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Selecting and defining transversal competences for higher education training design

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Transversal competences, such as flexibility, collaboration or critical thinking, are proving to be key not only in academic performance but also in professional and personal performance. In response to a growing demand for research and training in these competences, this study originates from a teaching innovation project at the University of Granada (Spain) with the aim of designing the base structure of a psycho-educational intervention aimed at undergraduate students at the Spanish public university. For this purpose, the European framework for Personal, Social and Learning to Learn Key Competence, LifeComp, is used as the base line. This work proposes a coherent, pedagogically sound, general competencebased programme that blends with the official, more-specific competence-based curriculum, to deepen learning and proactively respond to the complex challenges our society is currently facing. In order to do so, different levels of proficiency for each of the nine LifeComp competences are suggested, as well as an outline for the design of the training action. This work has served as the basis for the creation of a psycho-educational training programme whose parallel study has been registered on www.clinicaltrials.gov under NCT05598944 and NCT NCT05775978 registries. The resulting programme is currently being taught to all undergraduate students at the University of Granada (Spain).

KEYWORDS

curriculum innovation in higher education, LifeComp, employability, psycho-educational intervention, soft-skills in academia

1 Competence-based training

Many of the current proposals for training at all levels and in all settings focus on competence-based training (Ahmed and Sayed, 2020). This is also the case for the professional training, including that of university students, considered as professionals undergoing training (Keeley-Browne, 2009). Thus, competences have been included as part of the design of curriculum subjects at primary, secondary and higher education levels and they have emerged as key elements for academic success and professionalization (Kulik et al., 2020).

However, one of the most important challenges for the understanding and later adoption of competence-based learning models is the different meanings of the term "competence" (Cino Pagliarello, 2021). The word "competence" has been classified into several categories (Coll, 2007; Fernández Cruz and Gijón Puerta, 2012): Competences in the framework of the curriculum (curricular competences); competences for professionalization (professional competences); and competences for assessment (key competences or basic competences). For this document, a competence can be considered as the ability to mobilize all kinds of resources (cognitive, personal, social, etc.) to solve a problem or perform a task. In short, a competence

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is defined as knowledge put into action or action-oriented knowledge (Du Crest, 1999).

This study addresses generic competences of a transversal nature which have an impact on students' academic success and professionalization in four-degree programmes: medicine, sports science, translation and interpreting and civil engineering. To do so, the European competence framework LifeComp (Sala et al., 2020) is used as a starting point for extracting terminology and concepts. It is further compared with two documents that lay the basis for degree programme design in the context of the Spanish university system: the "White Papers," documents issued by the Spanish Ministry of Education to provide guidance and support in the design of official bachelor's and master's degrees, and the "Verifica" evaluation programmes, official documents issued by the Spanish Registry of Universities, Centers and Degrees accrediting the content of the degree and master programmes.

Given the literature and our findings, these transversal competences deserve more attention in Higher Education and could be considered as key elements among the "professional" competences (Calero López and Rodríguez-López, 2020; Carvalho and Almeida, 2022; Sá and Serpa, 2018).

1.1 Examples of competence-based frameworks

There are several competence-based frameworks that have been adopted across all levels of education in recent decades worldwide. First, the PISA assessment (Grinperberg and Lizarte, 2012; OECD, 2018) aims to compare the levels of basic skills among students in Organization for Economic Co-operation and Development (OECD) countries. Secondly, the EU framework consisting of eight core competences which have been included in primary and secondary education across member states and have been recently redefined (European Commission: Directorate-General for Education, Youth, Sport and Culture, 2019). Thirdly, the so-called "Global Competence" (OECD, 2018) proposed by the OECD which, from an interaction of knowledge, skills, attitudes and values, presents four key elements: Examination of any issue from local, global and cultural perspectives; Understanding and appreciation of others' perspectives and points of view; Engagement in interactions across cultures that are appropriate, effective and open; and Action for well-being and sustainable development. Fourth, the "work-based learning" competence framework (Bahl and Dietzen, 2019) developed for vocational education and training based on the recommendations of the United Nations Educational, Scientific and Cultural Organization (UNESCO).

