquisition of skills and abilities related to quality academic research. Doctorate programmes are the ensemble of activities leading to acquiring these skills and abilities required to obtain a PhD, with the aim being developing the education of the doctoral student y establishing the procedures and lines of research for development of the doctoral thesis. Completing these studies affords the right to obtain an official PhD qualification, official and valid throughout the country.

From the European perspective, from the Berlin Communiqué in 2003, until the latest Leuven Communiqué in 2009, the European ministers responsible for Higher Education have been making progress in developing which aspects should characterise a doctorate programme in the framework of the European Higher Education Area and the European Research Area. In the same way, the various EUA meetings and activities have produced a series of studies and recommendations for the development of doctorate programmes. The Berlin Communiqué (2003) addresses, among the other business, the role of doctorates with regards to the EHEA and the ERA.

The process of defining doctorates as the third cycle can be clearly seen in the Doctoral Programmes for the European Knowledge Society promoted by the EUA which was used as a basis for the Communiqué from the Bergen Conference (2005), where doctorates were definitely established as the third cycle of European studies, distinct from Master's degrees. In the said communiqué, the European ministers responsible for higher education highlighted the importance of university higher education in improving Research, Development and Innovation (R&D&I) and the importance of research in supporting the universities' teaching role, all for the purpose of improving the economic and cultural development of society, as well as fundamentally defending its role as an element of social cohesion. The key component of doctoral education is the advancement of scientific knowledge through "original research". Additionally, in this third cycle the participants in doctorate programmes are considered to be not merely students, but rather researchers in training. Thus, this point in the Bologna process connects doctoral education, the research profession and the spread of knowledge tThe European process has achieved a certain

international acclaim since one of its main outcomes is reaching a clear definition of the level of skill, the requirements and the contribution to society for a PhD within the national and European framework. In this way, it clearly defines the aim of PhDs in the new society of knowledge, which will greatly contribute to professional recognition and social prestige, to value for employers and to contributions to the new growth model. The rights of PhDs as researchers in training are reflected in the bases described by the European Charter for Researchers and a Code of Conduct for the Recruitment of Researchers of March 2005, widely accepted across Europe by Universities.

The particular characteristics of doctorate studies and the variety of needs and methods of training researchers in the different areas of expertise suggest that a high degree of flexibility is needed in regulating these studies. In this way, a doctoral education model is encouraged based on universities but involving collaboration by other bodies, entities and institutions involved in R&D&I both nationally and internationally, in which the Doctoral Schools are called upon to play a vital role.

The Doctoral Schools are units created by one or more universities, and possibly in collaboration with other bodies, centres, institutions and entities with R&D&I activities, national or foreign, whose key objective is organising the doctorates under their control, in one or more fields of study, or of an interdisciplinary nature. The Schools plan the necessary offerings of activities intrinsic to the education and development of doctoral candidates, carried out either by partners of the universities and promoting entities, or by visiting external professionals, lecturers or researchers. In all cases, the Doctoral Schools must ensure that they are leaders in their fields and that they have an adequate critical mass of third cycle lecturers with PhDs and doctoral candidates in their area of expertise.

Doctorate programmes include organised elements of researcher training which do not need to be structured by ECTS credits and include both cross-disciplinary training and training specific to the field of each programme, although in all cases the main activity of the doctoral candidate will be research. The organisation of said training and the procedures for monitoring it must be expressed in the report for verification of the doctorate programmes accredited by the corresponding agencies and form part of the subsequent assessment for the purposes of renewing the accreditation of the said programmes.

Doctorate studies ensure, as a minimum, that the doctoral candidate acquires the following basic skills:

- Systematic understanding of a field of study and mastery of the skills and research methods related to said field.
- Capacity to conceive, design or create, put into practice and implement a substantial research or creative process.
- Capacity to contribute to broadening the frontiers of knowledge through original research.
- Capacity to perform critical analysis and for evaluation and synthesis of new and complex ideas.
- Capacity to communicate with the scientific and academic community and with

society in general concerning their areas of expertise in the manner and habitual languages of the international scientific community.

