http://dx.doi.org/10.30827/sendebar.v30i0.8551 ISSN-e 2340-2415 | N° 30 | 2019 | pp. 141-162



Building a corpus-based glossary of Spanish-Russian higher education for specialised translation

Oksana Polyakova | Miguel Ángel Candel Mora

oksana.polyakova@ucv.es | mcandel@upv.es Universidad Católica de Valencia | Universitat Politècnica de València

Abstract

University systems of various European Union countries and some non-EU nations, while aligned in theory, have not been considered homogeneous until the twenty-first century. To put this in perspective, while the European cooperation has an established common market for goods and services, the long-term higher education collaboration still seems far from being completely harmonized. The inability to entail a new dimension based on full equivalence of all university systems of the countries involved in the Bologna Process has been selected as a starting point of this study as we assume that higher education terminology harmonization will improve understanding and cooperation within the EHEA. Focused on the case of university systems in Spain and Russia, the objective of this paper is to compile a corpus of reference documents in both languages and then extract higher education terminology in Spanish and Russian to identify the degree of equivalence according to conceptual domains proposed by the European network Eurydice.

Keywords: European Higher Education Area; specialised languages; terminology; translation

Resumen

Elaboración de un glosario basado en un corpus español-ruso de enseñanza superior para la traducción especializada

Los sistemas universitarios de la Unión Europea y algunas naciones no pertenecientes a la UE, aunque alineados en teoría, no se han considerado homogéneos hasta el siglo XXI. La cooperación europea tiene un mercado común establecido para el comercio de bienes y servicios, sin embargo, la colaboración en materia de educación superior a largo plazo aún parece lejos de estar plenamente armonizada. El punto de partida de este trabajo surge de la incapacidad de incorporar una nueva dimensión basada en la completa equivalencia de todos los sistemas universitarios de los países participantes en el Proceso de Bolonia, ya que asumimos que la armonización de la terminología de la educación superior mejorará la comprensión y la cooperación dentro del EEES. Centrado en los sistemas universitarios de España y Rusia, el objetivo de este trabajo es compilar un corpus de documentos de referencia en ambos idiomas y luego extraer la terminología de la educación superior en español y ruso para posteriormente identificar el grado de equivalencia según diferentes dominios conceptuales propuestos por la red europea Eurydice.

Palabras clave: Espacio Europeo de Educación Superior; lenguas especializadas; terminología; traducción

1. The EHEA setting

The creation of the EHEA aims at harmonising higher education in Europe and beyond EU borders to meet major goals: to promote equal and recognisable education, offering young people educational mobility opportunities and, later, transferrable professional careers.

The European context, as a set of commercial, cultural and educational connections has gained popularity in terms of the new partnerships in the Bologna Process which started in 1998 (Sorbonne Joint Declaration, 1998), later on, the European Higher Educational Area. While the participation of Spain started in 1999, the Russian Federation delayed four years its participation in the EHEA until 2003 (Ministerial Conferences on Bologna Process – European Higher Education 1999, 2003). Nevertheless, differences between higher education systems can still be identified at different levels.

Increasingly, Spanish higher education institutions, in an attempt to comply with institutional internationalization strategies and project their institutional image, carry out terminology harmonization work mostly in English and Spanish such as UGRTERM (https://ugrterm.ugr.es), or in English, Spanish and Catalan in collaboration with language normalization institutions such as UPVTERM from the Universitat Politècnica de València (http://www.upv.es/entidades/SPNL) and the Universitat de Barcelona (http://www.ub.edu/sl/ca/alt/recursos/terminologia/glossari-academic-docent/cos.html). Within this context, it becomes necessary to map the conceptual structure of the university terminology in Spanish and Russian. For that reason, the study of the conceptual background of the common academic environment with a special focus on the Spanish and Russian higher education terminology will serve as a reflection on the harmonisation within the European university system.

As an illustration, since 1999, Spain has implemented university degrees comprising four years of university education, followed by the master's level with a professional aim or a postgraduate research orientation. It has also adapted the European Credit Transfer System (ECTS) as an equal basis of study time and dedication of university students at different training stages. Similarly, another important document was adopted by the participants of the Bologna Process: the European Diploma Supplement, aimed at providing transparency to the courses studied and qualifications obtained. Regarding the situation of higher education in the Russian Federation, there are some similarities with the Spanish current educational basis but still, the later start date and the socio-political background of the last decades are shaping the slower evolution of the academic system. For instance, in the educational offer of Novosibirsk State Technical University, a specialist qualification of up to 5.5 years of duration can still be found. Similar degrees were common in Spain before the implementation of the EHEA, however they have been updated to accommodate this new unified education system.

Another substantial difference between the structures analysed of the Russian region is the intermediate stage between the master's program and the doctorate. Once it is completed, students obtain their university degree as Candidate of Science and may proceed with the second level, which lead to the doctoral degree. In sum, while university education in Spain has currently adopted a new structural and organisational model, Russia is still adjusting the Bologna model to its realities.

This paper is structured in three parts: after describing the need for conceptual harmonisation of higher education through a study of its specialised terminology, we present a short overview of the theoretical foundations of the translation-oriented terminology management approach used in this work, and, then, the analysis and discussion section describes the main findings of this research work.

2. Translation-oriented terminology management

Motivated by the need for the EHEA harmonisation and taking into account that one of the contexts in which the EHEA demonstrates all its capabilities is undoubtedly the transfer of knowledge and different forms of exchange between institutions, translation and terminology management play a key role (Arntz 1993). Therefore, this work is based on the premises of translation-oriented terminology management (Bowker 2015, Galinski and Budin 1993, ISO 21616 2002, Martínez and Faber 2009, Wright 1997a), which unlike terminology standardization and language planning approaches, is based on more functional and applied principles, and less comprehensive and prescriptive processes.