In the case of Higher Education, we can cite as an example the European Qualifications Framework (EQF), which is structured around eight qualification levels, defined since knowledge, skills and competences. Competences in this framework are understood as the synergistic application of knowledge and skills to specific professional situations, establishing a given level of autonomy, i.e., a level of attainment or use of the competence (Clarke et al., 2013). The European Higher Education Area (EHEA) is another example of the adoption of a competence-based model. In this case, the expected learning outcomes are represented, and the levels of (a) Generic or basic competences, i.e., for any graduate, (b) Transversal competences, i.e., for graduates from a broad group of professional areas, and (c)

Degree-specific competences, i.e., for the specific profession addressed, are laid down (ANECA, 2013). In this case, the methodological aspects have had to be adapted to the change of model, the previous one being content-based and the current one competency-based (Lizarte and Gijón, 2020).

1.2 Competences in the European Higher Education Area (EHEA)

The European Higher Education Area has opted for a training structure organized in transferable and accumulable learning units to which credit points are attached and registered in a personal transcript of learning outcomes (Wagenaar, 2019). before the real implementation of these competences in the academia is a reality. Since the development of international projects such as Tuning (González and Wagenaar, 2003), generic, transversal competences such as communication skills, learning to learn, organizational and planning skills, leadership skills, etc., are common to most degrees whereas specific competences correspond to skills and knowledge specific to a particular field of knowledge. With general, or basic, and transversal competences, the aim is to establish the development of common reference skills for all disciplines. In contrast, the specific competences define the learning outcomes of each degree within a specific area of knowledge.

1.3 Difficulties in developing competence-based models

The EHEA has its own competence framework, which is developed for each degree at different levels: general or basic competences, transversal competences and specific competences. This framework which conceives competences as "learning outcomes" is strongly influenced by projects such as Tuning (Laurito and Benatuil, 2019) and should be a key reference for any training proposal within the context of academia.

Based on previous experience in other projects, we can assume that the acquisition and development of generic competences, related to emotional, attitudinal or social aspects, is essential for the successful completion of educational processes in Higher Education. Thus, we can look for best practices to enhance the acquisition of this type of competences, assuming that achieving a high performance in these competences will facilitate the academic success and professional integration of graduates.

However, basic competences and curricular or professional competences are two different concepts (Fernández Cruz and Gijón Puerta, 2012). We must also consider a certain confusion in the integration of competences in curricula, which is due to the way in which training planning is approached: from content, from teaching activities or from learning outcomes (Coll, 1987; CECJA, 1997). If, traditionally, content was the focus of planning, in recent decades learning outcomes have become the focus of training programmes, in the form of objectives. The introduction of competences, also drafted as learning outcomes (ANECA, 2013), without having removed the inclusion of objectives or having turned them into the teacher's intentions, hampers the understanding of what is meant by learning

outcomes and their handling in the training planning process. In this article, we refer to basic (general) or transversal skills as soft skills.

At an international level, recent studies in very different contexts have indicated that soft skills are highly valued by both students and teachers, although they have not been transferred to classroom practices in many cases. For example, Mwita et al. (2023), find that students enrolled in business administration-related courses in Tanzania highly valued soft skills for their future professional development. However, they acknowledged that these skills were not included in their programs and had to be acquired independently. Asonitou (2021) highlights the challenge of integrating soft skills into the teaching practices for Greek students in accounting programs, despite EU encouragement to include them in the curriculum. In the U.S. context, Karimi and Pina (2021), using a focus group study, show the demands of employers and vocational counsellors for STEM careers in Kentucky, emphasizing the need to bridge the "gap" in undergraduate soft skills development. Finally, Di Virgilio (2024) can be cited, who discusses the TECO (TEst on COmpetences) project, an initiative aimed at aligning universities with company requirements, particularly in areas such as students' entrepreneurial and technological skills.

Despite the significance that students and teachers place on effectively incorporating soft skills into undergraduate and graduate programs, two key challenges can be identified in the process of integrating soft skills into higher education: on the one hand, the systematic and organised inclusion of soft skills in teachers' practice, regardless of the career chosen by the student (Gijón Puerta and Crisol Moya, 2012); on the other, a curriculum based on soft skills which promotes teachers' practice.