- Capacity to support, in academic and professional contexts, scientific, technological, social, artistic or cultural development within a knowledge-based society.

Obtaining a PhD affords a high level of professional competence in diverse fields, especially in those requiring creativity and innovation.

Doctorate studies have specific characteristics when it comes to their exact duration or to their division into teaching periods and research periods in the various countries, but this has not proven an obstacle to the creation of the EHEA. By way of example, what follows is an explanation of the main elements in Spain.

Doctorate studies have a maximum duration of three years, full time, counted from the doctoral candidate's admission to the programme until presentation of their doctoral thesis. Nevertheless, and with authorisation from the academic commission responsible for the programme, doctorate studies may be pursued part time. In this case, these studies may have a duration of up to five years from admission to the programme until presentation of the doctoral thesis. If, after the said three year period has transpired, no thesis submission request has been made, the commission responsible for the programme may authorise an extension to this period of one more year, and in exceptional circumstances of an additional year beyond that, per the conditions established in the corresponding doctorate programme. In the case of part-time studies the extension may be granted for two years more, which, likewise, in exceptional circumstances, may be extended by a one more additional year.

Doctorate studies are, in all cases, completed by writing and defending a doctoral thesis which includes original research results. The doctoral thesis consists of an original research project conducted by the candidate in any area of expertise. The thesis empowers the doctoral student to work autonomously in the field of R&D&I. It is the universities that establish the procedure for presenting the doctoral thesis, including setting a maximum timeframe for the subsequent reading of it. Similarly, the universities establish monitoring procedures with the aim of ensuring the quality of doctoral theses, underscoring in particular the quality of the doctoral education and the supervision. It also falls to the university to publish the completed doctoral thesis such that during the assessment process, and prior to the defence of the thesis, other doctors may offer remarks on its content. Theses may be developed and defended in the languages habitually used for scientific communication in the area of expertise. The tribunal which assesses the doctoral thesis will be formed according to the requirements set by the university and it is stipulated that all the members of the tribunal must hold a PhD and have demonstrable research experience. In any case, the majority of the tribunal will consist of members outside the University and the institutions collaborating with the School or programme. The tribunal which assesses the thesis has access to the document listing training activities completed by the doctoral candidate. This monitoring document does not provide a quantitative grade but does serve as a tool for qualitative assessment which supports the assessment of the doctoral thesis.

The doctoral thesis is assessed in the defence, publicly, which consists of the doctoral candidate presenting and defending the research project they have undertaken before the members of the tribunal. The PhDs present in the public meeting may pose questions at the time and in the manner indicated by the president of the tribunal. The tribunal will issue a report and the overall grade granted to the thesis in terms of "pass", or "fail", and may propose that the thesis be awarded "cum laude" honours if the secret ballot is unanimously in favour of this.

The doctoral diploma may include on its obverse the mention "International Doctor" assuming that during the period of training required for obtaining the PhD, the doctoral candidate has undertaken a stay of at least three months outside their country of study, in a higher education institution or prestigious research centres, pursuing studies or carrying out research work. The stay and the activities must be endorsed by the director and authorised by the academic commission, and is included in the document listing the doctoral candidate's activities. It may also be included when part of the doctoral thesis, at least the abstract and conclusions, has been written and presented in one of the languages habitually used for scientific communication in the area of expertise, where this is not an official language of the country in question. This rule does not apply when the stays are in, or the reports and experts originate from, a Spanish-speaking country. The same applies when the thesis has been advised by a minimum of two expert PhDs belonging to a higher education institution or research institute which is not Spanish. And also in the case that at least one expert belonging to a non-Spanish higher education institution or research centre, who holds a doctorate, and who was not responsible for the stay undertaken by the doctoral candidate in their research stage, formed part of the tribunal assessing the thesis.

