DeustoSocial Lab

DEUSTO SOCIAL LAB REPORTS

The social impact of the University of Deusto

People who transform themselves to transform society. An overview focused on learning processes. Part 2

Víctor Urcelay, María Lambarri, Elvira Arrondo, José Luis Larrea



No. **4(2024)** ISSN 3020-3090 ISBN 978-84-1325-255-1

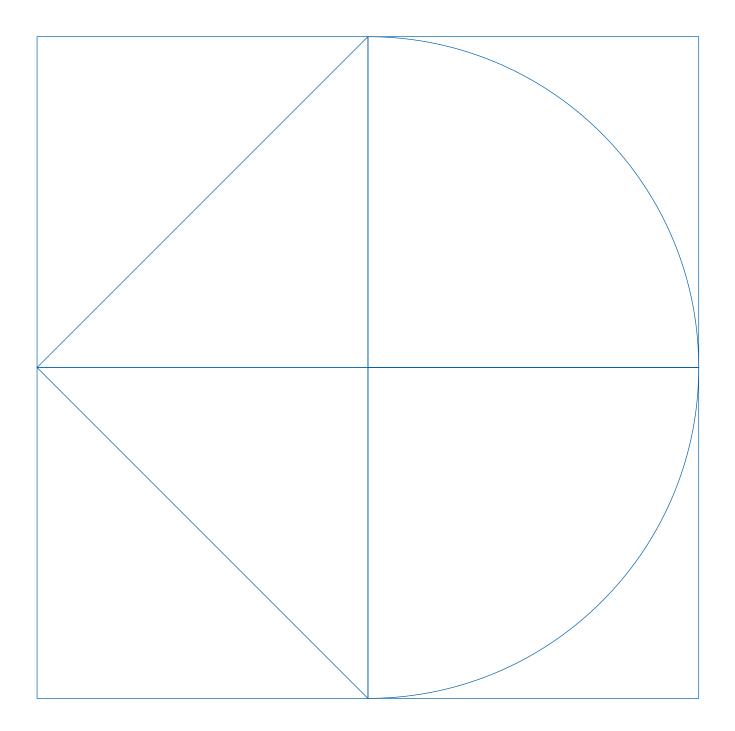


Deusto Social Lab Reports. No. 4(2024)

The social impact of the University of Deusto

People who transform themselves to transform society. An overview focused on learning processes. Part 2

Víctor Urcelay, María Lambarri, Elvira Arrondo, José Luis Larrea



The different projects, studies and pieces of research carried out by Deusto Social Lab every year form the basis for the publication of the so-called *Deusto Social Lab Reports*.

These monographs are aimed at all the economic and social actors that make up the open cooperation ecosystem in which the mission of Deusto Social Lab operates (companies and organisations, public administration, educational institutions, social and cultural bodies, among others) and, ultimately, at society at large. Using non-academic language, these monographs showcase the transformative power of research and enable Deusto's research results to be shared with social actors. This is intended to help them meet the challenges that they face in connection with social transformation by offering them examples of good practice, as well as guidelines and recommendations that can be useful in their work.

Frequency of publication and format

The Deusto Social Lab Reports are published twice a year, both in print and electronically.

Subscriptions

There is currently no charge for submission, publication, online access or download. Hard copies are made available to key contributors and partners.

Copyright

The Deusto Social Lab Reports are Open Access publications published by the University of Deusto (Spain). Their contents are readily available free of charge. Users may read, search, download, distribute and reuse these contents in any medium or format only for non-commercial purposes and in compliance with applicable copyright legislation. No authorisation is required from the publisher or the author provided that the original work is properly cited and any changes to the original are clearly indicated. Any other use of its contents in any medium or format, now known or hereafter developed, requires the prior written permission of the copyright holder.

© University of Deusto P.O. Box 1, 48080 Bilbao, Spain Publications Tel.: +34-944139162 E-mail: publicaciones@deusto.es URL: www.deusto-publicaciones.es ISSN: 3020-3090 (*versión impresa /* printed version) ISBN: 978-84-1325-255-1 (*versión impresa /* printed version) Deposito Legal / Legal Deposit: LG BI 1354-2023

Printed and bound in Spain

DEUSTO SOCIAL LAB REPORTS. No. 4(2024)

Editorial Board

José Luis Larrea Jiménez de Vicuña, Chairman of the Advisory Board of Deusto Social Lab and member of the Governing Council of the University of Deusto

Víctor Urcelay Yarza, Pro-Vice-Chancellor for Entrepreneurship and Business Relations at the University of Deusto and Professor at Deusto Business School

Irene Cuesta Gorostidi, Director of Lifelong and Dual Training at the University of Deusto and lecturer at Deusto Business School. Garbiñe Henry Moreno, Director of Entrepreneurship and Innovation at the University of Deusto

Jesús Riaño Sierra, Director of Alumni and Employment at the University of Deusto

José Luis del Val Román, Professor at the Faculty of Engineering and Lecturer in Executive Education at Deusto Business School. María Lambarri Villa, Director of the Unit for Relations with Economic and Social Actors at the University of Deusto.

Editorial Office María Lambarri, Editorial Manager Deusto Social Lab University of Deusto Avda. Universidades 24 48007 Bilbao Tel: +34 944 13 90 00 (ext 2107) Email: Maria Lambarri. <maria.lambarri@deusto.es> Web: http://www.deusto.es/

Foreword

Deusto Social Lab has been launched to meet the challenges posed by society in the 21st century. Providing people with the lifelong support they need so that they can be active agents of transformation is at the heart and core of what we do at the University.

This approach involves promoting the development of the person as an agent of change and transformation throughout life, and goes hand in hand with a process of ongoing training and learning. It also considers that the desired transformation must have a purpose: we want people to be agents of change at the service of well-being, we want our society to be characterised by inclusive and sustainable well-being, in which people play a leading role.

Similarly, we recognise that knowledge does not only reside in the university. It is therefore essential to generate an ecosystem for open learning, which links the various areas of knowledge to economic and social actors. In this ecosystem, the relationship model must be based on cooperation, recognising that the worlds of business, government and any type of social organisation must work together to face the challenges that exist within the new context.

Through the Deusto Social Lab Reports, we seek to transfer and share with our entire ecosystem the results of selected projects, initiatives and studies conducted in order to contribute to addressing the new challenges faced in our society.

> Víctor Urcelay Yarza Pro-Vice-Chancellor for Entrepreneurship and Business

Relations and Head of the Deusto Social Lab Initiative

Deusto Social Lab aspires to build a space for cooperative learning that fosters the co-generation of knowledge at the service of progress, while transforming the day-today work that we do. This learning space is committed to stimulus, discussion, reflection, action, recognition and dissemination, which need to be constantly developed to ensure sustained and sustainable learning processes over time. Processes that are useful and bring recognised value to society in terms of social impact.

In this context, these Reports are intended to be a sound instrument not only for dissemination, but also for stimulating and provoking a type of discussion that leads to reflection, action and the recognition of what we do, turning the process into a creative spiral that unfolds over time.

Stimulation is important in triggering any learning process and achieving cooperation in working at the service of an envisaged common future. An envisaged common future that serves to stimulate us; that lead us to share by engaging dialogue and conversation; and that demands individual and collective reflection and challenges us to take cooperative action. An action that needs to be evaluated and recognised as part of the construction of the common embodied narrative in every learning process. This is aimed at disseminating and socialising shared learning, which is the best way to stimulate a new stage of knowledge generation through learning. It involves working hand in hand with people, who are always at the core of the process.

> José Luis Larrea Jiménez de Vicuña Chairman of the Advisory Board of Deusto Social Lab

DEUSTO SOCIAL LAB REPORTS. No. 4(2024)

Project conducted by Deusto Social Lab in partnership with the BBK Foundation.

University of Deusto.

The social impact of the University of Deusto

People who transform themselves to transform society. An overview focused on learning processes

INDEX

СН	APTE	R ONE	9
1.	Intro	duction	10
СН	APTE	R TWO: LEARNING PROCESSES	14
2.	The r	elationship between learning and knowledge. An in-depth study of both concepts	15
	2.1.	Knowledge and learning	15
	2.2.	Knowledge and transformative learning	16
3.	The r	ole of the University in learning processes	18
4.	Trend	Is and levers for change	20
	4.1.	The VUCA environment as a lever of change for learning processes	23
	4.2.	Competency-based employability. Covering the most in-demand competencies and strategies	24
	4.3.	Digitalisation. Maturity level in organisations and people	27
	4.4.	Learning to learn. The key and the solution	29
	4.5.	Some conclusions	30
5.	Chall	enges for the university	31
СН	APTE	R THREE: LEARNING AND IMPACT IN THE UD. OUR OWN MODELS	33
6.	The L	JD's learning model	34
	6.1.	Ignatian pedagogy as a basis for MAUD (UD Learning Model)	34
	6.2.	The UD'S differential value: Transversal competencies	37
7.	The L	Iniversity of Deusto's Social Impact Model through its learning processes	39
	7.1.	Global framework	39
	7.2.	A conceptual framework specific to the social impact of learning processes	40
СН	APTE	R FOUR: THE APPLICATION OF THE MODEL. DISCOVERING OUR IMPACT	51
8.	Our o	operational context	52
	8.1.	The improvement in the Basque economy and social well-being	52
	8.2.	Educational characteristics of the population and the labour market	53
	8.3.	Qualifications demanded by Basque companies	54
9.	The i	mpact of the UD's activities on the selected learning processes	56
	9.1.	Individual transformations: a structure for impact assessment	57

DeustoSocial Lab

9.2.	Overall assessment of transformations occurred through specific transversal competencies	58
9.3.	Assessment of activities in terms of their contribution to the development of competencies	69
9.4.	Comparison of final-year students' and companies' scores	72
10. Future	e lines of work	83
10.1.	General project	83
10.2.	Undergraduate and postgraduate learning processes	83
10.3.	2030 Agenda and social impact	85
ANNEXE	S	86
Annex 1.	Methodology of the action research process	87
Annex 2.	References	91
Annex 3.	Index of figures and tables	95

Chapter one



1. Introduction

The University of Deusto has met one of the commitments identified in its strategic plan Deusto 2022 by engaging in a line of work started in 2019 aimed at providing a model to comprehensively understand, analyse and assess its social impact. Strategic line 18 (L18) of the 2022 Deusto strategic plan, entitled 'Assessing the University's social impact and its contribution to sustainable development', specifically addressed this issue and resulted in the two reports that precede this one:

'The social impact of the University of Deusto. An entrepreneurship-based overview', which covered 2019 and was the outcome of the first year of work on L18 (Deusto Social Lab Report number 3).

This document was an initial overview of the University of Deusto's social impact model and was based on a process of internal and external co-generation that was subsequently applied to the specific activities that the university conducted in the field of entrepreneurship. An action-research standpoint was used to develop a theoretical-conceptual framework of the social impact model. This was later specifically applied to the activities promoted by the UD in the area of innovation and entrepreneurship during the 2015-2018 period.

As described in this 2019 Report, the impact of the University of Deusto has been inherently related to its essence, the fulfilment of its mission through its university project. The impact is made by the individuals whom the University supports in their educational journeys, through the knowledge it generates in partnership with other stakeholders, and as a result of Deusto's commitment to society. All these impacts converge at a single, fundamental point: people. People who form a relationship with the University of Deusto may do so at different times in their lives, and are guided by different motivations to transform themselves in order to likewise transform their environment. They take on an active, conscious, critical and committed role in society. In the words of Pedro Arrupe (Superior General of the Society of Jesus, SJ), they become 'people for others' (Kolvenbach, 2001). The report goes further in voicing the specific transformations to which the UD aspires in the field of entrepreneurship and proposes a battery of impact indicators throughout the transformation process, which have been (partly) measured.