Our research addresses this final question and proposes a comprehensive, structured model for designing and assessing programs that foster soft skills development in higher education. It begins with an analysis of various degree programmes and suggests a model for designing graduate and postgraduate courses that incorporate soft skills.

2 Addressing the challenges of competence-based training design: a proposed approach

In the Spanish context, the certification of basic competence levels at different educational stages has not been clearly established (Vázquez, 2016). It is also true that in many cases the relationship of these basic competences with the rest of the curricular competences and academic content has not been adequately addressed either. However, some proposals shed light on possible solutions to this issue (Coll, 2007; Marchesi et al., 2010). Coll's (2007), competence ceases to be a potentiality and becomes a reality which focuses on participation in practical or applied sociocultural activities. This implies an interrelation among learners that forces them to mobilize all kinds of internal resources, i.e., emotions, skills, aptitudes, abilities, knowledge, motivation, habits, values, as well as external resources, i.e., material resources, information and collaboration (Fernández Cruz and Gijón Puerta, 2012). Thus, from this perspective, the three basic elements of a competence-based training design are: (a) the implementation of specific socially and culturally contextualized activities and practices; (b) the definition of criteria for the assessment of competence proficiency levels; (c) and the description of internal and external resources that learners must develop in the training action.

To minimize the difficulties of training design, and as a preliminary step, a complete analysis of the competences in the "White Papers" and "Verifica" evaluation programmes of the degrees in Translation and Interpreting, Medicine, Civil Engineering and Physical Activity and Sport Sciences was carried out. The basic (general) and transversal competences were used for comparison with the nine competences that make up LifeComp. From the extraction of competences, it can be inferred that the aim of this paper is for students to develop a minimum level of basic curricular competences and emotional, social and vocational skills as instrumental resources to foster their academic success. This view is shared by the designers of the Verifica documents, which include-at least formally-different competences: basic (or transversal), and specific competences. However, even though these transversal competences are included in this document, the focus is on the specific competences, directly related to the contents of the subjects. Thus, although the key competences are included in the preambles of the Verifica documents, they are not further developed in the content unless they are closely related to the specific competences of the degree.

3 Different frameworks for the UGR. CRAFT project: lifelong learning (LLL) and LifeComp

Since we are working with models, it's likely that we'll find several different ways to structure reality that can help us reach our goals; in practice, these approaches can often coexist and complement each other. For this reason, we selected two interconnected reference frameworks to guide our training design, among the many available in the literature: a broad framework, Lifelong Learning (LLL) (Volles, 2016); and a more specific one, the LifeComp key competence, which focuses on personal, social, and learning-to-learn dimensions (Sala et al., 2020). Both frameworks are endorsed by major institutions: the Organization for Economic Co-operation and Development (OECD) and the European Union (EU), respectively.

3.1 Lifelong learning framework

The concept of Lifelong Learning (LLL) emerged in the European discourse more than four decades ago and has been described as the guiding topic of education policy reforms in the European Union (EU), including a wide range of socio-educational issues (Lee et al., 2008). This topic was linked to the so-called "knowledge society" (Bianco et al., 2002) and focused on coping with increasing economic hardship and large demographic movements in an increasingly global society. In recent decades, especially since the 1990s, the most influential institutions in the development of training policies at the international level (UNESCO, OECD and EU) have converged in the concept of Lifelong Learning (Gijón Puerta, 2016) as a concept that seeks to integrate part of the so-called "human capital" (assumed by the OECD) and "humanist" models, which are more in tune with the UNESCO goals. Within this approach, both the EU and UNESCO have developed distinct models, yet they share a strong emphasis on the holistic development of individuals. UNESCO's report "Rethinking Learning: A Review of Social and Emotional Learning (SEL) for Education Systems" draws on recent research in the field and connects SEL to broader goals such as the United Nations' Sustainable Development Goals and the promotion of peaceful, sustainable societies (Chatterjee Singh and Duraiappah, 2020). In contrast, the EU LifeComp framework, pushes more towards integration into the workforce and career development (Caena, 2019).