Translators usually argue that one of the most common difficulties in their work is terminology, especially its lack of reference material, validity, specialization, and linguistic information available. Therefore, this work focuses on aspects of terminology, such as its function for translation, the process of preparing a terminological database with a view to its use with computer tools, information retrieval, the automation of the translation process and the consistent use of technical terminology (Arntz 1993; Bowker 2015; ISO 12616 2002; Wright 1997a).

Cabré (1998) distinguishes three types of terminological work orientation depending on the type of user and use: terminology oriented to the language system (Linguistic-terminological approach), terminology oriented to language planning (Standardization approach), and translation-oriented terminology management (Translation approach).

The linguistic-terminological approach has its origins in Wüster (1998), whose systematic study served as the basis for future studies on terminology, although later on was applied as the foundations for the terminological and lexicographical work of the ISO committee/TC37. This terminology work moves from designations towards concepts with the aim of standardizing the terminology used in technical and scientific communications, thus guaranteeing knowledge transfer among specialists. The language planning approach, a systematic approach also, was conceived as a governmental initiative to recognize the status of a certain level of language, aimed at the identification of grammatical and lexicographical gaps through official regulations (Auger and Rousseau 1987), although oriented towards the terminological work on two languages. Finally, the translation approach, based on the implementation of the previous terminology approaches by international multilingual organizations, such as the UN, the EU, UNESCO, was the driving force behind the creation of large terminology databases, such as TERMIUM in Canada and EURODICAUTUM in the EU.

With similar purposes to those of the translational approach there is an intermediate level between the linguistic-terminological approach and the standardization approach called terminological harmonization (Pavel and Nolet 2001: 33), understood as the process undertaken by a company, ministry or another administrative entity in order to consolidate certain terminological uses.

Wright and Budin (1997: 329) synthesize the fundamental types of terminological work in two types: descriptive and prescriptive. The former consists in the compilation of terms carried out by translators and technical writers, mainly to document the terminology used in their texts in order to contribute to the appropriate selection of the specialized vocabulary to be used. While the prescriptive terminology work, practiced by standardizing organizations, governmental institutions and language planners, is characterized by being carried out by experts in specialized areas or in close collaboration with them, in order to ensure mutual understanding between specialists after standardization of the technical terms and the elaboration of technical specifications for future terminological works.

Likewise, according to the user's needs, Auger and Rousseau (1987), Cabré (1998), and Wright (1997a) distinguish two types of terminological work: ad hoc terminology, aimed at specific aspects, and systematic, which is responsible for the terminological work carried out over the entire field of a specialized area.

The main applications of terminology for translation, according to Sager (2001: 251), include the representation of terminology in automatic systems, the structuring of terms in specialized areas, the procedures for creating terms and their standardization.

In line with the practical approach to terminology management followed in this work, Cabré (1998) emphasizes the need to distinguish between terminological work and translation work, concluding that the translator often makes use of specialized terminology to solve specific problems fundamentally due to the lack of adequate terminological tools. However, this specific need for specialized terminology does not imply that systematic terminological work has to be carried out or that all the terms of the field in question have to be identified.

In a systematic terminology work, the reason for classifying the terms according to the specialized area or sub-areas is based on the complete description of the conceptual field at hand, while in translation-oriented terminology work, classifications are based on efficiency and the subsequent identification and use of previously designed terminologies and glossaries.

The methodology used in this paper takes an intermediate position between the ad hoc terminology work and the systematic approach based on the purpose of the terminological work pointed out by the authors studied (Auger and Rousseau 1987, Arntz and Picht 1995, Cabré 1993, Pavel and Nolet 2001). Thus, although the aim of the work presented here is not to cover all the terms used in the context of higher education and, therefore, carry out a systematic terminological work, a punctual terminology work would excessively limit the scope of the research carried out on the terms compiled from the corpus of higher education documents (Buendía and López Rodríguez 2013; Buendía and Ureña 2010). The absence of a methodology for terminological work with characteristics of both approaches applied to specialized translation is also supported by the ISO 12616 standard (Translation-oriented terminography), which highlights the importance of terminological work for the translation of specialized texts based on the quality of translation and efficiency towards the process of computer-assisted translation and the subsequent exchange of terminological information between professionals.

3. Methodology

With all this background in mind, the first step was to compile a research corpus from official documents from higher education institutions of Spain and the Russian Federation, together with Bologna Process documents and administrative documents from Spanish and Russian universities, including academic and administrative general information, and higher education official documents, totalling 116 texts and an overall amount of 2,127,457 words.

The second stage involved terminology extraction with SynchroTerm by Terminotix (https://terminotix.com), which automatically extracts term candidates but requires supervised validation, thus streamlining subsequent revision of the term extraction process. Among the advantages of this tool is the automation of the processing of bilingual documents: after a simple configuration of the database settings and selection of language pairs, SynchroTerm aligns the bilingual documents, regardless of the file format (.pdf, .doc, .txt...), and then provides an automatic identification of equivalent terms by means of statistical algorithms and, finally, allows users to manually verify the program's proposal of term candidates and select the context where both terms were found in the texts.

Although *SynchroTerm* is compatible with 30 languages, due to technical problems concerning Russian characters, SynchroTerm extraction was then converted into an Access database which included documentary sources, contextual settings, corpora details, translation equivalence, synonyms and abbreviations (see Figure 1 below).

The criteria followed for the selection of terms can be summarized in four categories: suitability, as all the terms have been extracted from the corpus and belong to the study area; clarity, because the information of the terminological records has been simplified to provide faster access to terminological data; use, as priority has been given to the frequency of occurrence; and informative, as a guide for the translator some terms are included to illustrate processes of formation of common terms in this specialized area.

Regarding the notion of equivalence used in this work, for the case Russian-Spanish, we have followed Latyshev and Semenov (2003: 73) to compensate for the difficulties found in the terms without equivalent. These authors propose methods such as transliteration, the use of calques, the descriptive and explanatory translation due to the absence of equivalent concept: as in the case of abiturient ['abiturient' - 'абитуриент'] (to designate the student who has finished high school and is a candidate for admission to a higher education institution) and finally, the approximate, comparative translation that proposes a designation to identify the same reality in both linguistic environments, such as the case of *professor* ['catedrático' – 'προφεccop'].