The University is also an agent that is in turn transformed as a result of its multiple relationships. Therefore, it has an impact in two directions: as people are transformed, so is the institution itself transformed. The University is an active social agent that aims to make a contribution by finding answers to the social challenges that arise. It does so directly, by using its capabilities, and, above all, by also making these available to people.

In short, the work carried out in the first phase made it possible to confirm the validity of the proposed model and to obtain the first social impact indicators applied to a specific area. Since then, work has continued on its deployment in the area of entrepreneurship by systematising processes and tools, while also sharing and disseminating the results to society.

 'The social impact of the University of Deusto. An overview focused on learning processes', 2020, was a result of the deployment of the second phase of work and a continuation of the study performed during the previous year (Deusto Social Lab Report number 4).

This second phase took place in 2020. It further expounded on the global concept, moving forward by reflecting on the so-called first mission of the university, the learning processes. What is important for our purposes is that learning takes place in a variety of settings (not only in the university, but also within the family environment, in the community, and in the world of work) and requires different stakeholders to be involved (in addition to the university, the organisations and companies that work in partnership with it in the learning processes, for example). This analysis was therefore approached with humility, since the people who come to the University of Deusto with the objective of learning (whether through undergraduate, postgraduate, doctoral or lifelong learning programmes) also do so in those other spheres in which formal, non-formal or informal learning takes place as well. Taking into account the scope and complexity of the subject in question, this report conceptually structured the social impact model derived from the learning processes and took a step forward by reaching out to one of the main stakeholders (companies and organisations that host trainees and graduates).

The study confirmed that the logic of the conceptual model of social impact proposed in the first phase was fully applicable to the learning processes: the UD supports people in their learning processes by placing the all-round education of the person at the centre of the university project (i.e. seeking to shape students into people who are educated, competent, just and hope-inducing professionals). The UD encourages people to acquire knowledge (as a result of these learning processes) that is manifested as competencies, both transversal (necessary for and common to all programmes of study) and specific (tailored to each profession). The acquisition and development of these competencies is thus a process of personal transformation. This logic leads us to see competencies as those transformations to which the UD aspires, which are conveyed through people, the real agents of social transformation. These will thus be people's transformation processes in this impact model; as in the previous case, a battery of impact indicators was proposed for them, which, in this case, were applied to one of the most important UD stakeholders: the companies and organisations that offer our students internships and/or employ our graduates.

This work showed that the values of the individual, how they work and how they behave are increasingly important. Companies and organisations demand people with a specific attitude and motivation, who have the ability to adapt to the changes that society requires. Thus, those who have more transversal competencies will be more likely to find and keep a job because of their ability to provide added value to their company; but, above all, they will become more employable. In this sense, UD people are highly prized for these transversal competencies, which the UD continues to reinforce and boost through new projects and proposals for the future.

This report concerns the work carried out throughout 2021. Its focus continues to be the UD's learning processes social impact, with specific emphasis on the most significant group for the University, which is its raison d'être: students, the people who trust the UD to support their learning processes.

As was the case in the previous phases, the work process maintained and observed the basic premises established at the beginning of this strategic project, which are as follows:

- The project has been conceived and conducted using an action-research or transformative research approach, so that the conceptual model can be validated and corrected if necessary. It also generates joint learning among the different project participants, which promotes the co-generation of knowledge.
- The research project was therefore structured as a space to generate knowledge to be shared with institutional, economic and social stakeholders. Being able to Identify and involve them at the right time is thus important to ensure a successful process.

- The project used different combined quantitative and qualitative methodologies, which were applied using different existing methodologies and models on social impact. The most appropriate for each case have been selected and proposed.
- The research project did not seek to merely derive value from its assessment, nor did it seek to monetise all contributions.

In addition, this third Report furthers our understanding of the social challenges we face, particularly regarding how they affect institutions such as ours, and does so specifically from the perspective of how learning processes can make a contribution. In this context, an increasingly clear and shared understanding has emerged to the effect that education has an enormous potential to provide people with the necessary tools to face these challenges and contribute to greater (not only individual but also collective) well-being. This can be effected by identifying the levers of change that can be pulled to meet the needs of the volatile, uncertain, complex and ambiguous (VUCA) environment in which we operate.

All these issues are discussed in detail in this report, which is structured into four chapters and ten sections.

CHAPTER ONE

This consists of a single section aimed at specifically contextualising the scope of the work carried out in the third phase. It focuses on the learning processes at the University of Deusto and their assessment by one of the main stakeholders: students.

1. Introduction

CHAPTER TWO: LEARNING PROCESSES.

This chapter summarises the main reflections and conclusions on how the learning processes are conceptualised, which were covered at great length during the previous phase of the project. They identified the university as one of the leading agents (since its mission and core purpose is centred on supporting people in their learning processes). It also draws on a series of global trends that have a significant impact on our society to highlight those with the greatest impact on the University, identifying the challenges to which we must rise in an increasingly immediate future.

2. The relationship between learning and knowledge. An in-depth study of both concepts

Traditionally, the process of knowledge production has been located in academia, which is why this section reflects on both knowledge and learning. We note that there are different conceptual approaches to both notions, and identify two models as the most relevant for our purposes: the model by Gibbons et al. (1994), called Mode 2 of knowledge production, and the model by Kolb (1984), regarding experiential learning.

3. The role of the University in learning processes

The University is a social agent with a major role in social transformation. It carries out its mission to contribute to and improve social well-being through its triple function of teaching, conducting research and transferring the knowledge generated. Its current, more global mission is a consequence of the University's continuous adaptation to the social challenges and the context in which it operates. In the field of teaching, focusing on the employability of students, this is centred on providing students with the knowledge and skills to excel professionally. This endeavour is conducted with a view to educating active, responsible citizens, endowing them with the competencies and values that will enable them to meet the vast challenges of a society that aspires to achieve inclusion, justice and sustainability. In this process, the University takes on the role of facilitator and it evolves in response to various educational gaps in order to adapt to the necessary changes in the teaching-learning processes, concerning what, how, and when to teach and learn

4. Trends and levers of change

Among the numerous macro trends shaping globalised societies and economies, we will focus on those that have a specific impact on university teaching. In particular, we will examine how the competencies learners need to develop and acquire throughout their lives—as both professionals and citizens—are evolving, along with the learning processes themselves. This shift is driven by two main factors: the VUCA environment, marked by rapid change, uncertainty and complexity, and the unstoppable digitalisation of businesses, institutions and society at large. In the realm of employability, these trends are reshaping the professional profiles and skills demanded by companies. To meet these demands, individuals must cultivate a personal capacity for lifelong learning, alongside a positive attitude, resilience and adaptability.

5. Challenges for the University

The above scenario also creates challenges for the University. These include the development of new programmes and the adaptation of existing ones to meet the new requirements for employability in terms of professional profiles and competencies. Moreover, teaching-learning models, formats and methodologies are having to adapt to a user profile that is more digital, broader and more dispersed, where there is a need for ongoing lifelong learning. Thus, face-to-face formats are evolving towards hybrid and digital ones, while at the same time teaching innovations are being incorporated into processes, giving rise to new learning environments for which adequate digital training of teaching staff is required. Furthermore, the nature of current knowledge management processes challenges the university to enhance collaboration with other educational, business and social institutions.

Chapter Three: Learning and Impact on the UD. Our own models

Based on the impact model developed and applied in previous phases, this chapter includes the UD's initiatives both with regard to its own teaching-learning model and to the one specifically related to the UD's impact on society through the aforementioned learning processes.

6. The UD's learning model

The University of Deusto's hallmark project relies on the Ignatian tradition, on the basis of a specific pedagogy which has been called the 'Ledesma-Kolvenbach university paradigm' in the field of higher education. This is the foundation of the UD's Project and the UD's Education Model (known by its Spanish acronym as 'MFUD'). One the main elements of its pedagogical framework is that it focuses on the individual, and that it promotes an all-round, autonomous and supported education. The innovative nature of teaching is reflected in the methodologies used in the teaching-learning processes, the impetus given to dual and online models, and the new degrees offered to the market. This chapter provides a summary of all these elements.

7. The social impact of the University of Deusto through its learning processes

This section describes the ad hoc model designed to investigate and measure the impact of the UD's learning processes. It is based on the fact that learning process outcomes are measured in terms of competencies, which are defined as a combination of knowledge, skills, attitudes and values that enable individuals' personal and professional development. These competencies therefore reflect the transformations which the UD aspires to achieve in its learning processes. Analysing them will make it possible to discover the scope of the transformation, and thus the impact generated.

The focus of the analysis is on the degree course, as was the case in the previous Deusto Social Lab Report (2021), which analysed learning processes from the perspective of companies. However, this approach should be equally valid for all learning processes, such as postgraduate, doctoral, further education, dual and extra-curricular education. CHAPTER FOUR: THE APPLICATION OF THE MODEL. DIS-COVERING OUR IMPACT

This chapter includes both the specific measurement of a part of the proposed impact model for learning processes, as well as identifying areas of work to be further developed in order to broaden and extend the application of the model in the coming months.

8. The context in which we operate: Focus on the Basque Country

Given that context is an essential and necessary element in the social impact model designed, this section analyses the specific context that affects the UD and specifically, those variables that are most relevant to learning processes.

9. Impact of the UD's activities on learning processes

This section covers the partial application of the model regarding the UD's learning processes over the last three years. The information necessary for identifying the impact was collected from both internal sources and by conducting fieldwork with the key group for the UD: its students, the people who entrust their learning processes to the UD. And specifically, students in the final stages of their degree (fourth and fifth years), who are approaching the end of their learning processes and therefore have the necessary depth of vision to assess the whole process. This section also compares the impact as assessed by the students with that provided by the companies and organisations that host and/or employ UD students and graduates that were studied in the previous phase. This opens a new realm of comparative research focused on the development of the impact over time.

10. Future lines of work

Several lessons were learnt in the course of this third phase of the impact model, compounded by those acquired during the previous phases of the project. This section summarises the main lines of work proposed to extend and further expound on the proposed model in the coming years.

ANNEXES

A series of annexes aimed at complementing the information related to the transformative research process followed during 2021. In addition to laying the foundations for a shared language to be used, it contains other methodological and referential information of interest that broadens and complements the analyses contained in the main body of the document.

Chapter two Learning processes



2. The relationship between learning and knowledge. An in-depth study of both concepts

Human beings have sought knowledge since the beginning of time, as it allows them to interpret the world and use this interpretation to address the situations and stimuli to which they are constantly exposed. Knowledge not only gives people a better understanding of the world, but also of themselves, and is the basis for human survival. Thus, we acquire and develop knowledge through a process, learning. As Ormord, 2005, put it, 'the learning process allows the human species to have a greater degree of flexibility and adaptation than any other species on the planet. Because so little of our behaviour is instinctive and so much of it is learned, we are able to benefit from our experiences. We discover which actions are likely to lead to successful outcomes and which are not, and we modify our behaviours accordingly' (Ormord, 2005).