The thesis defence is carried out in the same Spanish university in which the doctoral candidate is registered, or, in the case of joint doctorate programmes, in either of the participating universities or according to the terms set out in the collaboration agreements.

10.4. Scholarship system for the promotion of studies abroad and mobility programs

In a EHEA with 47 member countries, both grants to encourage foreign studies, be they public or private, and mobility initiatives for students, lecturers and administrative staff from higher education institutions are so numerous that it would be impossible to describe them. Each country has its own national public system (in addition to which there are, in many cases, systems corresponding to other territorial divisions); there are, furthermore, numerous initiatives originating from the private sector which vary between the States.

It is necessary, however, to dedicate some space to covering the Erasmus Programme. The European Community Action Scheme for the Mobility of University Students (Erasmus) programme predates the implementation of the EHEA: it stems from a decision of the Council of what was then the European Economic Community, in 1987, which adopted a plan to encourage student mobility between the member countries. This mobility then

drove the search for solutions to the problem of recognising studies pursued abroad and encouraged the creation of higher education institution networks. At this initial point, 12 countries joined the programme.

As the years went by it underwent various reforms and expansions, until in 1995 it became part of the Socrates general programme, although Erasmus remained focused on mobility in higher education. Particularly relevant is the year 2007, when, on the basis of the EU's Lifelong Learning Programme, Erasmus also include mobility for professional placements.

Studies pursued in other countries are recognised by the home institutions and, to fund the placements, students receive grants funded by the European Union and the national governments; is some cases, extraordinary grants exist from other levels of government or even from private companies. Each university offers a series of placements each year at institutions which with it has agreements and obtaining the grant entails exemption from tuition fees at the receiving university. The duration of the grant may be a four-month term or a year and the requirements for candidates generally include completion of the first year of undergraduate studies and proof of a certain level in the language of the destination country. Moreover, the Erasmus programme also provides for lecturer mobility.

The latest update to this programme came in 2013, with approval of the European Parliament and Council Regulation N.º 1288/2013 of the 11th of December 2013, which created the Erasmus+ Programme of education, training, youth and sport in the European Union, with the goal, among others, with promoting the mobility of students from higher education institutions, to contribute to the travel and residence costs during the study or placement period in another country participating in this programme.

10.5. Professional activity of university graduates

Professional competencies define the fields in which a professional can practise, establish the conditions for said practice and set any qualitative or quantitative limits which may exist. In general, it is the Government which outlines these competencies. Academic qualifications tend to incorporate various activities which are not exclusive to the profession. In order to avoid fraud or irresponsible practice in professions, various statutory provisions exist which limit the responsibilities of each professional field. Not all professions are assigned their own competencies; mostly those derived from technical studies such as architecture or engineering, although competencies also exist for occupations related to Law (lawyers, notaries) and the field of health (Medicine, Nursing, Veterinary Medicine...).

10.5.1. Competencies in the European Union under the European Higher Education Area

The main aim of the Bologna process is to increase the mobility and employability of European graduates in order to create the Europe of Knowledge and to secure international competitiveness. The EHEA allows university transcripts to be compared and understood in any member country of the European Union. The result of this, in the context of European Convergence, is that all professionals will have the competencies associated with their qualification.

On the 23rd and 24th of March 2000 the Lisbon European Council resolved, in its report An internal market strategy for services, to facilitate free provision of services within the European Union and for professional mobility to prove as easy as within a single member State. In 2001, the Stockholm European Council agreed that the European Commission would present the spring European Council in 2002 with specific proposals for a qualification recognition system and for more uniform, transparent and flexible study periods. In light of this agreement the European Council issued, on the 7th of September 2005, the 2005/36/CE Directive governing recognition of professional qualifications within the framework of the EHEA. This document appeared with the aim of facilitating free provision of services and, to do so, established specific regulation aiming to broaden the possibility of practising professional activities with an original qualification. The professional is subject to application of the disciplinary rules of the receiving member State that relate directly and specifically to professional qualifications.