Figure 1. Example of a terminological card 566 "alumno – студент".

Finally, the last stage consisted in the conceptual classification of the terms extracted and completion of the terminological records. Despite the interdisciplinary nature of this area, the classification of terms according to a clear structure of conceptual domains streamlined the subsequent analysis object of this study (Wright 1997b). After considering different options, previous terminology work by the Education Information Network Eurydice (Eurydice 2001, 2002, 2004, 2005, 2007) was chosen as reference as it provided clear classification guidelines. Further exploitation of the Eurydice references consisted in examining its proposal of conceptual domains and propose an adaptation in accordance with the terminology found in our corpus. Thus, the following ten general domains were identified as representative of this work:

- 1. Students
- 2. Examinations, certificates and diplomas
- 3. Institutions and educational facilities
- 4. Legislation
- 5. Advisory bodies

- 6. Managing staff
- 7. Training processes and resources
- 8. Teaching staff
- 9. Systems and levels of education
- 10. Society

In addition to the 5 domains found in Eurydice (2. Examinations, certificates and diplomas, 3. Institutions and educational facilities, 5. Advisory bodies, 6. Managing staff and 8. Teaching staff) five new categories were included (1. Students, 4. Legislation, 7. Training processes and resources, 9. Systems and levels of education, 10. Society), which would better represent the characteristics of the term extraction carried out in this paper.

4. Analysis and discussion

4.1. Students domain

Students	alumno	студент
	becario	стипендиат
	delegado de clase	староста
	estudiante	студент
	preparación de los estudiantes	подготовка студентов

With the introduction of the new structure, this domain is likely to play the leading role in the educational establishment based on a student-centred approach. This domain contains 10 bilingual pairs of terms (8 of them equivalent in both languages). In addition to the term *student* (term denomination 1) ['estudiante' – 'cmyдент'] the Spanish system has another one, alumno (term denomination 2) or ['alumno'-'студент'], while in Russia there is only one.

This specialised terminology brings together not only the types of students from the academic point of view, but it also shows them as the participants of social aids programmes or scholarships. This is the case of scholarship holder ['becario' – 'cmuneндuam']. Moreover, it should also be mentioned the term young researcher ['investigador en fase inicial' – 'начинающий исследователь'] where an early-stage researcher is designated.

The process outlined in student preparation ['preparación de los estudiantes' – 'noдготовка студентов'] is performed during their university years before a degree is obtained. Among the attributes of student participation in university, there are terms such as representation ['representación' - 'npedcmaвительство'] and class representative ['delegado de clase' - 'cmapocma'] both dealing with the representation of students' interests.

This domain tackles the first almost complete coincidence of the specialised language identified and proves a clear universality of tertiary education students in both systems.

4.2. Examinations, certificates and diplomas domain

Examinations, certificates and diplomas	certificado	справка
and dipiomas	examen	экзамен
	examen preliminar	зачет
	prueba	испытание
	título	диплом

The idea of combining in the same section the main elements of the final evaluation and qualifications stems from the common denominator: the official recognition of a certain educational level. Among the terminology gathered in this domain, both the system prior to Bologna and the one currently recognised within Europe have been taken into consideration. This domain contains 59 bilingual pairs of terms, of which 29 are equivalent.

At first sight, the evaluation, assessment and certification domain would be expected to show the highest degree of harmonization, as evidenced by examination ['examen' - 'экзамен'] or test ['prueba' - 'ucпытание']. Nevertheless, the terminological pair of a preliminary examination ['examen preliminar'- 'savem'], which refers to the early stage of exams that any Russian student should pass in order to start the exam period, was not documented in the Spanish corpus.

This domain brings together some specific notions based on the wide range of academic certificates: certificate ['certificado' - 'cnpaвка'], transcript ['certificado académico' – 'академическая справка'] and teaching certificate ['certificado de aptitud pedagógica' – 'сертификат педагогической пригодности']. While the first two terms are common to both countries, examples like teaching certificate refers only to a Spanish academic document used before the Bologna process that officially justifies the capacity of university graduates to teach in schools.

The largest section of this second conceptual domain is related to diplomas from the point of view of their two designations: a general term for a university degree and a specific one of the qualification obtained. Regarding the degree subdomain, the terms are degree ['título '- 'диплом'], degrees ['titulación '- 'степень'] and diploma ['diploma' - 'диплом']. Once university studies are finished, Spanish students are awarded a degree or 'título' while in Russia students obtain a 'диплом' or diploma, being this example a clear case of cognate.

4.3. Institutions and educational facilities domain

Institutions and	campus студгородок		
educational facilities	cátedra	кафедра	
	centro	центр	
	departamento	отдел	
	institución de educación superior	высшее учебное заведение	
	universidad	университет	

The next section of this comparative study is the exploration of the special vocabulary on institutions and educational facilities which meets daily needs of students and staff: campus infrastructure. Included here are university campus areas not only dedicated to scientific and teaching activities but also medical, recreational, sports and technical facilities. In total, the domain contains 32 bilingual pairs of terms (of which 16 where documented in the Spanish and Russian corpus as equivalent).

Generic terms such as higher education institution ['institución de educación superior '- 'высшее учебное заведение'] generalise establishments for the academic environment within the global institution ['institución' – 'учреждение']. The wide range of terms under the terminological pair *university* ['universidad' – 'университет']: private university ['universidad privada' - 'частный университет'] and public university ['universidad pública' - 'государственный университет'] highlight public or private ownership of higher educational establishments. Other key concepts within the same area designate two more institutions in Russia where university education is also provided: academy ['academia' - 'академия'] and institute ['instituto' – 'институт'] with no clear referent in Spanish. We are likely to refer to a studio or language center in the case of academy in Spain, while the second term reminds us of secondary or vocational training institution. Indeed, both terms can be seen as new proofs of cognates rooted in cultural traditions of the Mediterranean country.