It is undeniable that people throughout history have constantly sought knowledge in an attempt to have a better grasp of themselves, understand their environment, change and evolve. Studying of how we learn has been an object of interest for different branches of knowledge for a long time; multiple approaches have been used within different sciences more closely linked to education (pedagogy, psychology, anthropology, andragogy, etc.), by building interconnections between them, but also with the aim of understanding the biological mechanisms that foster this process. This section summarises the main concepts related to learning and knowledge that form the basis of the proposed conceptual model that assesses the impact of the UD's learning processes. For a more in-depth analysis of these concepts, we suggest reviewing the Deusto Social Lab Report number 4, entitled 'The social impact of the University of Deusto: An overview focused on learning processes'.

2.1. Knowledge and learning

The term 'knowledge' has a very broad semantic content. It refers to the common understanding that people have about the world, which we use in our daily lives; disciplinary knowledge about different areas of our natural and socio-cultural reality, which make up the different sciences; an understanding of one's own personal identity; and knowledge about knowledge itself, that is, metacognition (García, 2009). A survey of the existing literature shows that, while knowledge has been widely studied from multiple perspectives, there is no common, single, clear definition. There is, rather, a great conceptual diversity both in terms of the concept itself and the different types of knowledge into which different authors classify it. The following conclusions can be drawn from its review:

- Knowledge is more than data or stored information. 'Knowledge includes aspects such as cognitive categories, the codes of interpretation needed to make information explicit, the tacit skills needed to put information into practice and the ability to provide solutions to problems' (Larrea, 2017).
- A distinction must be made between knowledge as a process (knowing) and knowledge as stock (knowledge). 'Knowledge refers to a fixed point in time at which a perception or belief has been recognised as knowledge, while knowledge in action is that which takes place continuously as we make use of that knowledge in a process (Karlsen and Larrea 2015).'
- Knowledge is dynamic. Knowledge is deemed to be something dynamic that is continuously created and recreated, which develops through the observation and transformation of experience. 'Knowledge is a transformation process' (Kolb, 1984).
- Knowledge is derived from experience and requires reflection. The importance of reflection (on problems and their possible solutions) in the integration of theoretical knowledge has been addressed by different authors: Knowledge comes from experience and problem-solving (Dewey 1933,1991, cited by Larrea, 2017). Again, the concept of reflection is polysemous, complex and interdisciplinary, and reflective action, for

Dewey, included the active, careful and persistent analysis of any belief or practice in the light of the reasons behind it and its possible consequences (Bastidas, J.A., 2018).

- · Knowledge does not belong to and is not for the individual alone. Social participation is required for the (co-) generation of knowledge. Following Wenger (1998), learning (and consequently, knowledge) occurs in social contexts that emerge and evolve when people with common goals interact as they strive to achieve those goals. Larrea took up this approach by acknowledging that the focus is on a broad concept of knowledge, which transcends a definition of knowledge in terms of stored information to consider the processes of knowledge generation from a social interaction perspective. This approach was maintained by Gibbons et al. (1994) in what is known as Mode 2 of knowledge generation, which corresponds to the production of knowledge in the context of a given application, in a transdisciplinary, heterogeneous, socially reflexive way and with new quality control mechanisms.
- When knowledge is both intellectually and emotionally relevant and meaningful to the person it is more easily, durably and effectively assimilated (Csikszentmihalyi, 1993; Seligman, 1991, cited in García 2009).

As is the case with knowledge, multiple approaches to the definition of learning can be found in the conception of knowledge, and has been analysed within multiple fields. The disciplines of psychology and pedagogy have made numerous proposals to explain and understand how people learn and how we build our cognitive structure, albeit using different definitions and conceptions. The differences lie primarily in the understanding of what changes when learning takes place (some refer to a change in behaviour—behaviourism—while for others it is mental representations or associations that change cognition).

Some interesting implications for the subject of this study can be drawn from the different existing theories:

- Learning is a cognitive process whereby knowledge is created through experience (Kolb, Dewey). This requires considering who the learner is and in what context the learner operates; how the learning process takes place (how it is developed and acquired and what barriers may be encountered) and its expected application. This reflection could be extended to the consideration that learning is not only about acquiring new knowledge, but can also entail reinforcing, restructuring or eliminating knowledge that we already have, among other things.
- As experience is dynamic and constantly evolving, it could be concluded from the above that the process is

more important than the outcome, i.e. having knowledge as a 'storehouse' is no longer meaningful in our time and the focus should be on the development of a dynamic skill that gives meaning to all the knowledge that is acquired over time (Ya-hui Su, 2011).

- In addition, the change brought about by the learning process initially takes place within the person who experiences it. According to Feldman (2005), learning is a process involving change in a person's behaviour. And cognitive processes influence learning.
- For learning to be considered meaningful, it must result in long-lasting behavioural change (or change in behavioural capacity).
- Practice is important in the learning process. People are more likely to learn something when they have opportunities to act, speak, write, experiment or demonstrate something.
- Learning is a process that involves action and reflection. As it needs to be exercised practically, reflection linked to experience is an essential tool. Learning processes are closely related to action-reflection processes, which stand out in the literature because they fundamentally affect the practical exercise and generation of knowledge. They focus on learning by doing rather than learning as an activity that is separate from practice. Reflection is an essential tool linked to experience.
- Learning is enhanced in positive environments and when it is associated with positive emotions.
- Individuals control their own learning, and therefore mental engagement is key to effective learning (depending on the nature of each person's cognitive processes).

2.2. Knowledge and transformative learning

Society evolves through change, through transformation. Recent years have seen a shift from what has been known as the information society to the knowledge society of the 1990s. The theoretical formulation for the information society began to take shape in the 1960s. Information was seen as an economic resource at the service of competitiveness (which in fact gave rise to the development of an important sector of economic activity). The knowledge society, however, describes societies that are economically and culturally highly dependent on their potential to create knowledge. Bueno (1998, 2001) defined the knowledge society as a society in which value in the economy is fundamentally created through intangible resources, based on knowledge in action, in which the cornerstones that build structure and behaviour are founded on knowledge (in all its dimensions), talent and imagination.

Society today is characterised by what some call the age of uncertainty, where the only thing that seems to be immutable is change. A new concept has been coined, the learning society, where 'knowledge is crucial when placed at the service of innovation strategies, which make competitiveness possible. It is essential to take a different approach to knowledge and learning' (Larrea, 2017). Peter Drucker contributed to the advancement of the knowledge society in 1993, as he argued that in the knowledge society people must learn how to learn, and highlighted the importance and necessity of developing ongoing (lifelong) learning skills. In this new learning economy what is at stake is the capacity of people, organisations, networks and regions to learn (Lundvall cited by Larrea, 2017). Nobel prize-winning economist Joseph E. Stiglitz also proclaimed that learning has never been more important than it is today.

Thus, today's society calls for an awareness of the importance of (individual and collective) learning in order to face social challenges. A type of learning that leads to the generation of knowledge that has capacity for social transformation, and is therefore transformative knowledge.

What do we understand by transformative knowledge? Transformative knowledge is knowledge that is generated in a process of personal (individual) and social (collective) transformation (Larrea, 2017). The peculiarity of this alchemical and transformative process is that when we experience it, we become someone else (personal transformation), and, given that cooperation with others is necessary for generating it (as we have seen in previous sections), this also entails a social transformation.

Moreover, if we consider that knowledge is the expression of the accumulated outcomes of our learning processes at each point in time, then transformative knowledge and transformative learning must be very closely related (Larrea, 2017). That is, transformative knowledge is the result of a transformative learning process.

And what do we mean by transformative learning? Following the analysis conducted by Larrea (2017), the literature shows different approaches that study it (including the main authors quoted above), which consider transformative learning to be emancipatory and liberating. This involves a change in mental structures through a reflective process that involves confirming, adding to, or transforming the ways in which we interpret experience (Mezirow, 1991); promoting internal reflection and intrapersonal dialogue (Boyd 1991); and changes not what we know but how we know it (Kegan, 2009).

In Mezirow's words:

«There are two dimensions to transformative learning, the transformation of meaning schemes and the transformation of meaning schemes is integral to the process of reflection. As we assess our assumptions about the content or process of problem solving, we create new ones or transform our old assumptions and hence our interpretations of experience. This is the dynamics of everyday reflective learning. When occasionally we are forced to assess or re-assess and then find unjustified the basic premises we have taken for granted, what follows may be a transformation of perspective, resulting in major life changes. » (Mezirow, 1991:192).

In the context of today's learning society, this conception of transformative learning seems to inherently hold that this process is intrinsic to the life process of individuals, and therefore learning never ceases throughout life. Thus, lifelong learning can be understood on the basis of its two constituent concepts: learning and life. This refers to the individual and collective, formal and informal learning that takes place throughout life at all ages and stages, using all available resources (Torres, 2013).

In his 1996 report 'The Four Pillars of Education', Delors referred to the four fundamental learning processes in the course of a person's life: learning to know, i.e. acquiring the tools of understanding; learning to do, in order to be able to influence one's environment; learning to live together, in order to participate and cooperate with others in all human activities; and finally, learning to be, a fundamental process that brings together elements of the previous three.

When referring to this issue, the philosopher J.A. Marina (2005) argued that learning is the resource that intelligence has available in order to survive and progress in a changing environment. When these changes were slow, a brief stage of training was enough for one's entire life. But we are in the midst of accelerated change, which requires ongoing, rapid, lifelong learning.

Deusto Social Lab Reports. No. 4(2024) ISSN: 3020-3090 • ISBN: 978-84-1325-255-1

3. The role of the University in learning processes

The University is an outstanding social institution with a strong vocation of social transformation. It fulfils its purpose of promoting welfare and contributing to inclusive economic and social development through its threefold mission: teaching, research and the transfer of knowledge to society. Its continuous adaptation to social and contextual changes has meant that its current mission has become more global in nature (Aranguren, Canto-Farachala, Caro and Larrea, 2020), and has recently incorporated the function of knowledge transfer into the two classic missions of teaching and research. At the Conference of Vice-Chancellors of Spanish Universities (CRUE) (2018) it was noted that universities are the natural space for knowledge, research and teaching and therefore they are the institution that continuously transforms society, which entails that they have a great social responsibility.

The educational function, through which people are supported in their personal and professional development, is the core activity of the University. Higher education institutions (hereinafter HEIs) play an essential role in this, both because of their scope (as they reach a multitude of students) and because the students educated in their classrooms are the professionals who will lead future changes, and consequently are an essential force for change to meet the challenges we face as a society (Gil-Pérez and Vilches, 2017; Aznar-Minguet, et al., 2017). There are also economic and social benefits arising from higher levels of education, including greater protection from the risk of unemployment, better jobs and salaries, healthier lifestyles, and greater ease of social participation and integration.

According to the CYD Foundation Report (2021) and to a BCG study it refers to, the university is a key player in the social subsystem, and is therefore sensitive to changes in the other subsystems, including the economic, technological, industrial and cultural subsystems. Consequently, in order to ensure that all students have access to high-quality education that prepares them for the future, it faces a number of challenges. The Report defined them as 'gaps in the education system' and identified three types. The 'perspective gap' is linked to when and how learning occurs, in the sense that the education ecosystem should be thought of as a continuous process that extends throughout life. The 'skills gap' refers to how and what is learned and points to the urgency of a transformation to work on the skills needed in the new reality. The opportunity provided by technology to change educational methodologies and experiences was also mentioned in the CYD Foundation Report. To bridge the 'agility gap' the Report urged that there is a need for action that goes beyond thinking about how to transform education and noted that the education sector is one of the most reluctant to change.