This directive presents no obstacle to the possibility of member States recognising, in accordance with their regulation, professional qualification acquired outside the borders of the European Union by a citizen of another country. Therefore, with the aim of ensuring the efficacy of the professional qualification recognition system, it considers it appropriate to define standardised formalities and rules of procedure for its application, a well as specific methods of professional practice.

To the define the recognition mechanism for professional qualifications, it is necessary to group the various education and training programmes into different levels. This method is established by Directives 89/48/CEE and 92/51/CEE. As outlined in these regulations, access to a regulated profession should be granted to those professionals who demonstrate that they have successfully completed training at a post-secondary level, with a minimum duration of one year, in those Member States in which said access depends on possession of a qualification proving successful completion of one cycle of higher or university education, with a minimum duration of four years, independently of the level of the required qualification in the receiving Member State. When no balance exists in the minimum training requirements to access regulated professions in the general system, it must be possible for the receiving Member State to impose a proportionate compensatory measure, which must value the professional experience of the applicant.

The professional associations and organisations of the Member states should create common platforms at a European level in order to ensure and adequate level of qualification. Moreover, these associations or organisations can issue professional certificates at European level to facilitate professional mobility, in particular because

this would streamline information exchange between the receiving Member State and the home Member State. These professional accreditation documents make it possible to monitor professional careers.

The document also deems it advisable to create network of contact points whose remit would be to inform and assist citizens of the Member States and which ensures the transparency of the recognition system. When the national or European professional body for a regulated profession presents a reasoned request for specific provisions for the recognition of qualifications on the basis of coordination of the minimum training requirements, the European Commission should assess the appropriateness of adopting a proposal intended to modify this Directive. This regulation will simplify management and its revision will take into account scientific and technological progress, especially when coordinating the minimum training requirements with a view to automatic recognition of training qualifications. The Directive proposes installing a single Committee for recognition of professional qualifications, also ensuring appropriate participation at European level of the representatives of professional organisations. Periodically, the Member States compile a report on the application of the Directive, which includes statistical data and which allows the impact of the professional qualification recognition system to be assessed. Moreover, the rapid evolution of technology and scientific progress makes continuous development vital in many professions. The Member States have planned for these situations and will keep professionals informed of technical and scientific advancements through suitable CPD.

10.5.2. Regulated professions

The term 'regulated profession' refers a professional activity or group thereof for which access, practice or one of its methods of practice directly or indirectly requires a Degree and which represent a profession in a Member State of the European Union or the European Economic Area, other than Switzerland. For the purposes of this procedure, the term 'Degree' includes any degree, certificate or other diploma or group thereof, issued by a competent authority in a Member State, which accredits: that the bearer has completed a cycle of post-secondary studies with a minimum duration of three years, or with an equivalent duration part-time, at a University, a Centre of Higher Education or another Centre at the same level of education, and that they have the requisite professional qualification to access a regulated profession in the said Member State. This assumes that the training was acquired primarily in one of the States indicated or that the holder can has three years professional experience accredited by the country in which the qualification is recognised.

Qualifications will be compared to documents issued by a competent authority in the aforementioned state, recognised as being of an equivalent level in this State, when the endorse training acquired in the indicated States.

Remarks and best practice

Remark 1.

The Bologna Declaration of 1999 was signed by 29 countries. Currently, the EHEA is composed of 47 States. Furthermore, upon analysing any of the annual reports on the state of the European Area, we can see that the members of the EHEA find themselves at different points with regards to implementation and development of the area's main instruments, be it the ECTS credit system, the European Diploma Supplement or the implementation of national qualification frameworks.