The terms related to the main and auxiliary facilities of a modern university include the following: infrastructure ['infraestructura' – 'инфраструктура'], campus ['campus'- 'cmy∂εοροδοκ'], building ['edificio'- 'κορηγς'], foundation ['fundación' - 'фонд'], office ['gabinete' - 'кабинет'], park ['parque' - 'napk'], headquarters ['sede' – 'центр'], service ['servicio' – 'служба'] and hall of residence ['residencia de estudiantes' - 'общежитие'].

In reference to the university structure, another set of designations is anchored to the basic term centre ['centro' - 'центр']. It includes educational establishment ['centro de enseñanza' - 'центр обучения'] and research centre ['centro de investigación' - 'центр научных исследований']. In line with educational establishment, the following terms show various types of centers: language center ['centro de lenguas' - 'центр иностранных языков'], university college ['colegio universitario' – 'университетский колледж'], university school ['escuela universitaria' - 'институт'] and faculty ['facultad' - 'факультет']. The composition of a school or faculty is identified with terms such as *chair* ['cátedra' - 'καφε∂pa'], dean's office ['decanato' - 'деканат'], department ['departamento' - 'omдел'] which reveal a very similar structure in both languages.

It is worth mentioning the approximation of the university infrastructure of Spain and Russia to a generic idea. However, the need to harmonise and clarify the content, using the terms academy and institute as higher education institutions, is essential owing to the potential confusion rooted in the Spanish and Russian cultural traditions.

4.4. Legislation domain

Legislation	aprobación	утверждение
	derecho	право
	legislación	законодательство
	ratificación	утверждение
	regulación	регулирование

This domain comprises the legal aspects of higher education management. It includes both the legal terminology, such as the names of fundamental documents of the European Higher Education Area, and specialised vocabulary of the national or local regulations. This domain contains 57 bilingual pairs of terms (of which 47 cases where documented in both corpora).

Terms related to law ['derecho' - 'npaso'] and legislation ['legislación' -'законодательство'] describe various regulatory processes: approval ['aprobación' - 'утверждение'], authorisation ['autorización' - 'paзрешение'], ratification ['ratificación' – 'утверждение'], regulations ['reglamentación' – 'регламентация'] and regulation ['regulación' – 'peгулирование']. We observed no difference in the use of Bologna process ['Proceso de Bolonia' – 'Болонский процесс'] and Bologna reform ['reforma de Bolonia' - 'Болонская реформа'] as both are the previous step to the European Higher Education Area.

On the whole, the legal terminology extracted from the corpus proves the strength of specialised vocabulary in each language through an existing social tradition. This makes it easier to search, contrast and analyse the samples to the extent of their connections with the educational context. As a result, a contrastive study of the legislative area reveals a significant number of inconsistencies since the Spanish political system is a parliamentary monarchy versus the semi-parliamentary federal democratic republic proclaimed in Russia.

4.5. Advisory bodies domain

Advisory bodies	consejo	совет	
	Consejo de Europa	Совет Европы	
	Consejo de Universidades	Совет университетов	
	sindicato	профсоюз	
	Unión Europea de Estudiantes	Объединение европейских студентов	

The terms included in this section refer to the coordination of documents and entities that support the university management and procedures during the Bologna Process. This domain contains 95 bilingual pairs of terms (of which 62 cases where documented in both corpora).

From the terminology section, headed by the term *council* ['consejo' - 'consejo'], the importance of agreement on different political, social and educational levels is seen. We identified some specific examples based on this core term: Council of Europe ['Consejo de Europa' – 'Coвет Европы'], Council of Ministers ['Consejo de Ministros' - 'Coвет министров'], Council of Universities ['Consejo de Universidades' – 'Совет университетов'], National Higher Education Council ['Consejo Nacional para la Educación Superior' - 'Национальный совет по высшему образованию'] and Higher Council for Scientific Research ['Consejo Superior de Investigaciones Científicas' - 'Высший Совет научных исследований'].

There is enough similarity between the concepts linked to the cluster term forum ['foro' - 'форум'] and related terms such as Bologna Policy Forum ['Foro Estratégico de Bolonia' - 'Болонский политический форум'], European Quality Assurance Forum ['Foro Europeo de Certificación de la Calidad' – 'Европейский форум по вопросам обеспечения качества ']. However, a complex process like the Bologna reform requires all kinds of European political meetings and contacts, including forums, to ensure progress.

In the next group, the key concept is term union ['sindicato' - 'npoфсоюз'], focused on the association of professionals or people with common interests: Union of Industrial and Employers' Confederation of Europe ['Unión de Confederaciones de Empresarios e Industrias de Europa' - 'Союз конфедераций промышленников и работодателей Европы'], European Students' Union ['Unión Europea de Estudiantes' - 'Объединение европейских студентов'] and National Union of Students in Europe ['Unión Nacional de Estudiantes en Europa' – 'Европейское национальное объединение студентов']. The participation of all these groups in decision making within the EHEA is vital for its advance: without the consensus of university students or future professionals and businessmen or future employers there would not exist a strong link between university and society. These groups also include the term pair

professional association ['colegio profesional' - 'профессиональная ассоциация'] responsible for ensuring the rigour of specific professions.

This domain outlines the main modes of operation of the higher education area in Europe. Therefore, the need to uncover common educational and work standards of EU members and territories located outside the European Union will promote mutual understanding between cultures.

4.6. Managing staff domain

Managing staff	comisario	уполномоченный	
	defensor universitario	университетский защитник	
	gerente	управляющий	
	personal	сотрудник вуза	
	personal de administración y servicios админи vocal		

This domain contains a necessary part of the university structure: the administration personnel responsible for performing administrative and executive duties. In total, it includes 24 bilingual pairs of terms (of which 10 cases where documented in both corpora).