Filling the 'skills gap' pointed out by BCG requires that universities adapt the competencies and skills to be acquired and to cater for the new working environments, new professional profiles, more diverse student profiles, as well as different learning environments and processes. The responsibility for and commitment to the employability of the students therefore urges higher education institutions to identify and prepare for professions that were previously non-existent and demand new knowledge and skills. However, the existing professions also require an updating of professional skills and abilities as a result of changes in the nature of employment, which has been fundamentally altered by digitalisation.

Nevertheless, while it is important to endow students with knowledge, skills and tools that are geared towards the labour market and to facilitate their employability, this is not sufficient. According to Michelsen (2016), the university should extend its role beyond merely educating professionals; it should also cultivate citizens with ethical awareness and a sense of civic responsibility. These individuals, both as professionals and as members of society, should make decisions and act based on principles of responsibility and a commitment to the well-being of humanity and the environment. And universities should also ensure that their students include in their professional and private lives a vision that promotes a more sustainable and balanced development, a process that begins with each person (UNESCO, 2020). According to the Report entitled 'The future of education and skills Education 2030', there is a need to develop capacities, skills, attitudes and values (different from those prioritised to date) in the context of a complex, changing, digital and interconnected world (OECD, 2018).

There is a clear consensus that the role of the university is to be a facilitator of learning, an aspect highlighted in the previous report (Deusto Social Lab Report No. 4). Taking into account that knowledge is more dispersed and that it originates from and is mediated by different stakeholders, it is essential for the university to liaise and promote collaboration with them. The rationale for this is that meaningful learning requires a multidisciplinary and action-oriented approach.

This is all part of a framework of teaching and learning strategies and processes, which have been affected by digitalisation and need to be adapted, or fully implemented, specifying the role that people, spaces, time and technology play in them. However, there is a broad consensus on the importance of focusing the learning strategy on the learner as a person and working on the basis of a transformative pedagogy in flexible learning environments that make it possible to have a personalised process. To this end, strengthening digitalisation from a humanist perspective is an essential lever.

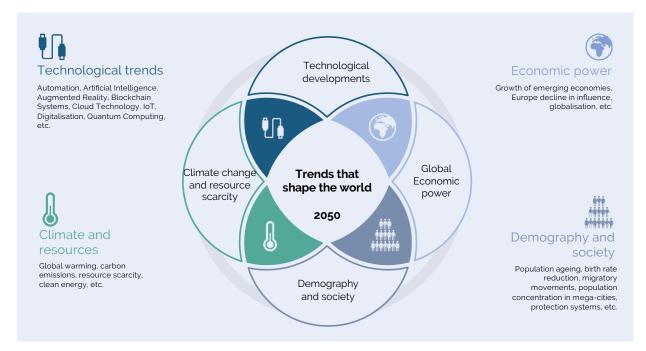
The university's vocation as a facilitator also extends to the field of lifelong learning. Longer periods of work require professionals to undergo ongoing training, which equips them to respond appropriately to the changing demands of the labour market. In this scenario, a fundamental contribution of universities is facilitating better access to lifelong learning, becoming a trusted lifelong advisor or counsellor, facilitating their personal and professional development in response to the 'perspective gap' identified by BCG.

Finally, linked to the civic awareness and commitment referred to above, the 2030 Agenda (United Nations, 2015) for the general fulfilment of the SDGs, and especially SDG4 Quality education includes Target 4.3. and Target 4.7, which address HEIs and universities in. The latter refers to Education for Sustainable Development (ESD), to which it attaches increasing importance and is intended to achieve the goal of creating a more just and sustainable world by achieving the 17 SDGs by 2030. A similar concept is what is known as Education in SDGs (ESGDs). The transformative action of ESD is a consequence of a process in which the individual transformation of each learner plays a key role. Therefore, the incorporation of ESD and the SDGs into university teaching is an unescapable challenge for universities. They are considered to be the most appropriate sphere to lead the creation of scenarios and forms of education for sustainability (Martínez, 2018), the implementation of which requires the involvement of the entire university community and many other social agents.

4. Trends and levers for change

Since Deusto embarked on this initiative in 2019, it has been deemed essential to consider the trends shaping the world, both now and in the coming years, and to reflect on how these trends particularly and significantly have an impact on institutions like ours. For several years, it has been clear that we are living in a time of change and transformation, marked by growing complexity and a fast-paced change, a process that has been dramatically intensified by the onset of the global pandemic. This analysis is included to help understand and correctly contextualise the current environment, identify opportunities and assess risks. It is therefore important to revisit these drivers or levers of change in order to understand their effects and draw insights from them. In identifying and analysing them, it must be remembered that they cannot be viewed in isolation, as the interconnections between various trends are becoming increasingly stronger.

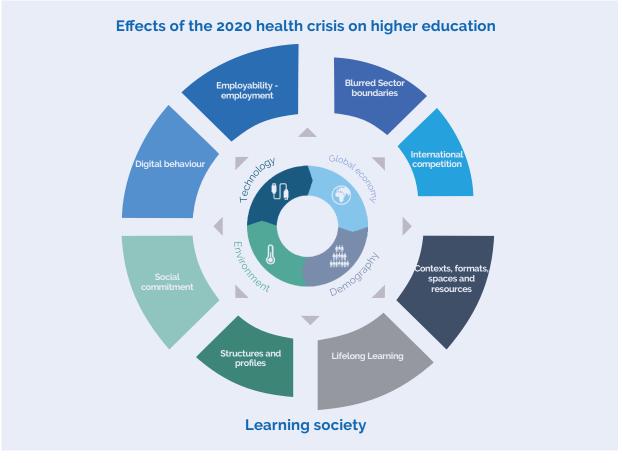
The report 'The social impact of the University of Deusto, An entrepreneurship-based overview ' (Deusto Social Lab Report No. 3) summarised the main macro-trends in four areas of transformation that are already affecting societies and economies in the globalised world: technological progress, socio-demographic changes, the change in world economic power and the environment. It was also mentioned that a multitude of future scenarios emerge from their combination. Further details can be found in the aforementioned report, which is graphically summarised in Figure 1 below:



Source: Prepared by the authors (Deusto Social Lab)

Figure 1. Trends that shape the world (2050)

This analysis of the work undertaken in 2020 (and its detailed insight into how these macro trends directly impact the University) was followed by the study 'The Impact of the University of Deusto on Society: An overview focused on learning processes' (Deusto Social Lab Report No. 4). This built on the previous work and further expounded on those trends which particularly influenced learning processes. This included employment and employability, digital behaviour, lifelong learning within the context of a learning society, as well as the impact on contexts, formats, spaces and resources dedicated to learning and social responsibility. See Figure 2 for a visual summary.



Source: Prepared by the authors (Deusto Social Lab)

Figure 2. Challenges for the University of the future. A focus on the challenges closely linked to the learning process

Given that the focus of this phase of the study continues to be on learning processes, we will now discuss some of these trends further and explore how they are acting as drivers of change and specifically from the perspective of the impact they have in relation to the competencies that people will have to acquire and develop throughout their lives. The sources of information consulted have been expanded (full details can be found in the Annex to this report), which have made it possible to examine the following in greater depth:

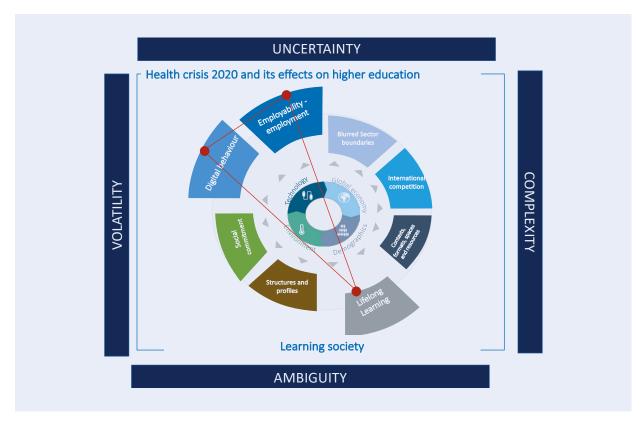
- The VUCA environment as a lever for change in learning processes. In the face of an increasingly volatile, uncertain, complex and ambiguous world, education—learning—can make a difference by equipping people to meet the challenges they face and be agents of social transformation.
- We also continue to focus our attention on one of the areas of greatest interest for society in general and for the university in particular. People's employability, and how this has evolved over time, what competencies are most in demand, and what strategies companies and organisations are following to ensure that their people have the competencies they need.

- The pandemic inspired us to analyse and understand digitalisation processes, not only from the perspective of their real and expected impact but also from the perspective of one of the most important groups for the University: students, both young and not so young; specifically, their relationship with technology and the role it plays in their learning processes.
- In short, the realisation from different spheres and agents that the recognition of ongoing lifelong learning will be a determining factor.

Before discussing the trends mentioned above further, it is important to note that the subsequent subsections of section 4 refer to various competencies and skills, each following different classification and naming criteria. To aid understanding, it has been deemed necessary to first summarise the scope of the main classifications and clarify the connections between the different terms used.

The Spanish Agency for Quality Assessment and Accreditation (*Agencia Nacional de Evaluación de la Calidad y Acreditación*, known as *ANECA*) defines competencies as 'the knowledge, skills and attitudes that are acquired or developed through coordinated education/training, with

DeustoSocial Lab







the purpose of achieving functional knowledge that efficiently addresses a task or problem of daily and professional life that requires a teaching and learning process' (ANECA, 2012). Competencies are a dynamic combination of knowledge and skills with attitudes and values. The most common classifications and designations are as follows:

- a) **Specific and transversal competencies.** A widely used classification, which the Tunning Project (2006) defines as:
 - Specific competencies: these relate to specific disciplines.
 - Transversal competencies: these are generic and transferable and shared by all subjects or fields of knowledge. Three types are identified:
 - Instrumental competencies: cognitive, methodological, technological and linguistic abilities.
 - Interpersonal competencies: individual abilities such as social skills (social interaction and cooperation).
 - Systemic competencies: abilities and skills concerning whole systems (combination of understanding, sensibility and knowledge).

- b) **Soft skills and hard skills**. Concepts that are also widespread, the scope of which is as follows:
 - Hard skills: so-called 'hard' or 'technical' skills. They are based on knowledge acquired and developed through years of academic and vocational training. These are specific competencies.
 - Soft skills: also known as 'soft' or 'non-technical' skills, are a combination of social competencies, personal attributes and attitudes that enable people to interact cooperatively and effectively with others and to integrate into the workplace. These include: collaboration and teamwork, resilience, flexibility and adaptation, personal and social commitment, initiative, leadership, creativity and continuous learning. 'Soft skills' are increasingly important assets complementary to 'hard skills. → These are transversal competencies.
- c) Cognitive and higher cognitive (or metacognitive) competencies. Social and emotional competencies. Practical or digital competencies.
 - \cdot Cognitive and higher cognitive competencies \rightarrow Linked to systemic competencies
 - \cdot Social and Emotional competencies \rightarrow Linked to interpersonal competencies

• Internships. (Some approaches focus on digital competencies) \rightarrow Linked to instrumental competencies.

There is a tendency to differentiate between **human competencies** (cognitive and social and emotional) and **digital competencies.**

- d) Fusion Skills. Liquid Skills. These are more recent terms.
- Fusion Skills and Liquid Skills: these concepts reflect the 'new' skills required for digital economy profiles, which require close collaboration between human workers and intelligent machines. Hybrid human-machine tasks will be performed in addition to the tasks performed by humans and machines on their own.