The point being made here is that creation of the European Higher Education Area is an open and progressive process. On one hand, the States join it at whatever point they consider appropriate. On the other, they are moving towards putting into practice its guidelines at different rates, either due to a different level of involvement in the project, or to greater differences between the initial education systems, or for other reasons. No obstacle exists to the countries making progress towards the various goals to the extent which is desirable or possible fGradualness should also be a characteristic of the common bi-regional area, as well as of any regional initiative in Latin America and the Caribbean, in order that, it proves possible through this flexibility to coordinate the wishes of each of the countries with agreements which allow progress towards this bi-regional area.

Remark 2.

The countries of the EHEA have been holding biennial or triennial conferences since 1999. However, they also have a system of bodies that allow the evolution of the measures adopted to be monitored and for continuity to be given to the process (through the Bologna Monitoring Group, for example). Any initiative towards the bi-regional area would benefit from establishing these sorts of mechanisms, in order that the declarations of intent or the specific projects might have monitoring bodies.

Remark 3.

The creation of reliable information systems allowing monitoring of progress is a vital instrument. Having adequate information has allowed the EHEA, for example, to determine that the implementation of the European Diploma Supplement is not progressing at the desired rate and that many countries have yet to include it; in an attempt to re-design the supplement, an advisory group has been formed. Both the implementation of a bi-regional area and its subsequent development necessarily require access to data which allow evaluation of the state of the national higher education, Science and Technology systems and, subsequently, to monitor the results of the measures adopted in order to take the necessary public policy decisions.

European Association for Quality Assurance in Higher Education (ENQA).
The work of the ENQA, first as a network (from 2000 to 2004) and later as an association, must at least be considered as an option when it comes to implementing a forum or organisation which, first of all, works to define common standards for assessment and quality accreditation and, secondly, becomes a place to exchange information and best

practices between the various countries of Latin America and the Caribbean.

ECTS System.

Implementation of ECTS credits as the standard unit of measurement for academic work has had, since its origin in 1989, the goal of facilitating international mobility by making it easier to recognise studies pursued abroad (in addition to other effects on teaching and learning styles). It cannot be said that this situation has been resolved. The 2012 report of the implementation of the Bologna Process noted "concern with regards to the persistence of problems with recognition of credits and qualifications" (European Commission, EACEA and Eurydice 2015: 47). However, nor can it be denied that the credit system has been a step towards the goal of removing barriers to mobility, in this case, barriers linked to uncertainty. Various systems in Latin America and the Caribbean have already begun working with the same type of instrument. Moreover, the work carried out in the frame of the 6x4 EU-LAC Project regarding an Academic Credit System (*Sistema de Créditos Académicos, SICA*) for Latin America means that significant groundwork already exists for implementation, in Latin America and the Caribbean, of a mechanism which facilitates "communication" with the European systems.

Erasmus. Programme.

Since its creation in 1987, the Erasmus Programme has demonstrated its effectiveness in increasing mobility between higher education university institutions, employability and creation of networks of work and cooperation.[48] The fact that it is underpinned by agreements between universities gives it a significant degree of flexibility, such that implementation of an initiative with these characteristics in Latin America and the Caribbean would allow universities, within the scope of their autonomy and interests, to be incorporated as they deemed appropriate. It would, certainly, be necessary to coordinate the funding methods and the necessary mechanisms to advise those universities wishing to join the programme on how to improve their chances and their communication channels with other institutions.

48 Concerning the impact of the Erasmus Programme, see European Commission (2014). Effects of mobility on the skills and employability of students and the internationalisation of higher education institutions.

Conclusions

Already, 18 years have passed since the Summit of Heads of State and of Government of the European Union, Latin America and the Caribbean (EU-LAC) in 1999 in Rio de Janeiro, where the initiative to create a bi-regional higher education area appeared. Despite the progress made in subsequent encounters and through various work groups, what is clear is that the goal for this area, set in 2015, has yet to be achieved.