For example, the lexical set subject to the position key term includes administrative occupations, elected in some cases, such terms as commissioner ['comisario' – 'уполномоченный'], University Ombudsman ['defensor universitario' - 'университетский защитник'], manager ['gerente' - 'управляющий'], staff ['personal' – 'compyдник вуза'], administrative staff ['personal de administración y servicios'- 'административный персонал'], supervisor ['supervisor/a'- 'инспектор'], technician ['técnico' - 'mexник'], deputy secretary ['vicesecretario' - 'заместитель министра или секретаря'] and board member ['vocal'- 'член комиссии'].

In this specialised field it should be noted the existence of Spanish gender equality terms such as 'director' - 'directora', 'jefe' - 'jefa', 'rector' - 'rectora', 'supervisor' - 'supervisora', 'vicerrector' - 'vicerrectora', just to mention a few, 21% of the total terms under Managing staff, which is not reflected in the Russian terminology in any of the cases in general: possible explanation is the prominence of gender issues in Spain (Ley para la igualdad 2007).

The study shows considerable differences between countries with just 42% of equivalence of professional management terms prove both the need for further harmonization.

4.7. Training processes and resources domain

Training processes and resources -	aprendizaje	обучение	
	aprendizaje basado en el estudiante	студентоцентрированное обучение'	
	carga de trabajo del estudiante	трудозатраты студента	
	coevaluación	совместная оценка	
-	evaluación	оценка	

The following specialised domain – the largest of all – contains the terms associated with the training process and the resources used. In fact, it is not only about the academic coordination (e.g. 'subject', 'schedule', 'program'), but rather financial aspects (e.g. 'scholarship', 'loan', 'social academic freedom', 'interdisciplinary training') or material resources 'classroom, library, insurance'. This domain contains 232 bilingual pairs of terms (of which 155 cases where documented in both corpora).

There are numerous terms within the area of influence of learning ['aprendizaje' – 'обучение']: lifelong learning ['aprendizaje a lo largo de la vida' – 'обучение в течение всей жизни'], student-centred learning ['aprendizaje basado en el estudiante' – 'студентоцентрированное обучение'], formal learning ['aprendizaje formal' – 'формальное образование'], informal learning ['aprendizaje informal' – 'неформальное обучение'] and prior learning ['aprendizaje previo' – 'ранее полученное обучение']. The variety of terms reveals training orientation during different stages of life through numerous programs of the European Higher Education Area.

Another significant factor is the effort made by students, as reflected in the pair of terms load ['carga' – 'нагрузка'] and related terms: workload ['carga de trabajo' – 'рабочая нагрузка'], student workload ['carga de trabajo del estudiante' – 'трудозатраты студента'], weekly hourly load ['carga horaria semanal' – 'недельная учебная нагрузка'] and workflow ['volumen de trabajo' – 'трудоемкость'].

The next group of terms is used to measure assessment results with terms such as assessment ['evaluación' - 'oueнка'] through the pairs of terms such as peer assessment ['coevaluación' - 'coeмecmная оценка'], point ['punto' - 'балл'], score ['puntuación' - 'nodcuem баллов']. Special mention deserves mark ['nota' - 'oueнка'] closely linked to pass ['aprobado' - 'зачем'], excellent ['sobresaliente' - 'отлично'], good ['notable' - 'хорошо'], average ['bien' - 'хорошо'], satisfactory ['suficiente' - 'удовлетворительно'] and fail ['insuficiente' - 'неудовлетворительно'].

This section draws attention to another difference between university systems in Spain and Russia: grading scale ranges from 1 to 10 in Spain, and from 1 to 5 in Russia. Furthermore, Russian mark «pass» represents a one or two-semester evaluation

when the course is completed, and the final mark is awarded at the end. The following assessment also proves the correct advance of the learning process or, in cases, is used as a final mark, too.

The practical approach of teaching methodology places special emphasis on the development of skills ['habilidad'- 'умение'] of students through the content of the pairs of terms analysis ['análisis' - 'анализ'], debate ['debate' - 'cnop'] and reading ['lectura' – 'чтение']. Higher education is about strengthening qualities such as analytical competencies or communication skills useful in future professional life of graduates.

In sum, the domain Training processes and resources contains specific differences (in particular, the evaluation system, types of examinations and access to higher education) rooted in the Soviet tradition of higher education in the Russian Federation. Therefore, the expected approach of European and Slavic cultures education can occur on a solid foundation of the similarities observed. These observations lead to the conclusion that the above average level of equivalence (67%) demonstrates comparable types of training offered in both countries.

4.8. Teaching staff domain

Teaching staff	catedrático	профессор	
	funcionario docente	преподаватель в ранге государственного служащего	
	personal docente e investigador	профессорско- преподавательский состав	
	profesor/a	преподаватель	
	professor titular	преподаватель	

The bilingual terminology related to the teaching personnel in charge of carrying out university education shows a considerable number of gaps between Spanish and Russian systems. This domain contains 12 bilingual pairs of terms (of which 4 cases where documented in both corpora).

To that end, the first step in the professional higher education teaching career in the Russian Federation is reflected by the term pair assistant lecturer ['auxiliar de cátedra' - 'accucmeнm']. Usually a university graduate obtaining the degree of doctoral candidate is being instructed or guided by an experienced lecturer. Once the instruction process has finished, the next level of university teaching staff is lecturer ['profesor/a' - 'npenoдаватель'] and followed by reader ['professor titular' – 'npenoдаватель'] or professor ['catedrático' – 'npoфессор'].

The educational situation in Spain is based on the presence of several types of teachers who aspire to occupy the official teaching position of tenured lecturer ['funcionario docente' - 'npenoдаватель в ранге государственного служащего']. The

main exception of the Spanish system is the competitive public examination process requirement while desiring to occupy an official teaching position in a public university.