Table 1 shows a summary of the typologies mentioned above.

Specific. Technical \rightarrow	Hard Skills		
Transversal. Generic →	Soft Skills	Cognitive and higher cognitive Social and emotional (self-leadership) Practical. Digital	Systemic Interpersonal Instrumental
Fusion Skills, Liquid Skills			

Source: Prepared by the authors (Deusto Social Lab)

Table 1. Typology of competencies. Overview of the most commonly used approaches

4.1. The VUCA environment as a lever of change for learning processes

Ever since the concept of the 'VUCA environment' coined more than three decades ago, it has been linked to times of social and economic turbulence, from the Cold War to the 2008 crisis. In recent times, there has been a resurgence of the use of these four letters due to the crisis caused by the global Covid-19 pandemic.

- Volatility, associated with the nature of the changes and the speed at which they occur, usually frequent, rapid and significant. It requires a high level of knowledge and predictive ability, and involves being prepared for events that require fast and effective action.
- Uncertainty due to unpredictability of events. It is known that change is possible, it is indeed certain, but its direction is unknown.
- Complexity caused by a multitude of often interconnected factors, breaking the cause-effect logic.
- Ambiguity due to the difficulty involved in understanding various situations, given the lack of clarity, which may lead to different interpretations.

In this context, people play a fundamental and active role in all dimensions of their lives. And here education has a vital part in helping individuals develop knowledge, skills, attitudes and values so that they can contribute to and benefit from an inclusive and sustainable future. All of this is based on the understanding that they will need to apply their knowledge to tackle complex challenges in unfamiliar and changing situations, requiring them to acquire and develop competencies that will evolve throughout their lives.

One of the most striking implications of the current context of technological, environmental and social change, and of increasing complexity and uncertainty is the drastic shortening of the lifespan of skills and competencies. Numerous alarming reports have found that competencies become obsolete faster than they are acquired (for example, according to a BCG report, technical skills become obsolete within two to five years, a shorter period than a highly skilled professional needs to be trained). While this is certainly happening, not all competencies fall into this category. Therefore it is important to separate the different categories in order to take the right approach. On the one hand, there are some competencies that can be categorised as 'perishable', which refer to the skills needed to perform a specific task, are often specific to a particular job and change relatively frequently (specific or technical competencies, according to the introductory classification). On the other hand, there are the so-called transversal or generic competencies (also called meta-competencies), which are of a lasting nature, contribute to the development of more specific competencies, are transferable to any job and facilitate lifelong learning.

Learning to set clear and purposeful goals, work with others with different perspectives, find untapped opportunities and identify multiple solutions to big problems will be essential in the coming years. It has been argued

DeustoSocial Lab

from different quarters that education must aim to do more than prepare young people for the world of work, as all these forces of change are shifting how, where and when we work. People must be equipped with the skills and competencies they need to become active, responsible and engaged citizens. In short, what is needed is to enable people to build a new reality, to understand how to navigate change and use it as a catalyst for new ways of thinking and working.

In particular, the OECD report 'The future of education and skills 2030' stressed that people will need to develop a wide range of competencies and skills which are mediated by attitudes and values. It pointed to cognitive and metacognitive skills such as critical thinking, creativity, adaptation to change, learning-to-learn and self-regulation; social and emotional skills such as empathy, self-efficacy and collaboration, among others, noting that the ideas, perspectives and values of others will need to respected, and that there will be a need to cope with failure and rejection and move forward in the face of adversity; physical and practical skills, including those related to the digital domain. People will have to learn to be systematic thinkers, i.e. learn to think and act in a more integrated way, taking into account the interconnections and interrelationships between contradictory or incompatible ideas, logics and positions, both from short- and long-term perspectives. Their motivation will be more than just finding a good job and having a high income, and will be about caring for the well-being of their friends and family, their communities and the planet.

These issues are already present in today's younger generations, such as Generation Z, and the next generation, still at a young age, christened by some as Generation Alpha (born from 2010 onwards, and due to reach adulthood in 2030, which will by then represent 11% of the global workforce). For example, according to a BCG study, people in Generation Z are willing to accept 10% less salary in exchange for shorter working hours, and only 36% consider career advancement a priority.

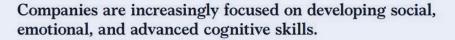
The OECD study highlighted two factors that will help people on this path. The first is a personalised learning environment that supports and motivates each student to cultivate their passions, make connections between different learning experiences and opportunities, and design their own projects and learning processes in collaboration with others. The second is based on building a solid foundation from earlier stages in the educational process. Furthermore, it indicates that the use of this wider range of knowledge and skills will be mediated by attitudes and values (e.g. motivation, confidence, respect for diversity and virtue). Attitudes and values can be observed at personal, local, societal and global levels. While it is true that different geographical contexts have their specific needs, there are some human values (e.g. respect for life and human dignity, and respect for the environment) that cannot be compromised.

In order for our society to meet all the current challenges, as stated in a BCG report, we will have to move from mass standardisation (which no longer meets present needs) to what it calls 'mass uniqueness', considering the individual attributes of each person, their different needs, capacities and potential to contribute in a unique way to the economy and society. This basically requires the creation of a new social contract, in which people choose where and when to apply their knowledge and competencies, and where to focus their educational and development efforts throughout their lives. This is a daunting challenge for institutions such as universities.

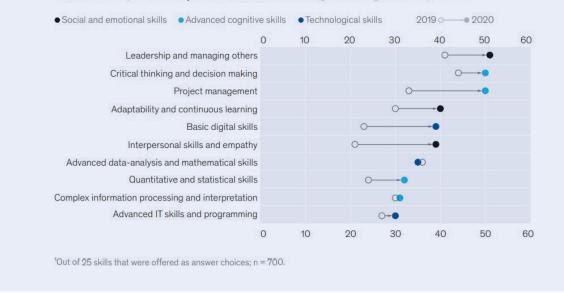
4.2. Competency-based employability. Covering the most in-demand competencies and strategies

We are at a time when significant changes are taking place in the most-in-demand jobs (occupations), and in the skills and competencies required to access employment and to maintain high employability throughout one's professional life. It is estimated that the increased longevity of the working life span can trigger 20-30 job changes in the course of it. In this scenario, the number of skills required for a single job increases by 10% year on year, and more than 30% of the skills needed become irrelevant in just over three years (Gartner, 2020).

Among the causes leading to this situation is the unstoppable advance of the digital transformation of companies, as well as social changes, including consumer habits and the obvious impact of the pandemic. The scenario envisaged for 2025 anticipates that more than half of all jobs will be performed by machines (World Economic Forum-WEB, 2020), which means that humans and machines will solve routine tasks between them with a ratio of approximately 50%-50%, according to the Skills Revolution Reboot report (2021) by ManpowerGroup. In relation to employment, estimates indicate that there will be 97 million new jobs globally related to Artificial Intelligence, the green economy and healthcare (Manpower, 2021), and that more than 107 million workers around the world (of which 5 million are located in Spain) may have to change occupation by 2030 (McKinsey). Consequently, the employability of professionals requires updating, expanding and renewing competencies and skills, which is a major challenge. This has been referred to in various sources as the 'Skill revolution', which involves



Skills that companies have prioritized to address through reskilling,¹% of respondents



Source: Three keys to building a more skilled post-pandemic workforce (McKinsey Quarterly, July 2021).

Figure 4. Competencies that companies are focusing on for re-skilling

people themselves as professionals, companies and educational institutions.

Therefore, the profiles employers are looking for and the professional competencies they demand are changing in line with these needs. According to ManpowerGroup (2021), the demand for IT profiles in Spain doubles every two years. This increases the demand for people with technology-related technical skills and competencies, such as robotics, artificial intelligence, biotechnology, nanotechnology and programming, among others. But also with skills that humanise and help solve the ethical challenges of the digital age. Characteristics such as creativity, empathy, resilience, critical thinking, communication and collaboration are becoming increasingly important. A study by the consulting firm McKinsey revealed that the demand for social and emotional skills (those that machines cannot have a command of) is set to increase by 25% in the US alone over the next decade.

According to the 2021 Talent Shortage' survey produced by ManpowerGroup, there is currently a talent mismatch. Some 69% of companies worldwide, and 64% in Spain say that they cannot find people with the necessary technical knowledge and skill profiles they require for the positions they offer. In Spain, these figures are the highest for the last 15 years. The report pointed out that soft skills have become more important in the wake of the pandemic, and that they have become a key factor in talent selection, with commitment and discipline (26%), initiative and leadership (22%), as well as critical thinking, problem solving and teamwork (each accounting for 14%) are the most in-demand. In terms of company size, large companies are currently having the greatest difficulty in finding the talent they need (83%), followed by small companies (67%), medium-sized companies (66%) and micro companies (42%). A comparison of the most demanded soft skills at a global level (43 countries) and in Spain is shown in Table 2.

DeustoSocial Lab

Position	Global	Spain
1	Commitment. Discipline. Reliability.	Commitment. Discipline. Reliability.
2	Adaptability and resilience	Initiative
3	Initiative	Leadership and social influence
4	Leadership and social influence	Critical thinking and analytical skills
5	Problem solving	Problem solving
6	Creativity	Collaboration and teamwork
7	Collaboration and teamwork	Creativity
8	Critical thinking and analytical skills	Active learning and curiosity
9	Active learning and curiosity	Adaptability and resilience

Source: Prepared by the authors based on the 2021 Talent Shortage survey. ManpowerGroup (2021).

Table 2. Comparison of the most in-demand Soft Skills in 2020

The report 'Oferta y demanda del empleo en España. 2020' (Employment supply and demand in Spain. 2020)', prepared by the job portal Infoempleo and the Adecco Group in 2021, analysed more than 240,000 job vacancies and 170 interviews with companies. It found that the interpersonal skills or soft skills most valued by Spanish companies were those oriented towards problem solving and teamwork, having a positive attitude and values such as honesty and professional ethics. Table 3 shows the top-rated 10 skills, but does not include tolerance to pressure, critical ability and creativity, which occupy later positions.

Position	Spain
1	Teamwork
2	Problem solving
3	Organisational and planning skills
4	Positive attitude
5	Proactivity / initiative
6	Honesty and professional ethics
7	Communication skills
8	Adaptability
9	Empathy
10	Versatility and multi-functionality

Source: Informe Infoempleo Adecco 2020 (Infoempleo 2020 Report). *Oferta y demanda del empleo en España (Employment supply and demand in Spain)* (2021).

Table 3. Soft skills most valued by Spanish companies. 2020

Different employers therefore consider that graduates do not have the competencies they are looking for, a phenomenon generally known as the 'skills gap'. However, this situation hides two different circumstances: on the one hand, the skills gap itself, usually referring to the unavailability of sufficient candidates with the necessary set of competencies to fill vacancies. But on the other hand, the concept of a skills mismatch needs to be considered, which is defined by the BCG as a mismatch in which people's skills are not what they need for the work they are actually performing. According to BCG estimates, this situation is experienced by two out of every five workers in OECD countries, a total of 1.3 billion workers in the world, and is, according to their estimates, a burden equivalent to a 6% annual tax due to the loss of annual labour productivity.

Organisations need to make a commitment to overcome these imbalances. According to the report 'Las empresas españolas ante la revolución del reskilling' (Spanish companies in the face of the re-skilling revolution) prepared by EY and the Future for Work Institute, 61% of Spanish companies recognise that retraining workers will be one of the main priorities in people management in 2022, compared to the current 20%. But it also requires people to take responsibility for and take ownership of their own lifelong learning processes, which requires a certain level of motivation.