Over the course of these pages a exhaustive review has been carried out of the current system of the various elements of the Higher Education, Science and Technology systems in the countries of Latin America and the Caribbean, with this review being accompanied by a chapter which assesses the same aspects in the case of the European Higher Economic Area. The starting situations of the countries comprising the EHEA and those of the countries of Latin America and the Caribbean (LAC) currently are not the same . The countries which signed the Sorbonne (1998) and Bologna (1999) declarations were part of a supra-national integration project begun decades earlier and which boasted institutions, mechanisms and procedures to support it. This institutionalism must necessarily be created in LAC, where regional integration projects are numerous, although none of these endeavours covers all the countries.

The implementation of a process of such breadth requires, first of all, commitment from the countries involved. Barlete (2010: 7), in a review of the process, states that many ministers did not attend the 2005 ministerial meeting in Mexico City and "instead sent representatives to stand in for them, reinforcing the idea that governments are disinterested in the ALCUE process". Despite the difficulties indicated by this quotation, the report shows that there are changes which the government will by necessity have to make in moving towards a bi-regional area, related to aspects ranging from standardisation of the lengths of courses or, at least, establishing quantification of the work load, for example through credits, to signing some sort of international document on recognition of qualifications. As is therefore logical, it is crucial for the governments of the countries to be involved in the process.

Creation of a common area need not be a compulsory process in terms of participation or degree of commitment. The EHEA shows in this sense that the countries have been joining the project as and when they deem it appropriate and the fact that some of them are making slower progress towards the stated objectives has not prevented another group of States from operating at a different pace.

However, government agents cannot be the only actors involved, given that this is a comprehensive process which will involve the entire university and scientific spectrum. On one hand, because, as has been seen, there are countries in which universities regulate themselves, either because there is only one university in the country, or because the regulations are produced by university councils. It is absolutely essential that these form part of the design of the bi-regional area. However, on the other hand, because it is desirable that as many as possible of the organisations, institutions and bodies which will be affected may participate in the process.

Once the actors are involved, we consider there to be a keystone to the whole process: the creation, systematisation and circulation of information with the aim of building trust. Naturally, it would also be a tool for understanding and comparing initiatives, identifying difficulties and seizing opportunities. Still, building trust is first and foremost. A credit recognition mechanism, an agreement on recognition of qualifications, a mobility programme based on these recognitions and on quality accreditations of HEIs and their education programmes are initiatives which will not be possible if the actors involved do not have trust their counterparts. As has been indicated in this document, the countries themselves have noted that the Regional Agreement on Recognition of Qualifications has not worked, due, among other things, to the lack of information and trust.

Revolving around this central pillar, there are various measures which seem essential. The first is setting out a system for quantifying the workload (credits/hours) which is shared or understandable throughout the region and which can interface with the European system; that is to say, that if it proves impossible to create a common mechanism, it can still function through a system of equivalencies. The experience of creating and implementing the ECTS will serve as a starting point. At no point do we intend to suggest that LAC should adopt the EHEA; it has already been indicated that we are facing different situations and starting points. It would seem logical, however, to take into account the experiences of those who designed and implemented and integration process for education and research systems, and also the initiatives which did not work as hoped (European Diploma Supplement) and which could be improved in this process.

The second measure concerns quality assessment and accreditation systems. As has been seen, in general terms these are based on the same phase model and take into account similar indicators (with differences which should be borne in mind). It is our view that, around this pillar of information production to build trust, it would be worth exploring the possibility of a second-level accreditation agency, that is, an agency which accredits agencies. In this endeavour, we must necessarily consider the experience of the Central American Higher Education Accreditation Council, which performs this task in Central America.