Terms such as university tutor ['tutor/a' - 'kypatop'], researcher ['investigador' - 'ученый'] as well as teaching staff ['personal docente' - 'преподавательский персонал'], teachers ['profesorado' - 'npenoдаватели'], teaching and research staff ['personal docente e investigador' - 'профессорско-преподавательский состав'] and research staff ['personal dedicado a la investigación' - 'исследовательский персонал'] describe the universal realities for the two countries studied.

The organisation of the terminology discussed in the Teaching staff differs depending on the cultural and administration background of Spain and Russia, being somewhat isolated from the common denominators of the Bologna Process. This fact explains the apparent equivalence discrepancy in this domain.

4.9. Systems and levels of education domain

Systems and levels of education –	ciclo largo	длинный цикл	
	ciclo universitario	цикл достепенной (цикл обучения до получения первой академической степени)	
	educación	образование	
	educación superior de corta duración	первый уровень структуры квалификаций	
-	enseñanza superior	система высшего образования	

The Systems and levels of education domain requires a comparative evaluation of the university education systems after the Bologna Process and the previous system in both countries. Additionally, this structured terminology approach identifies the degree of assimilation of the foundations of the European Higher Education Area in Spain and Russia. This domain contains 64 bilingual pairs of terms (of which 42 cases where documented in both corpora).

Following the research, the terminology of this domain is gathered around three clusters, from the terms education ['educación' - 'образование'], structure ['estructura' - 'cmpyкmypa'], to system ['sistema' - 'cucmeмa']. The idea of this division is based on the data extracted from the corpus in terms of educational type, organisation of higher education during the previous stages to the Bologna Process.

Among the terminological pairs found are: general education ['educación general'-'общее образование'], higher education ['enseñanza superior '- 'система высшего образования'], training course ['ciclo' - 'уровень/цикл'], degree course ['ciclo de grado' – 'cmeneнной цикл'] or ['ciclo universitario' – 'цикл достепенной (цикл обучения до получения первой академической степени)'], college degree ['educación superior de corta duración' – 'первый уровень структуры квалификаций'] and vocational training ['formación profesional' – 'профессиональное образование']. The terms that attract the most attention are classified in the subgroup of *university* degree ['ciclo universitario' - 'цикл достепенной (цикл обучения до получения первой академической степени)]. The originality of the Russian term consists in providing an added explanation: the university degree in the Russian version is the cycle of undergraduate education or training before obtaining the degree. However, this explanation may confuse readers as it would suffice to simplify the Russian term.

The terms are separated into two main groups depending on the years of study. Terms like long cycle ['ciclo largo' – 'длинный цикл'], degree ['licenciatura postgrado' – 'выпускной степенной цикл'], engineering degree ['ingeniería' – 'инженерный профиль'] refer to the longer five-year cycle of Specialist programmes. Meanwhile, the term short cycle ['ciclo corto' – 'короткий цикл'] identifies the short three-year university degree similar to Bachelor of Arts ['diplomatura pregrado' - 'предвыпускной квалификационный цикл']. Nowadays, Russian bakalavr programmes require four years of study offering basic academic education also referred as Degree level or are equal to 'grado' in Spain.

In addition to the above-mentioned levels, Spanish doctorate programs include the future researchers' preparation stage called DEA 'Diploma of Advanced Studies', which is nowadays obsolete after the reform of tertiary studies and the incorporation of Master's degrees oriented towards research.

Currently, the EHEA provides its own context of degrees: structure in cycles ['estructura en ciclos' - 'cucmeмa cmeneнeй'], two cycles ['dos ciclos' - 'два цикла'], second cycle ['segundo ciclo' – 'второй цикл'], first cycle ['primer ciclo' – 'nepвый цикл'] and degree level ['nivel de grado' – 'cmeneнь'], highlighting the basic university education.

Even though we observe a number of differences, there is an adequate alignment of terms in relation to systems and levels of education: 66%.

4.10. Society domain

Society	competencia profesional	профессиональная компетенция
	cooperación	сотрудничество
	cooperación académica internacional	международное академическое сотрудничество
	empleabilidad	трудоустраиваемость
	mano de obra cualificada	квалифицированная рабочая сила
	participación	международное сотрудничество

Given the importance of higher education for the civil society, we have assigned a specific domain to this segment. The main tasks performed by universities include training of future highly-qualified professionals and preparation of new scientific researchers for the advance of a post-industrial society. In fact, international, European and national communities act as generators of multiple changes in higher education, aimed at obtaining the best possible response from graduates. This domain contains 115 bilingual pairs of terms (of which 78 cases where documented in both corpora).

One of the conceptual blocks identified in this section is structured around the term cooperation ['cooperación' - 'compyдничество']. The contribution of the cooperation process to social progress is grounded on the pillars of international academic cooperation ['cooperación académica internacional' – 'международное академическое compyдничество'], cooperation between institutions ['cooperación entre instituciones' – 'межинституциональное сотрудничество'], networking ['networking' - 'участие в международной деятельности'] and participation ['participación '- 'международное сотрудничество ']. For networking, an English loan word was used instead of a Spanish term due to the influence of the contemporary international community, which sometimes imposes its English terminology.

The employment ['empleo' - 'pa6oma'] subdomain comprises a variety of components that cover the occupation context from several points of view, starting with employability ['empleabilidad' - 'mpyдоустраиваемость'] or its antonym unemployment ['desempleo' - '6e3pa6omuua']. The participants of the recruitment process are designated as job applicant ['candidato' - 'кандидат'] and the whole selection process is included: curriculum vitae ['Curriculum Vitae' - 'peзюме'], interview ['entrevista' - 'coбеседование'], job placement ['inserción laboral' - 'mpyдoycmpoйство']. The previous steps are vital in order to become a qualified worker: qualified workforce ['mano de obra cualificada' – 'квалифицированная рабочая сила'], worker ['trabajador' - 'paбomник'], used by employer ['empleador' - 'paбomoдameль'], entrepreneur ['empresario' - 'npeдnpuнuматель'] or partner ['socio' - 'napmнep'].