LifeComp (Sala et al., 2020) is a theoretical development of the key competence "Personal, social and learning to learn." This competence is one of the eight key competences recommended by the European Commission to be included in the education systems of EU members (Rychen and Salganik, 2002). To our view, it is more interesting to use the LifeComp macro-competence as a reference, because: (a) it is an operational competence model that is far from the use of metaphor and holistic and all-encompassing conceptions— peace, sustainable development, equality...—which are sometimes more complex to address in didactic design; (b) it has been originally planned for implementation in the EU; (c) and it is related to the LLL model, thus connecting all levels of education within the European Union.

This study adopts LifeComp as a reference soft skills framework for the training of UGR undergraduate students. To this end, we will consider the nine competences defined within it (three for the personal area, three for the social area and three for the learning to learn area) and their twenty-seven descriptors, which may be termed "competence elements" or "sub-competences." The competence structure is presented in Supplementary Table 1, assigning the value of "unit of competence" to the nine competences described. This makes it possible to organize a modular training programme, in which each of the modules is precisely associated with each of the competences (units of competence). Each competence will thus be independently certifiable and accumulable, thereby allowing for the establishment of different itineraries, adjusted to the needs and deficiencies detected in each degree. As for the descriptors, they could be considered as topics for each of the modules. Three didactic units or work units can be further developed per module under each of the descriptors. This way, each didactic unit would go on to describe the learning outcomes expected in the unit, which should be written as if they were sub-competences or elements of the competence associated with the module.

4 Proposal of proficiency levels for LifeComp competences

For assessment purposes, including rubric development and grading, four proficiency levels have been defined for each competence and its corresponding descriptors. It is essential that the training program operates at this practical level, as doing so allows the assessment to be both actionable and scalable.

Supplementary Table 2 outlines four levels of proficiency: basic, standard, advanced, and excellent. Generally, each successive level builds upon the previous ones, representing a gradual progression in competence. It should be noted that while these proposed levels are informed by established frameworks such as the Verifica documents, Tuning, and LifeComp frameworks, they are not rigid. Rather, they can be adjusted and tailored to suit the specific characteristics of the

subject matter, the profiles of participants and instructors, and broader cultural considerations.

5 Competences in the bachelor's degree studies of the project

Figure 1 presents a summary of the general and transversal competences outlined in the White Papers and the Verifica evaluation programmes, alongside the LifeComp competences structured by degree. Competences that are underrepresented or absent in degree programmes should be considered key areas for enhancement in training designs informed by the LifeComp framework. Nevertheless, determining which LifeComp competence to emphasize in the training design should not rely solely on this analysis. The decision must consider the content of each degree's training programme for each degree; a task that lies within the remit of the programme developers.

As it can be seen, there is a disparity in the selection of basic and transversal competences. A modular approach to training design is recommended in order to accommodate the diverse range of professional profiles and educational pathways. This flexibility allows the training to be adapted to the evolving demands of academia, the labour market, and society at large. By enabling customization and scalability, a modular structure supports the alignment of educational outcomes with specific contextual needs, thereby enhancing the relevance and impact of the training programmes.

6 Competence-based training programmes

The design approach is structured to integrate both, a broad, longterm competence and more specific, certifiable competences associated to individual modules. The overarching competence is drawn from the LifeComp framework, reflecting its holistic and crosscutting nature, while each module is aligned with one of the nine specific competences that make up this framework. Competence descriptors guide the planning of training units, providing a clear structure for their development. This is further refined through the incorporation of detailed, context-specific elements tailored to the implementation of each unit. Such a layered design ensures alignment between the broader educational objectives and the practical aspects of content delivery.

6.1 Competences as learning outcomes

As a response to the lack of clarity in defining competences, training planning is structured around learning outcomes articulated as competences. Once these competences are defined as learning outcomes, the training design is developed accordingly. This design includes:

- The objectives, expressed as training intentions.
- The contents of the training, i.e., what should be taught and must be learnt to achieve sufficient development of the competences set out in the training.