Thirdly, having noted the multitude of grant initiatives, mobility schemes or cooperation networks with all manner of characteristics, it is essential to carry out a centralisation and diffusion project for all this information. On one hand, in order to identify successful experiences which can be replicated, difficulties which some of these programmes or networks have faced and which will need to be overcome, and collaboration opportunities. On the other, for this endeavour to benefit, from the outset, the interested parties themselves: students, lecturers and researchers, which could more easily identify their possibilities and to establish links and contacts.

The regional experiences (Mercosur, OEA and SEGIB) can offer important lessons. The Erasmus programme, established in agreements between universities, is also a reference worth analysing from the point of view of its viability in LAC, always remembering that the success of the Erasmus programme lies in the parties' willingness to cooperate and in the possibility of being flexible when standardising studies proves complex; one example which can be given is the case of positive law which, by its very nature, tends to be studied only in countries in which it applies. It is essential, in any case, to cover, from the outset,

the topic of funding these programmes and to involve the private sector in both this aspect and in R&D&I, where it has also been noted that collaboration has room for improvement in LAC.

Fourthly, it is vital that LAC works purposefully towards adopting a regional instrument for qualification recognition. The task of rethinking and redesigning the 1974 Regional Agreement is an opportunity, and the materials generated in this process have allowed the causes of its failure to be identified and, on this basis, to make progress in designing a mechanism which proves attractive and reliable for the countries. The history of the various elements designed makes it clear that this is not a simple task, but it would be a step forward to move beyond the bilateral agreements upon which recognition currently relies and on to more inclusive mechanisms.

In neither of these areas are we starting from nothing. There are initiatives and studies on the possibility of a credits/hours system, experiences with instruments for recognition of qualifications and of grant and mobility programmes. There are, in the same vein, programmes such as Erasmus Mundus or the ALCUE NET network which demonstrate that it is possible to find ways to establish bi-regional cooperation in matters of higher education and of R&D&I. Lastly, dozens of academic publications exist concerning a regional education area and a European Union-Latin American and Caribbean bi-regional area. Once again, the multitude of initiatives can only be positive for the process. However, it is important to establish clear objectives and to identify which experiences may prove useful and which can be improved upon.

A European, Latin American and Caribbean Area for Higher Education, Science, Technology and Innovation would open possibilities for improvements in education, in research and for institutions in all the countries of both regions. The project requires a firm intent from the governments to begin advancing on the groundwork of the efforts made thus far if we wish to make another step towards compatibility of the education and R&D&I systems.

Bibliography

Barlete, A. (2010). *La construcción del espacio común ALCUE de educación superior*. UDUAL, 44: 3-13.

Casassus, J. (2000) *Problemas de la gestión educativa en América Latina (la tensión entre los paradigmas de tipo A y de tipo B)*. UNESCO. http://bit.ly/1QUv9SO (date of access: 14th of December 2015).

European Commission, AECEA and Eurydice (2015). The European Higher Education Area in 2015. Bologna Process Implementation Report. Luxembourg: European Union Publications Office. http://bit.ly/1R7yzyd (date of access: 24th of March 2016).

ENQA et al. (2015) Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG). Brussels, Belgium. http://bit.ly/2nl67PD (date of access: 3rd of April 2016).

European Commission (2015) Erasmus. Facts, Figures & Trends. The European Union support for student and staff exchanges and university cooperation in 2013-2014. European Commission. http://bit.ly/2fVB8ai (date of access: 12th of July 2016).

Leiva Lavalle, P. (ed.) (2013) *Hacia un espacio eurolatinoamericano para la educación superior, ciencia, tecnología e innovación* (Towards a Euro-Latin American area for higher education, science, technology and innovation). Chile: Central University of Chile, *Institut dés Ameriques*, EU-LAC Foundation, Latin American Centre for European Relations and Miguel de Cervantes University.

Luchilo, L. (comp.) (2010). *Formación de posgrado en América Latina: políticas de apoyo, resultados e impactos*. Buenos Aires, Argentina: Eudeba.

Malo, S. (2005) *El Proceso Bolonia y la educación superior en América Latina.* Foreign Affairs *en español*: 21-33.