The employment subdomain is also supported by terms from job market ['mercado'- 'рынок занятости'], production ['producción'- 'производство'], external quality assurance ['garantía de calidad externa' - 'внешние системы обеспечения качества'], productivity ['productividad' – 'npouзводительность'], professional competence ['competencia profesional' - 'профессиональная компетенция'] to salary ['salario' – 'заработная плата'].

As a sign of the multicultural society targeted by the EHEA, the group of terms gathered around the nationality, legality and motivation to stay in a country shows its social impact. These include status ['estatus' - 'cmamyc'], citizen ['ciudadano' -'гражданин'], immigrant ['inmigrante' - 'иммигрант'], immigration ['inmigración' - 'иммиграция'], migrant ['migrante' - 'мигрант'], foreigner's ID ['número identificativo del extranjero' – 'идентификационный номер иностранца'], residence permit ['permiso de residencia y trabajo '- 'paзрешение на временное проживание и работу'] and visa ['visado' – 'виза'].

Monitoring the systematic changes occurring in the modern society, the increasing importance of social support of foreign students is included in national migration policies. As the degradation of the employment situation has been progressing recently, work status and financial conditions have certainly affected the socioeconomic status of all tertiary education participants: students, teaching and managing staff. Compared to previous categories, the level of equivalence of in the *Society domain* is high (68%).

4.11. General data overview

Our terminology analysis was designed to determine the effect of the EHEA commitment on the Spanish and Russian specialised language used in universities. Together with the project results, Table 1 represents a list of ten domains and cases of equivalence or lack of it applied to the pairs of bilingual terms.

Subdomain	Equivalent terminology	% Equivalent terminology	Not equivalent terminology	% Not equivalent terminology	Total amount
1.Students	8	80%	2	20%	10
2.Examinations, certificates and diplomas	29	49%	30	51%	59
3.Institutions and educational facilities	16	50%	16	50%	32
4.Legislation	47	82%	10	18%	57
5.Advisory bodies	62	65%	33	35%	95
6.Managing staff	10	42%	14	58%	24
7.Training processes and resources	155	67%	77	33%	232
8.Teaching staff	4	33%	8	67%	12
9.Systems and levels of education	42	66%	22	34%	64
10.Society	78	68%	37	32%	115
TOTAL	451	64%	249	36%	700

Table 1. Terminology distributed by domains.

As shown in Table 1, the total number of terms extracted is 700. More than half of the cases (64%) report equivalent terminology which at first glance reveals a considerable conceptual harmony but not a complete presence of correspondence. However, the equivalence data on Table 1 varies from one domain to another. The evidence of this can be clearly seen in the case of the Students and the Legislation domains that reach an overall equivalence of 80-82%, while the *Teaching staff* and *Managing staff* domains decrease: 33% and 42%, respectively.

While the process of preparation to successfully enter a university has got a specific expression of «student preparation» (подготовка студентов) in Russia, Spanish high school graduates are not that heavily guided towards higher education degrees. Another case related to the educational system's differences is the process of preliminary examinations (зачет) found in Russian higher education.

In the legal field, we observe some formal gaps, such as Spanish «Decreto real» (Королевский указ) non-existent in Russia with the federal system of governance. In line with previous national singularities, the Advisory bodies domain warrants both countries communities' formal accession to the Bologna agreement, whilst keeping national university system quality agencies «Agencia para la Calidad del Sistema Universitario» (Агентство оценки качества в сфере высшего образования).

Regarding the Training processes and resources domain, besides the marking scales differences in both countries, there is a special case of a pass mark «apto» (зачет) that sometimes appears in academic transcripts of Russian universities and means a top mark in short courses. Further comparison of teaching staff raises the issue of cognates such as «professor» (преподаватель) as lecturer, while the Russian word προφεccop corresponds to «catedrático». Due a number of legal changes happening in both countries, we avoided dealing with special teaching roles of contracted staff such as «ayudante doctor», «contratado doctor» or доцент. Surprisingly enough, the results obtained in the systems and levels of education domain show a lot of equivalent terms, among which the Russian term кандидат наук is included. This academic category, generally corresponding to PhD, features an important heritage of the system before Bologna and does not exist in Spain. Finally, the last domain called Society evidences relatively high level of equivalence, although displaying a list of terms concerning foreign student visa and migration terms, for example, «NIE – Número de Identidad de Extranjero» (идентификационный номер иностранца) only relevant for Spanish social realities.

5. Results and conclusions

The practical challenge in the EHEA area is the lack of equivalent terminology detected in several domains. It should be noted that we deal with two countries sharing the common denominator of the Bologna Process, although the historical, cultural and social background of each nation is evidenced by the frequent cases where equivalence is lacking. As shown in the examples, for those instances the solution adopted has been the proposal of a dictionary-based definition or a description.

This research has focused on the design of a terminological database applied to the translation of specialized texts. As a starting point we have taken the existing approaches and work from different studies of terminology and the experience of models already applied within different areas, such as standardization and language planning.

The study of the terminological peculiarities of the academic context of the European Higher Education Area in Russian and Spanish has allowed to compile and analyse 700 bilingual term pairs. We showed that the overall European idea is a cultural connection inseparable from an educational partnership. In line with this, the continuous collaboration of European Union members opens new ways of interaction between them and their closest continental neighbours. More research is also needed to widen the education context, seen here as a set of commercial, sociocultural and educational connections. The empirical findings in this study provide a new approach towards conceptual harmonisation and prove the possibility of overcoming current barriers. Understanding is possible if the community is motivated to learn, compare and establish connections or equivalences between key terms.

The average percentage of language barriers or non-equivalent terms varies from 20% – the minimum equivalence to 67% the maximum. Nevertheless, the 'Teaching staff' domain shows a striking 33% (4 cases out of 12 bilingual terms) of coincidence. Meanwhile, the 'Institutions and educational facilities' domain maintains 50% (16 cases out of 32 pairs of terms) and 'Examinations, certificates and diplomas' domain represents 51% (30 cases out of 59 bilingual terms). Thus, the traditional educational platform of Spanish and Russian universities illustrates the necessity of more exact common denominator on the advisory, institutional and examination levels.