	LIFECOMP COMPETENCES AT THE BACHELOR'S DEGREES									
	I	Personal Are	а		Social Area	а	Lear	ning to Learn	Area	
BACHELOR'S DEGREE	P1. Self-regulation	P2. Flexibility	P.3 Wellbeing	S.1 Empathy	S2. Communication	53. Collaboration	L1. Growth mindset	L2. Critical thinking	L3. Managing learning	TOTAL
TRANSLATION AND INTERPRETING	1	4	2	3	19	4	3	14	8	58
MEDICINE	0	6	1	8	13	7	12	16	4	67
SPORT SCIENCES	1	6	9	13	6	6	6	7	5	59
CIVIL ENGINEERING	0	1	2	2	2	0	2	9	3	21
TOTAL	2	17	14	26	40	17	23	46	20	

FIGURE 1

Comparison of transversal degree competences between LifeComp and the White Papers/Verifica documents. The frequency of appearance of the transversal competences that make up the LifeComp macro-competence in the official curricular documents of the different degrees that have been reviewed (Translation, Medicine, Sport and Civil Engineering) is shown.

• Assessment criteria, expressed as tasks which, when correctly performed by the students, indicate that the learning outcome was adequate. These criteria may be specified in the form of standards if a higher level of accuracy in the criteria is deemed necessary.

The analysis of competences reveals significant variability in how soft skills are represented across different degree programmes. As a result, the training design must account for this diversity, requiring tailored courses for each specific degree. To address this challenge, the proposed solution is to develop a single modular course structure that can be adapted to the unique characteristics of each degree involved in the project. This modular approach not only ensures flexibility and relevance but also enables future adaptation of the content to new degree programmes, postgraduate studies, or to the specific needs of students, educators, and professional profiles.

7 Training course design

The proposed training design follows a modular structure. The course is organized around the three core areas of the LifeComp framework, comprising nine modules, each aligned with one of the specific competences outlined in LifeComp. Depending on the target careers or professional profiles, relevant modules can be selected to create tailored learning pathways.

Given that students are viewed as professionals in training, the design prioritizes professional rather than purely academic profiles. To effectively build these pathways, it is essential to clearly define the intended professional profile in advance. This ensures that the course content and delivery are appropriately aligned in terms of duration and depth to achieve meaningful impact.

To support flexibility and scalability, each module is assigned an equal credit value, allowing for the construction of learning pathways with varying total credit loads. In the hypothetical examples provided, each module is assigned one credit (see Table 1).

7.1 Course general design

As shown in Tables 2–4, a standardized protocol is provided to ensure coherence throughout the training programme.

In designing the overall structure of the course, the following guidelines should be taken into account, based on the competencebased training model outlined in Table 2:

- (1) The course should be identifiable with a simple, easy-to-remember acronym.
- (2) The total number of hours should be indicated as well as how many hours will correspond to each module. It is recommended that all modules have the same number of hours. Credits or ECTS credits can be used.
- (3) An overall objective of the course should be set.
- (4) A general competence corresponding to the general objective, the LifeComp competence, must be selected.
- (5) The modules that make up the course should be defined around a structuring topic each. The general content of each module can be used for the wording.
- (6) A competence to be called "unit of competence" must be associated with each module. This must be certifiable

TABLE 1 Possible professional profiles and learning pathways.

Profile	Modules						Number of			
	P1	P2	P3	P4	P5	P6	P7	P8	P9	credits
Interpreter		1	1		1	1		1	1	6
Translator	1				1	1	1	1	1	6
Physician	1	1	1	1	1	1				6
Medical manager			1		1	1	1	1	1	6
Civil engineer		1	1	1		1	1		1	6
Sport trainer	1	1	1		1	1	1			6
PE teacher	1		1	1	1		1		1	6

For each degree programme, six modules are selected out of the nine modules that make up the training profiles, thus selecting the transversal competences involved.