Morones, G. (2011). *Informe de resultados del Proyecto Intercambio Académico ANUIES-CSUCA 1998-2010.*

Pires, S. and Lemaitre, M. J. (2008). *Sistemas de acreditación y evaluación en la Educación Superior en América Latina y el Caribe.* In: Gazzola, A. L. and Didriksson, A. (eds.) (2008) *Tendencias de la Educación Superior en América Latina y el Caribe.* Caracas, Venezuela: IESALC-UNESCO.

Polino, C., and García Rodríguez, M. (2016) *Indicadores de interés en las encuestas de percepción pública de la Ciencia y la Tecnología.* In RICYT (2016) *El estado de la ciencia. Principales indicadores de Ciencia y Tecnología Iberoamericanos/*

Interamericanos 2016. http://bit.ly/2m64Lap (date of access: 2nd of March 2017).

Red Iberoamericana para la Acreditación de la Calidad, RIACES (2004). *Glosario Internacional RIACES de Evaluación de la Calidad y Acreditación*. Madrid, Spain: RIACES. http://www.saidem.org.ar/docs/Glosario/RIACES. %20T %E9rminos %20para %20la %20Evaluaci %F3n %20de %20la %20calidad %20y %20acreditaci %F3n.pdf (date of access: 11th of December 2011).

Rodríguez Andujo, A., López Díaz, J.C., Arras Vota, A.M. and Basante Butrón, G. (2009) *Experiencias y lecciones aprendidas del sistema de evaluación y acreditación de la calidad en Mexico*. Synthesis, 50(4), 1-8.

UNESCO (1995) Policy Paper for Change and Development in Higher Education. Paris, France: UNESCO. http://bit.ly/2mNOefA (date of access: 7th of April 2016).

UNESCO-IESALC (2004) *La evaluación y la acreditación de la calidad de la Educación Superior en América Latina y el Caribe: situación, tendencias y perspectivas*. Caracas, Venezuela: UNESCO-IESALC. http://bit.ly/2nconLG (date of access: 15th of February 2016).

UNESCO-IESALC (2005) *Glosario de Términos Básicos en Regulación y Acreditación en Educación Superior Virtual y Transfronteriza*. Caracas, Venezuela: UNESCO-IESALC. http://www.saidem.org.ar/docs/Glosario/Glosario %20de %20T %E9rminos %20B %E1sicos %20en %20Regulaci %F3n %20y %20Acreditaci %F3n %20en %20Educaci %F3n %20Superior %20Virtual %20y %20 Transfronteriza.pdf (date of access: 10th of December 2015).

UNESCO-IESALC (2006) *Informe sobre la Educación Superior en América Latina y el Caribe (2000-2005). La metamorfosis de la educación superior*. Caracas, Venezuela: UNESCO-IESALC. http://iesalc.unesco.org.ve/ (date of access: 7th of March 2016).

UNESCO-IESALC (2008). *Tendencias de la Educación Superior en América Latina y el Caribe*. Venezuela: UNESCO-IESALC. http://bit.ly/2m6mJcD (date of access: 20th of January 2016).

UNESCO-IESALC (2014) *Reconocimiento de Estudios Superiores en América Latina y el Caribe. Acerca del Convenio Regional de la UNESCO de 1974 sobre Reconocimiento de Estudios, Títulos y Diplomas: Situación Actual y Perspectivas*. Caracas, Venezuela: UNESCO-IESALC. http://bit.ly/2n5SQ1n (date of access: 5th of April 2016).

Zarur Miranda, X. (2008). *Integración regional e internacionalización de la Educación Superior en América Latina y el Caribe*. In IESALC-UNESCO (2008), *Tendencias de la Educación Superior en América Latina y el Caribe*. Caracas, Venezuela: IESALC-UNESCO, 179-240.

EULAC FOUNDATION 2017