From the perspective of companies and organisations, this is proving to be a challenging task, as they must help individuals prepare for a future where new and evolving skills, along with changing ways of working, are a given. In this context, embracing continuous learning is essential to maintaining relevance in the workplace. And they must do this while embarking on a broader organisational experience of what the workplace will look like in a post-Covid-19 world, a challenge that is under increasing pressure to be met.

According to different studies by Gartner that summarise the main strategies that companies are adopting in this regard, these can be classified into three groups:

• Reactive strategies, which entails being close to the business and meeting its needs. However, the time required for (a) the business to communicate its needs,

(b) the gap that opens up while it is being filled and (c) the additional gap while people are being upskilled is excessive. It also adds the risk of new skills becoming obsolete once acquired.

- Proactive strategies, one of the most widespread so far. These entail attempting to predict which competencies will be required in the future by following up on the major macrotrends and try to ascertain to identify the signs provided by the company and their industry experience to decide which will be their specific future needs. The numerous variables involved, together with their unpredictability make this task too complicated. A recent Gartner study using this predictive approach found that employees apply only 37% of the new skills they learn, as the predictions turn out to be incorrect.
- Dynamic strategies. These involve all areas of the company, avoiding traditional mechanisms that are considered too reactive. Advanced big data and/or artificial intelligence techniques are employed, as well as the culture of the organisation and its processes. This means that people must take responsibility for and think about what they need to develop and how. And the organisation must provide the necessary help and support, the tools and knowledge they need to plan for their future. This is the strategy that is proving to be the most successful but also has significant complexities in its implementation, mainly related to the cultural change involved.

On the other hand, some companies are beginning to emerge that have placed skills at the heart of their strategy. There are organisations which have created skills hubs within their structures to manage, operationalise and scale the aspirations of their people. They are usually found in the people area and are responsible for identifying the demands in terms of skills and competencies at any given time and which of these they have available among their people. They create and offer training courses to provide the re-skilling needed at any point. This concern has also led to the emergence of a new type of position, the 'Chief Skills Officer' in some organisations.

4.3. Digitalisation. Maturity level in organisations and people

It is now universally accepted that we must all acquire the skills and competencies needed to pursue our personal and professional goals in today's society, where technology plays a central role in all aspects of life, leading to what is known as the digital transformation. This situation became further even more apparent in 2020, when it was drastically assimilated in an accelerated fashion with the global pandemic. Some analysts have suggested that the world experienced in slightly over eight weeks in 2020 digitalisation changes which, under normal circumstances, would have taken five years to achieve (according to McKinsey data cited in the Fundación Telefónica report 'Sociedad Digital en España 2020-2021' (Digital Society in Spain 2020-2021).

The rapid impact of digitalisation is an unprecedented global phenomenon. As people reinforce digital culture and undergo significant changes in their daily lives, companies are stepping up their efforts in their digital transformation, leading to an increasing demand for professional profiles and skills essential for the digital economy. This process is also becoming accelerated in educational institutions. Therefore, the following sections are intended to provide an in-depth understanding of the different developments mentioned above and concludes with an approach to how digitalisation can be conceptualised as a competence.

Firstly, a closer look at the business environment shows that digitalisation is a prerequisite for companies. The digital transformation processes that companies were already experiencing have been expedited by Covid-19. As highlighted in the Fundación CyD's monograph on digitalisation, 'Covid-19 has driven a clear shift in companies towards prioritising digital transformation and emphasising the urgency of offering consumers digital services through a "digital first" strategy: any service that can be delivered digitally will be digitalised. Even sectors that have traditionally been more reluctant to implement these digitalisation processes have now embraced this digital transformation, either out of necessity or because of the opportunities it can bring. It is estimated that around 75% of global companies have decided to accelerate their digital transformation processes and plans due to the pandemic.'

The 'Skills Revolution Reboot' study (ManpowerGroup, 2021) presented at the World Economic Forum confirmed the link between the level of digital transformation and job creation. It concluded that those companies that had made the most progress in their digital transformation during the Covid-19 pandemic were the most likely to preserve or even create jobs worldwide. Specifically, 38% of companies have accelerated their digitalisation in response to the pandemic and of these, 86% have managed to retain staff or generate new employment opportunities.

According to the OBSERVATORIO EMPRESAS VODAFONE 2020 (Vodafone Business 2020 Observatory), all companies, regardless of their segment, consider new technologies to be important for their short-term activity with a view to the near future. However, the importance of these

new technologies increases with company size, with 58% of large companies rating them as 'very important'.

Clearly, these transformations have a clear impact on the demand for professional profiles that must meet the needs of the digital economy. The World Economic Forum has identified the professions that are set to experience an increase in demand in the near future, and those that are set to decline. The technological nature of the profiles on the rise is more than evident, especially those related to data science and the most cutting-edge technologies, such as artificial intelligence, the internet of things or robotics. Among the occupations that are likely to disappear in the long term are many that have hitherto required high qualifications, which shows that automation does not only affect less qualified profiles, as has traditionally been believed.

This demand for new professional profiles in turn involves a change in the skills and competencies required. According to the latest report by the Telefónica Foundation, 'the digital worker will need to boast a number of skills that are complementary to technical or soft skills, such as critical thinking and creativity'. The report emphasises that, for digital professionals to operate effectively, they must acquire a new set of skills referred to as fusion skills. These represent the essential combination of competencies needed to facilitate the integration of people and machines and have significant overlap with soft skills.

In a similar vein, the consultancy firm Burning Glass Technologies has identified some foundational skills for the digital economy, such as a blend of competencies that should cater for the needs of both technological and non-technological sectors (as quoted in the Fundación Telefónica Report, 2020). It is essential to distinguish between the digital skills to be developed broadly for any profession and daily life, and those that are required for specific training, which can be highly specialised. Burning Glass Technologies thus differentiated between three categories, resulting from a combination of personal, technological and corporate skills:

- Human skills: largely reflecting *soft skills*, which includes communication skills, creativity, critical thinking, the ability to collaborate and digital skills.
- Digital building block skills: these include data analysis and management, software development, computer programming, digital security and privacy skills.
- Business enabler skills: these establish the foundational elements within the workplace environment.

In the second area of analysis, the education sector as a whole and the university in particular, the challenge of digital transformation is not new, nor is it due to the crisis caused by the Covid-19 pandemic, although this has accelerated the process. As with any technological revolution, progress happened at a time when a significant sector of society (the vast majority during the harshest months of lockdown) widely used the tools that drove the change, and 'appropriated them en mass'. There has also been an acceleration in the processes of digital literacy, which are essential to be able to leverage the opportunities offered by the new environment.

How people are teaching and learning have been changing for years thanks to the opportunities provided by technology. Its rapid evolution has meant that the 'digital realm' has become a source of vast potential for learning processes. The reflection on the need for the digital transformation at universities, which has long been debated and shared, is now more topical than ever, as today universities are physical and virtual spaces; they are configured and operate as an interface that allows students to learn through connections facilitated by an expert and using all kinds of resources, from physical books to applications on mobile devices. It is a 'resource mix' area (Domingo and Alvarez, 2012 cited by Domínguez Figaredo, 2014). As stated in the CRUE's document of proposals for the University of 2030, we must understand the digital transformation in universities 'as a change of culture, of organisational model and of the way of undertaking university missions'.

While the progress made by the university in the digital sphere has been significant, largely in response to sporadic restrictions on face-to-face attendance, digitalisation goes beyond the online university. Technology continues to provide opportunities applied to teaching and learning processes in order to improve the experience of learners, whose levels of digital literacy are high and constantly growing. But its application is also extended beyond teaching staff and encompasses all operational processes to increase their operational efficiency, agility and security.

There are many examples of how technology is being used in education and specifically in universities, both in terms of models, formats and content. Other digital resources include artificial intelligence, virtual and augmented reality, blockchain, apps and collaboration platforms. This urges reflection on the impact this has on learning models and strategies specifically for online contexts, since the logic of digitising the physical world without adapting it first is not valid because its depth is much greater: bringing learning processes into the digital world involves changing the teaching-learning dynamic, adjusting it to each student's learning capacities and study capabilities.

Although most universities are already making the transition to more flexible formats, whether hybrid, blended or fully online, further digitalisation can reinforce them to reach audiences of different socio-demographic and geographic profiles, and thus boost inclusion. But digitalisation also facilitates the learning process and enhances the learner experience, based on deeper knowledge and personalisation of learning, as well as by incorporating pedagogical innovations that provide immersive learning experiences. All this is taking place in a scenario where students' digital competencies are becoming strengthened and optimised. However, leveraging such opportunities requires data management and exploitation through analytics and the application of advanced AI techniques, among other technologies. The suitable training of teaching and non-teaching staff and the provision of sufficient resources to enable the digital transformation of processes is also a requirement.

The third area of analysis focuses on the digital habits and skills of the Spanish population in general and especially of the youngest groups, the latter being the main current users of the education system and the university. Despite the fact that there are groups where there is a severe lack of basic digital skills, leading to a risk of digital and social exclusion (Caritas, 2022), there is global evidence of a strengthening of digital skills in 2020 as a consequence of the Covid-19 pandemic, which has compelled people to use digital tools for different purposes. According to the Fundación Telefónica report (2021), the number of online shoppers grew more in the first six months of the lockdown than in the previous four years, teleworking tripled and consumers of information in indirect digital media increased to half the population. Much of entertainment also moved to the online medium. As a result, digital skills have rapidly become necessary in all areas (information, communication, problem solving and computer literacy), with almost 50% of the population admitting that they are much better at using technology, although around a third still do not operate with it efficiently. However, the widespread lack of knowledge about cybersecurity issues is noted as a cause for concern.

As for young people, the university's main target group and intense users of technology, several studies have pointed out that they have deficient levels of digital literacy and that they do not make the most the opportunities provided to their full extent (Ferrés, Aguaded and García, 2012). Among the main shortcomings identified are those related to the creation of knowledge and problem solving by sharing with others through collaborative media, as well as the limited ability to take the initiative and communicate with team members in digital environments; in general, they show passive and uncritical habits in relation to interaction, communication and information consumption (UN-ESCO, 2012; Armendáriz, 2015; Monge and Etxebarria, 2017). There are also significant weaknesses in the area of personal data security and device management. This shows that students have not acquired the skills required for the current context of digital transformation in their academic life (Álvarez-Flores et al., 2017).

The above diagnosis shows that in order to facilitate the employability of students and meet the skill requirements

of the digital economy, universities need to readjust their strategies. This means filling the identified gaps and ensuring that an appropriate level of digital skills is acquired. Because it is a very broad concept with different interpretations, we take as a reference the European Commission's proposal, DigComp 2.0, a framework that establishes five areas of skills or knowledge that every person should have and defines them as follows:

- Information and data literacy: articulate information needs, find data and content, being able to discriminate sources according to their quality.
- Communication and collaboration: communicate and collaborate through digital media, to participate in society, and to manage one's own digital identity and reputation.
- Creation of digital content: be able to create and edit digital content, with knowledge of how licences and copyrights work and are applied.
- Security: know how to protect devices, content, personal data and privacy in digital environments.
- Problem solving: identify technological needs and responses, and the ability to adjust and customise digital environments for each use case.