TABLE 2 Template for competence-based modular training course
worksheet.

course hours) purse	Title of the course To provide the learner with Description of the LifeComp competence Topics					
purse	with Description of the LifeComp competence					
purse	LifeComp competence					
	Topics					
	Topics					
	Associated competences (certifiable "unit of competence")					
	CP1.					
	CP2.					
	СР3.					
	/Cxxx.					
ons						
/Oxxx.						
d degrees	 Translator Interpreter Sport trainer 					

The template allows for a schematic description of a complete training course, including the general objective, the associated competences, the selected modules and their units of competence.

independently of the others and therefore cumulative. In our case, each of the nine LifeComp competences can be related to a module of the course.

- (7) It is advisable to establish the general methodological strategies to be followed in the course.
- (8) It is advisable to clearly specify the professional profiles or academic degrees for which the programme is intended.

Additionally, it is advisable to include information on the instructors' professional profiles, the overarching content of the module, the assessment methods to be used, the general criteria for successful course completion, and any other relevant details deemed appropriate. TABLE 3 Module template.

Module No.	Hours xxx	Title	
		Module title	
Objective of the module			
Competence associated wit	For each module, one of the nine LifeComp competences		
Contents associated with th	Topics		
Training units of the modu	Competences associated with the training units (derived from the descriptors)		
TU1.		CP1.	
TU2.		CP2.	
/TUxxx.		/CPxxx	
Methodological observation	ns		
O1.			
O2.			
/Oxxx.			
Teachers profile			

The template allows for a schematic description of a training course module, including the objective, the associated unit of competence, the training units and associated contents.

7.2 Design of the course modules and training units

As shown in Table 3, a template can be defined to homogenize all modules during the design of the training.

Each module of the course should adhere to the following guidelines to ensure clarity, consistency, and effective implementation by the trainers:

- (1) The module should be labelled as it was entered in the course record.
- (2) It is advisable to indicate the number of hours.
- (3) It is desirable to write a descriptive title of the contents.
- (4) It is recommended to state the objective of the module.
- (5) It is convenient to select a competence corresponding to the LifeComp macro-competence which in turn must coincide with the one included in the general course sheet.

TABLE 4 A competence-based training unit factsheet.

Module number.	Training unit	UF title	Training hours				
Module title:	number		Theory	Practice			
Competence associated with the training unit	criptors						
Specific competences of the training	unit	Assessment criteria (key tasks)					
CP1.	KT1.						
CP2.	KT2.						
СР3.	KT3.						
/CPxxx.	/KTxxx.						
Contents associated with the training unit							
CT1.	CT1.						
CT2.							
СТЗ.							
/CTxxx							

The template allows for a schematic description of a unit factsheet based-on competences, including the specific competences and their associate assessment criteria.

TABLE 5 A content-based training unit factsheet.

Module no.	Training unit no.	UF title	Trair	ning hours		
Module title:			Theory	Practice		
Competence associated with the training unit	mp descriptors					
Specific contents of the training unit		Assessment criteria (key tasks)				
CT1.	KT1.					
CT2.		KT2.				
CT3.		KT3.				
/CTxxx.		/KTxxx.				
Competences associated with the training unit						
CP1.						
СР2.						
СР3.						
/CPxxx						

The template allows for a schematic description of a unit factsheet based-on contents, including the specific contents and their associate assessment criteria.

- (6) It is important to define the training units that make up the module, each one around a structuring topic.
- (7) Each training unit should be explicitly linked to a single competence. The associated descriptors, formulated as learning outcomes, may be utilized to further specify the unit's focus, effectively resulting in three distinct sub-competences per training unit.
- (8) It is advisable to establish the methodological observations.
- (9) If deemed necessary, the trainers' profiles can be indicated.

Each training unit within a course module should include the fundamental elements necessary for trainers to comprehend its purpose and apply it effectively in practice. This includes a clear description of the unit's objectives, relevant content, and intended learning outcomes. To ensure consistency and pedagogical coherence, it is also important to detail the sequence of activities planned for each session. These activities should be aligned with the overall methodology of the course and tailored to support the achievement of the defined learning goals. Providing this structured guidance facilitates a more effective and consistent implementation across different trainers and learning contexts.