By contrast, the domains 'Students' and 'Legislation' reveal an almost complete correspondence of the academic terminology dimension with 80% and 82% variations, respectively. The results suggest that the advance of the higher education convergence is taking place on the levels where the participants are actively interacting within the European Higher Education Area.

Moreover, there is a certain progress towards the unification of Spanish and Russian university systems under the guidelines of the Bologna initiative. It is reasonable to think that the process that started in the heart of learning, teaching and managing forces will improve the formal-administrative background.

Although the current study is based only on electronic sources of information, the data base created allowed the systematisation of specialised vocabulary. The findings corroborate the initial hypothesis on the necessity to develop new ways of mutual understanding between both countries, as the average equivalent terminology is 64% and leaves significant room for improvement.

6. References

- Arntz, Reiner (1993). Terminological Equivalence and Translation. In *Terminology*. Applications in interdisciplinary communication. Helmi B. Sonneveld and Kurt L. Loening (eds.), 5-19. Amsterdam and Philadelphia: John Benjamins Publishing Company.
- Arntz, Reiner, y Picht, Heribert (1995). Introducción a la terminología. Madrid: Pirámide.
- Buendía Castro, M. & Ureña Gómez-Moreno, J.M. (2010). ¿Cómo diseñar un corpus de calidad? Parámetros de evaluación. Sendebar, 21: 165-180.

- Buendía Castro, M. & López Rodríguez, C.I. (2013). The Web for corpus and the Web as corpus in translator training. New Voices in Translation Studies, 10: 54-71.
- Bowker, L. (2015). Terminology and translation. Handbook of terminology, 1, 304-323.
- Cabré, Maria Teresa (1998). Terminology. Theory, methods and applications. Amsterdam and Philadelphia: John Benjamins Publishing Company.
- Eurydice (2001). European Glossary on Education, Volume 3: Teaching Staff. Accessed December 27, 2018.
- Eurydice (2002). European Glossary on Education, Volume 4: Management, monitoring and support staff. Accessed December 27, 2018. http://www.termcoord.eu/ wp-content/uploads/2016/07/volume-4.pdf>
- Eurydice (2004). European Glossary on Education. Volume 1 Second edition: Examinations, Qualifications and Titles. Accessed July 27, 2018. http://www.ter-page-12018. ht mcoord.eu/wp-content/uploads/2016/07/volume-1.pdf>
- Eurydice (2005). European Glossary on Education. Volume 2 Second edition: Educational Institutions. Accessed December 27, 2018. http://www.termcoord.eu/ wp-content/uploads/2016/07/volume-2.pdf>
- Eurydice (2007). European Glossary on Education. Volume 5: Decision-making, Advisory, Operational and Regulatory Bodies in Higher Education. Accessed December 27, 2018. http://www.termcoord.eu/wp-content/uploads/2016/07/vol- ume-5.pdf>
- Galinski, C. and Budin, B. (1993) New Trends in Translation-Oriented Terminology Management. En Wright, S. E. y Wright, L. (Eds.). Scientific and Technical Translation American Translators Association Scholarly Monograph Series. Volume VI (pp. 209-215). Amsterdam: John Benjamins Publishing.
- ISO 12616:2002. Translation-oriented terminography. International Organization for Standardization. Ginebra:ISO.
- Latyshev, L. K. and Semenov, A. L. (2003). Translation: Theory and Methods of Teaching. Academy, Moscow.
- Ley Orgánica 3/2007, de 22 de marzo, para la igualdad efectiva de mujeres y hombres. Accessed December 27, 2018. https://www.boe.es/buscar/pdf/2007/BOE-A- 2007-6115-consolidado.pdf>
- Martínez, S. M., & Faber, P. F. (2009). Terminological competence in translation. Terminology. International Journal of Theoretical and Applied Issues in Special*ized Communication*, 15(1), 88-104.
- Ministerial Conferences on Bologna Process European Higher Education Area. 1999. The Bologna Declaration of 19 June 1999. Accessed January 10, 2019. $<\!\!\!\text{http://www.ehea.info/Uploads/Declarations/BOLOGNA_DECLARATION1.pdf}\!\!>$
- Ministerial Conferences on Bologna Process European Higher Education. 2003. Communiqué of the Conference of Ministers responsible for Higher Education in

- Berlin on 19 September 2003. Accessed January 10, 2019. http://www.ehea.info/ Uploads/about/Berlin Communique1.pdf
- Novosibirsk State Technical University Student Guide 2013-2014. Accessed January 10, 2019. http://www.nstu.ru/static files/947/file/NSTU spr stud 2013 2014. pdf>
- Sager, Juan Carlos (1990). A practical course in terminology processing. Amsterdam and Philadelphia: John Benjamins Publishing Company.
- Sorbonne Joint Declaration (1998). Joint declaration on harmonisation on the architecture of the European higher education system. Accessed December 27, 2018. http://www.ehea.info/Uploads/Declarations/SORBONNE DECLARATION1. pdf>
- World Bank (2018). World Development Indicators database. Population 2017. Accessed December 27, 2018. from https://data.worldbank.org/indicator/SP.POP. TOTL?locations=ES>
- Wright, S. E. (1997a). Term selection: The initial phase of Terminology Management. In Wright, S. E. and Budin, G. (Eds.). Handbook of terminology management. (pp. 13-24). Amsterdam: John Benjamins Publishing.
- Wright, S. E. (1997b). Representation of Concept Systems. In Wright, S. E. and Budin, G. (Eds.). *Handbook of Terminology Management* (pp. 89-97). Amsterdam: John Benjamins Publishing.
- Wüster, Eugen (1989). Introducción a la teoría general de la terminología y a la lexicografía terminológica. Barcelona: Institut Universitari de Lingüística Aplicada.