4.4. Learning to learn. The key and the solution

The context described above, with rapid and disruptive changes and increasing globalisation, together with the challenges posed by the knowledge society and digital transformation, require a permanent capacity to adapt. At the individual level, people need to be mentally flexible, have a positive attitude to change and uncertainty, and the capacity for lifelong learning. All this is necessary in order to remain active in the labour market and respond to changing employability criteria, but also to participate in social activities. As Gómez (2008) pointed out, 'lifelong learning is as old as humanity itself. What is modern is critical reflection and debate about it'.

The fact that knowledge is dynamic and that educational institutions cannot guarantee it on a permanent basis in new hybrid working and educational environments promotes the development of lifelong learning. In this regard, Michelle Weise, Vice Chancellor of Strategy and Innovation, National University System, (USA), an expert on lifelong learning, pointed out that 'we have to assume that learning is going to be more frequent and episodic

DeustoSocial Lab

(...) We have to think of it as lots of highways with many, many on- and off-ramps'.

One of the key competencies for the promotion of lifelong learning is 'learning to learn'. The aim is to reinforce personal autonomy in order to learn in different contexts and with or from other people, as well as to be able to cope with changing situations. The 'learning to learn' approach ensures that all people are empowered throughout their lives, aiming at their individual and social well-being. It includes all people and all possible learning settings (formal, non-formal and informal), thus fostering inclusion.

It is a competence that has a transversal and integral character, i.e. it includes the different phases of the learning process. Martín and Moreno (2007) defined it as the most basic basic-level competence. 'Learning to learn' means having the skills to start learning and being able to continue learning in an increasingly effective and autonomous way according to one's own goals and needs. This competence involves developing both cognitive and emotional aspects.

Specifically, the European Commission defined the 'Learning to learn' competence as 'the ability to initiate and persist in learning, to organise one's own learning and to manage time and information effectively, either individually or in groups' in the Key Competencies for Lifelong Learning Report (2007). This competence includes awareness of one's learning process and needs, identifying available opportunities, and the ability to overcome obstacles in order to learn successfully. This competence means gaining, processing and assimilating new knowledge and skills as well as seeking and making use of guidance. Learning to learn engages learners to build on prior learning and life experiences in order to use and apply knowledge and skills in a variety of contexts: at home, at work, in education and training'.

'Learning to learn' in the area of knowledge requires that the individual be aware of the strengths and weaknesses, of their abilities and qualifications and the learning strategies that work best for them. It demands an ability to seek out the necessary training opportunities and support services. In order to effectively manage it, perseverance and critical reflection on its aims and purpose are a must, as well as autonomy and discipline. But also the ability to work as part of a team. A positive attitude, based on motivation and confidence, and an ability to overcome difficulties and solve problems are essential. This attitude is fostered by an interest in applying what has been learned and experienced.

4.5. Some conclusions

By way of conclusion, Table 4 relies on the information presented in the preceding sections and shows the main transversal competencies and skills for the future of work marked by digitalisation and cultural and social changes. A key factor in the professions of the future are transversal competencies, which need to combine technological skills with human skills (cognitive, social and emotional). All of them are highlighted in the various studies referred to above (McKinsey, BCG, OECD, Telefónica, Burning Glass, Manpower and Adecco).

Critical thinking. Systemi	с	
Project management	C	
Project management Ability to learn		
Communication		
Social and emo	tional (self-leadership)	
Teamwork. Collaboration	1	
Relationship development: empathy, sociability		
Creativity		
Entrepreneurship and in	novation	
Self-awareness, self-man	agement and self-confidence	
Resilience, tolerance to s	tress and flexibility	
Persistence		
Digital	competencies	
Digital fluency and ethic	S	
Software use and develo	pment*	
Understanding digital sy	stems*	

* More specifically digital professional profiles require more specialised digital competencies.

Source: Prepared by the authors based on various reports (McKinsey, BCG, OECD, Telefónica, Burning Glass, Manpower and Adecco).

 Table 4. Typology of competencies. Overview of the most commonly used approaches

5. Challenges for the university

The current environment in which educational institutions operate is characterised by the relentless acceleration of knowledge and a technological revolution occurring at an often disruptive scale. This leads to a new social and productive paradigm that values the ability to apply generated knowledge and to respond to emerging demands. Therefore, in order to promote progress on a social and professional level, the various groups involved in the educational process (most significantly, universities) are required to adapt constantly. As the university is an institution dedicated to educating and empowering students to thrive as professionals, individuals and citizens, while also contributing to global well-being, it is essential to enhance its contributions. This involves not only generating higher-quality content but also developing a broader range of competencies beyond cognitive competencies. Together with the changing environment and the imperative of digitalisation, this has triggered a number of important and diverse challenges that the university must face, notably including:

- 1. Adapting knowledge, competencies, skills and values to current demands and trends in the work and social spheres, with the aim of promoting the employability of students and of ensuring that they become citizens who contribute to social welfare. The fact that the professional profiles recruited are changing increases the demands on the university; it is now required to incorporate higher quality and even new knowledge into the curriculum, especially in the field of technology and digitalisation. But also, because of the new ways of working, it must promote social and socio-emotional skills and competencies such as leadership, initiative and teamwork, among others. Resilience and adaptability are attitudes to be reinforced, as they will enable the learner to cope with current challenges. A humanistic and personal approach will be taken to do this, since students must be enabled to face the challenges of real life at the individual level.
 - Knowledge: specific to existing or new subjects. Also those linked to technology, digitalisation, sustainability and the SDGs.
 - Skills, attitudes and competencies: cognitive (critical thinking, creativity, etc.), socio-emotional (interpersonal, teamwork, adaptability, resilience, leadership, initiative, entrepreneurship) and digital.
 - Values that make it possible to navigate today's complex and changing world.

This may cause the need to modify existing programmes and develop new curricula that respond to the growing demand for new or even non-existent professions, which are implemented through a variety of degrees and programmes of varying formats and lengths. Operationally, this process may require unprecedented teaching content and processes.

- 2. The updating and development of teaching-learning strategies and models adapted to ever more diverse student profiles, as well as to teaching environments that are increasingly digitalised and feature greater formal and informal interaction. At the same time, the practical approach needs to be strengthened. In order to cater for a more multicultural student body, of different ages and with various traits, resulting in particularities and differentiated training needs, it is necessary to personalise learning processes and make them more flexible in order for them to be meaningful. Technology is an essential element to do so. Consequently, in addition to promoting the integration of learning between disciplines, it is necessary to adapt processes and methodologies, tools, spaces and the relationship between students and teaching staff.
- 3. The promotion of a culture of lifelong learning and training for learning to learn and adapt. The increasingly fast pace at which the knowledge and skills required are changing makes this strategy even more important as an enabler for adequate professional and personal well-being. For this reason, universities must develop lifelong learning skills, as well as offer training formats and channels that meet the need to continuously adapt to new work requirements. However, it is also important to expand the focus beyond lifelong learning to encompass all areas of life, addressing the various aspects of well-being as a whole. This means that the university must have a lifelong commitment to its students.

Driving the levers of transformation that facilitate meeting the above challenges is a taxing endeavour. The levers needed include innovation, digitalisation and cooperation.

4. Strengthening innovation as a fundamental lever of transformation. As the Vodafone Innovation Ecosystem (2021) pointed out, the role of the University in society and in the economy must be even more significant in order to generate the innovation that can be crystallised into the different types of industry. But it also extends the role of innovation to the field of teaching.

- 5. The intensification of digitalisation is indispensable for the above purposes. It facilitates the personalisation and flexibility of learning processes, allowing each learner to choose the time, place, format and channel, depending on their conditions. The inclusion of technology leads to the automation of various processes currently carried out by teaching staff, which encourages them to focus on activities that add greater value to student education. This transformation necessitates a shift in role of the teaching staff, requiring them to train in and develop the digital skills needed to effectively manage technology and to embrace their new position as facilitators who are closest to the student. An important aspect in relation to digitalisation is that it will also allow access to different profiles, thus encouraging inclusion.
- The promotion of collaboration between all the social agents involved in the processes of knowledge generation. The university must enhance its role as a mediator and forge alliances among various stakeholders,

including companies, technological institutions, universities and governments. This is essential because knowledge is dispersed, and meaningful learning necessitates a practical approach that is closely connected to the real world. This is the framework for the 'European Universities' project, promoted by the European Commission in 2018 with the aim of encouraging mobility between countries and universities, and increase the internationalisation of the Spanish University System.

7. The adaptation and anticipation of the education system to the new demands of the market require agility as well as personal and economic resources. In relation to the latter, the EU Council approved the Next Generation (NGEU) plan in July 2020. Within this framework, the Spanish government has launched the Recovery and Transformation and Resilience Plan for Spain, which includes a section for the modernisation and digitalisation of the education system and specifically refers to the university system, including measures for the training and qualification of teaching and research staff and the improvement of digital infrastructures, equipment, technologies, teaching and evaluation.

Chapter three Learning and impact in the UD. Our own models



6. The UD's learning model

The University of Deusto was founded at the end of the 19th century and has constantly adapted to meet the educational needs of society, remaining true to its principles and vocation of service to the community. It has successfully faced the challenges posed by technology, internationalisation and innovation processes, and become a pioneering institution in remarkable fields of knowledge, including law, business and the humanities.

It has its own pedagogical framework based on Ignatian pedagogy, which focuses on the process of transformation of the individual based on experience, reflection and action. It prioritises competency-based learning, applying an innovative and recognised education model (MAUD) which promotes an all-round, autonomous and supported education, in which each student is placed at the core of the process. Person-centredness is the cornerstone of the model.

The UD's commitment to social transformation means that it must face new challenges, which are met through differentiated initiatives; by launching new education programmes in the market, notably including those linked to areas of great interest such as healthcare and digitalisation; developing new innovative teaching models, such as the Dual Model and Deusto Online. At the same time, it applies new teaching methodologies such as problem-based learning and service learning, among others, which foster the development of essential skills, including critical thinking and problem solving. It also reinforces the provision of continuous training for teaching staff.

6.1. Ignatian pedagogy as a basis for MAUD (UD Learning Model)

Ignatian pedagogy has its roots in the spiritual experience of Saint Ignatius of Loyola (1491-1556). It was offered to the world to be replicated in his Spiritual Exercises, and shared by the group of people who made up the founding core of the Society of Jesus together with him, and those who are part of this religious order until today. The most prominent features of Ignatian pedagogy are as follows (Gil Coria, 2002):

It sees learners as all-round individuals and seeks their overall development.

- It conceives education as a process of personal transformation through experience, reflection and action: it starts from the context of the learner, promotes experience, demands reflection to understand the deeper implications and is oriented towards commitment to faith and justice. Reflection is key for students to gain a depth of thought that helps them to overcome the difficulties in reaching critical truthfulness about reality and their life.
- It underlines the importance of evaluation, including the evaluation of the progress of human attitudes.
- · It provides value-based learning.
- It understands the teacher-student relationship as being key to education: teachers support students in their growth and development. This requires that they are approachable and accessible to students.
- This involves having an overall vision that unifies and helps crystallise criteria based on Ignatian principles common to all teaching.