7.2.1 Competence-based unit model

In this approach to designing teaching units, learning outcomes are articulated as competences and are linked to corresponding assessment criteria or "standards" (see Table 4).

While the content of each training unit is also specified, it is not directly associated with key assessment tasks. Instead, the focus remains on evaluating the acquisition and demonstration of competences through defined performance criteria.

7.2.2 Content-based unit model

Content or activities can lead to the planning of training. In many cases, it is more convenient for trainers to organise the contents in a precise way and link them to the assessment criteria. In this proposal, as can be seen in Table 5, the contents to be taught are drafted and associated with the assessment criteria ("standards").

8 Conclusion

Today's students are entering a labour market that is significantly more challenging and unsettled than that faced by previous generations of scholars and researchers (Hora et al., 2020). The role of universities must be redefined to respond proactively to the evolving demands of contemporary society. This requires a shift from a traditional focus on content acquisition toward the development of higher-order competences that are critical to students' well-being, both in their personal lives and professional careers (Alves and Tomlinson, 2021). In particular, the increasing importance of soft skills in an ever-changing social and economic landscape must be acknowledged and integrated into higher education practices (Succi and Canovi, 2020).

In light of the current and rapidly accelerating changes in society, there is an urgent need to expand the scope of learning within Higher Education. This is not a matter of preparing for a distant future transformation is already underway. Acknowledging this reality, Higher Education institutions are increasingly moving beyond the traditional twentieth-century model, which emphasized specialized and technical competences, and are instead placing greater focus on the development of higher-order skills essential for students' wellbeing and effective performance in both academic and professional contexts.

To meet these demands, colleges and universities must be equipped to support more complex and multifaceted learning processes. This includes the adoption of diverse learning modalities, opportunities for personal and professional growth, and flexible pathways for achievement. Such an approach requires robust systems for assessment, certification, and credentialing that recognize and validate high-quality learning outcomes both within and beyond the academic sphere.

The integration of soft skills into university curricula has emerged not only as a topic of academic research but also as a pressing concern for higher education administrators and policymakers. This issue has gained prominence in strategic discussions on educational reform and institutional development. For instance, in a publication commemorating the 500th anniversary of the University of Granada (Luque Martínez, 2015), university rectors from a wide range of institutions—both international (including Helsinki, Poitiers, Cartagena-Colombia, Glasgow, and Kassel) and Spanish (such as the Universities of Córdoba, Alcalá, Valencia, Deusto, and Granada) highlighted the need to embed soft skills into undergraduate and postgraduate programs.

Further evidence of this concern has emerged from recent international Erasmus+ KA2 projects, which have identified significant gaps in the development of key competences such as entrepreneurship and creativity among incoming university students. These projects also underscore the growing recognition—among both students and academic staff—of the critical role soft skills play in enhancing employability (García Sempere et al., 2023; Khaled Gijón et al., 2023; Lizarte Simón et al., 2023).

In this context, the proposed initiative aims to introduce a coherent and pedagogically robust general competence-based programme that complements the existing, more specific competence-based curricula. The objective is to enrich student learning while offering a proactive educational response to the complex and evolving challenges faced by contemporary society.

The findings presented in this paper have informed the development of a large-scale psycho-educational intervention currently implemented at the University of Granada (Spain), reaching over 45,000 undergraduate students. Additionally, these findings have supported the design, registration, and implementation of parallel studies aimed at evaluating the intervention's impact and guiding future developments.

These studies are formally registered with clinicaltrials.gov under the identifiers NCT05598944 and NCT05775978.

Data availability statement

The original contributions presented in the study are included in the article/Supplementary material, further inquiries can be directed to the corresponding authors.

Author contributions

BR: Supervision, Writing – review & editing, Project administration. MK: Conceptualization, Supervision, Writing – original draft, Methodology, Writing – review & editing. IÁ: Conceptualization, Supervision, Writing – original draft, Writing – review & editing. MG: Funding acquisition, Resources, Supervision, Writing – review & editing, Conceptualization, Writing – original draft.

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Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Generative AI statement

The author(s) declare that no Gen AI was used in the creation of this manuscript.

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Supplementary material

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