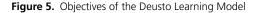
In the transition from the 20th to the 21st century, Peter-Hans Kolvenbach brought the traditional Ignatian apprenticeship model up to date. Based on the Jesuit theologian and pedagogue Diego de Ledesma (1519-1575), Kolvenbach identified four essential dimensions in all Jesuit education, especially in higher education, which he defined by using the Latin terms of utilitas, iustitia, humanitas and fides, corresponding to the practical dimension, the social dimension, the humanistic dimension and the religious or meaning dimension. The map of the four dimensions of the Ledesma-Kolvenbach model starts from a Personal Profile; it does not include (academically assessable) 'competencies' in the strict sense; rather, it points to 'orientations, sensitivities, attitudes, values...', which serve as a basis for personal choices and constitute guidelines and guides for personal and professional behaviour; in this sense, they are presented as extensions of the competencies in the strict sense, at a higher level. To preserve this affinity, it would perhaps not be an abuse of either the concept or the language to designate them as being 'Meta-Competencies' (Agúndez, 2008)

The Ledesma-Kolvenbach paradigm helps to understand the mission of the universities managed by the Society of Jesus, in which, in addition to the professional profile, other aspects are considered, such as the importance of the social dimension in students' education. Based on this paradigm, in addition to seeking excellence in research and teaching in order to educate people to be competent professionals (utilitas), we must also educate free people who uphold ethical and humanist values, who are selfaware and have a consciousness of the world in which they live, and are sensitive to the aspirations and concerns of their contemporaries (humanitas); people sensitive to the Gospel and Christianity (fides), who are committed to building a fairer world and compassionate enough to feel the joy and pain of others as their own (iustitia). Within this framework, the UD emphasises the development of ethical and humanist values, with the aim of educating free people, responsible citizens and competent professionals equipped with the knowledge, values and skills that will enable them to commit themselves to the promotion of knowledge and the transformation of society. It also highlights a strong commitment to social and cultural change in society and solidarity towards those who are disadvantaged.

In 2000, the UD developed its own pedagogical framework, which is still in force today. It provides pedagogical underpinning for the overall teaching process. This pedagogical framework is implemented through the UD Education Model (MFUD) and the UD Learning Model (MAUD), supported by competency-based learning, consistently with the guidelines of the European Higher Education Area (Poblete and Villa, 2008). Its objectives are set out in Figure 5.



Source: University of Deusto Learning Model.



The pedagogical framework of UD teaching is based on the following eight principles:

- Person-centred education.
- Values-based learning.

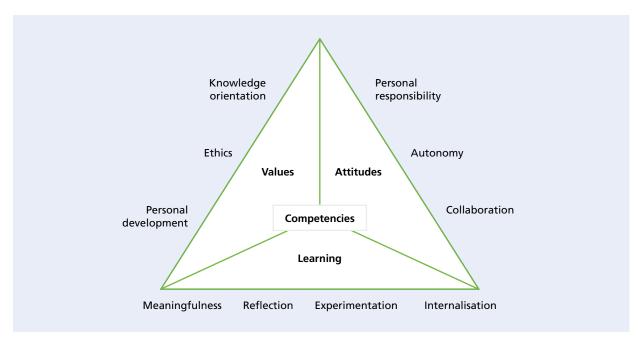
- Encouraging the creation of personal and social attitudes.
- Fostering autonomous and meaningful learning.
- Promoting the development of thinking.
- Enhancing the acquisition of academic and professional competencies.
- Includes ICTs.
- Becoming a learning organisation.

Based on these principles, the MAUD model promotes Competency-Based Learning, which consists of the integration and mobilisation of knowledge, skills, attitudes and values, demonstrated by appropriate performance in diverse and real contexts. Based on the competencies that students must develop in their professional and personal spheres, the knowledge required in each education area is specified, as well as the attitudes and values to be developed. This results in students gaining the wisdom derived from knowledge, and the attitudes and values that enable them to both be wise and willing to put their knowledge into practice, in order to achieve appropriate outcomes from their actions. The proposed learning model, MAUD, is based on the experiential learning of Kolb et al. (1976) and Ignatian pedagogy (Gil Coria, 1999).

As indicated in the introduction to this section, new proposals based on the MAUD have been developed in the UD which have launched new and innovative approaches to learning processes. This is the case for the pioneering Deusto Dual Training Model, which applies the UD's proposals to promote, develop and implement dual university training. Deusto Online, which also offers a complete online learning experience, is a model in its own right. More information on these cases can be found in the Deusto Social Lab Report No. 4 and the University of Deusto's website.

Competency-Based Learning therefore is aligned with a holistic education model oriented towards social and personal transformation, helping the learner to develop as a person. The UD aims not only to transmit specialised knowledge to students and prepare them to engage in a specific profession, but also to support them in their process of personal growth and development, so that they can develop their own (intellectual, personal, social...) potential in order to provide creative solutions to society's problems.

The pyramid in Figure 6 is composed of four sides, namely, learning, attitudes, values and competencies. It presents the main elements of the model, which contribute to the all-round development of individuals. The combination of all these elements promotes holistic learning and helps the learner to develop as a person.



Source: UD Pedagogical framework.

Figure 6. Main elements of the UD Learning Model.

A number of aspects are particularly important in relation to the four components of the pyramid:

- The learning model (at the bottom of the pyramid) combines the different learning styles and aims to apply different types of intellectual thinking. Meaningful learning involves applying thought by combining reflective activities and observation, with conceptualisation, experimentation and evaluation of process and outcome.
- Attitudes towards learning help to set and systematise habits and behaviours according to personal choices which become values. For learning to be autonomous and meaningful, students should take personal responsibility and develop a positive attitude towards study and learning, and do so as part of a collaborative process in which they are supported, and they share and cooperate with their fellow students, teaching staff and other people in their environment.
- Individual values are a consequence of each student's personal and social background. They are linked to their experience, environmental responses, ideals and expectations, among other factors. Regarding values, consistently with the University's mission, the type of the person it seeks to graduate into the world and the learning model, efforts focus on three key areas:
- Personal and social development: the first focus of values is the person. Values such as personal dignity, right to life, self-esteem, self-confidence and self-fulfilment are considered. All human rights are linked to this key area.

- Knowledge orientation: this involves developing the value of seeking the truth, engaging in study and knowledge. This value applies throughout life.
- Ethical-social responsibility: this means taking responsibility for financial resources, structure and human capital, creating a stimulating work environment, as well as making a contribution to the community. In short, it requires reflecting on the consequences and effects that their decisions have on others and especially those that contribute to social justice.
- A differentiating factor of the UD model is the prominent role given to values education and ethical commitment. Since the 2009 academic year, all students have taken two subjects in a module entitled 'Humanistic Values Education' as part of interdisciplinary groups, which showcases the value of coexistence between different people.
- The third side of the pyramid corresponds to competencies, which are defined as 'acquired knowledge, abilities, skills or abilities which results in a good level of development and performance' in the UD Pedagogical Framework. Although there are various models for grouping competencies, the UD classifies generic or transversal competencies into three categories.
- Instrumental: these are a combination of manual skills and cognitive abilities that make professional competence possible.

- Interpersonal: these refer to the abilities and skills that enable people to have appropriate social interactions with others, promoting the development and application of certain values in social life.
- Systemic competencies: these entail skills related to understanding a system as a whole.

6.2. The UD'S differential value: Transversal competencies

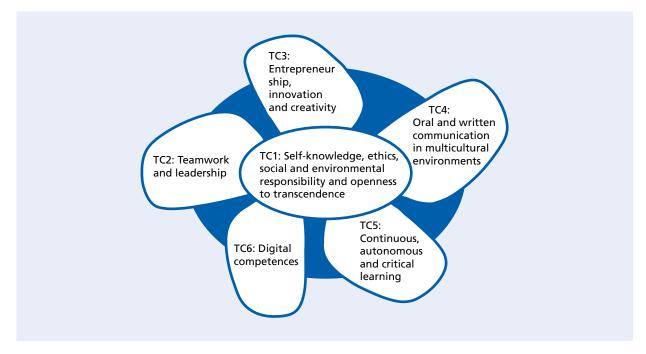
The University of Deusto is currently reflecting on, updating and simplifying its model of transversal competencies, based on the conviction that transversal competencies are the hallmark of its graduates in line with the University's mission. This is a strategic project for the UD that is mobilising a wide range of experts from within the University.

These competencies are those that all students, whatever their degree, will have to develop during their undergraduate or postgraduate studies. This reflection concerns how the University of Deusto seeks to fulfil its mission as a project of the Society of Jesus, aiming to educate individuals who are free, responsible citizens and competent professionals; equipped with the necessary knowledge, values, and skills, these individuals will be able to contribute to the advancement of knowledge and the transformation of society. Thus, the UD is committed to six key transversal competencies (see Figure 7). The proposed definition and scope presented below is a summarised outcome of the work of the different expert groups to date. The following descriptions are part of that synthesis:

- TC1. Self-knowledge, ethics, social and environmental responsibility and openness to transcendence. This is the UD's hallmark competence which has a twopronged approach:
 - Acknowledging and taking responsibility for the inclusion of human communities and vulnerable people, adopting the perspectives and engaging in the procedures of their academic discipline. Social responsibility.
- Safeguarding natural resources and the environment as a whole, ensuring that they can be enjoyed both by present generations and future generations, utilising the expertise and capacities provided by their specialised areas of knowledge. Environmental responsibility.

This competency encompasses a range of components and fosters all-round human growth, since the different aspects of the person cannot be 'compartmentalised'. These elements are:

 Social responsibility for the most disadvantaged people and human communities and protection of the common good.



Source: Office of the Pro-Vice-Chancellor for Academic Organisation, Teaching Innovation and Quality.

Figure 7. UD transversal competencies. 2018

- Environmental responsibility for the protection of natural assets and nature as a whole.
- Professional ethics, which sets moral limits and brings a horizon for a good life and the protection of the common good.
- A personal form of spirituality that gives meaning to one's own life and provides guidance in the choices to be made, based on one's own personal knowledge and the aspiration to have more solidarity among human beings.

It has been defined as follows: Behaving in an ethical, egalitarian, inclusive, responsible and sustainable way in different realms: regarding oneself, others (men and women for others), society (social justice), and the planet as a whole (environment), asking the big life questions.

 TC2. Leadership and teamwork. This is defined as working with a group of people to achieve common goals by contributing one's own knowledge and skills, assuming shared responsibility and leadership, integrating different points of view and striving for collective development.

This is based on a conception of the person as a relational being, who cannot develop fully unless it is in relation to other people and at the service of others (Guardini, 2004). Research has shown that people learn and develop in interaction with others (Vygotsky, 1978). Teamwork, therefore, offers the opportunity to learn and grow individually, as a group and socially and leadership is identified as an essential dimension when working with others.

 TC3. Entrepreneurship, innovation and creativity. Entrepreneurship is a process that starts with the individual. It is individuals who innovate and undertake new projects (whether within or outside an organisation). What characterises these individuals, according to Timmons, is that they have and/or develop the ability to create and build something out of virtually nothing, which involves initiating, doing, achieving and building.

Our society needs people with a high degree of initiative and critical thinking, who are in control of their own professional and personal development and have the ability and vision to carry out projects that add value to society, which are ultimately transformative projects. And from the perspective of the University of Deusto, these are individuals who can meet the challenges we face as a society from a humanist point of view.

Thus, this competency has been defined as developing new ideas, actions and projects with a positive impact on the environment, turning ideas into actions, making decisions and taking risks.

 TC4. Oral and written communication in multicultural environments. This refers to the ability to communicate both orally and in writing in order to interact effectively with others; to listen to, express and convey feelings, knowledge, ideas and arguments clearly, rigorously and convincingly; to use a variety of expressive resources, both orally and in writing; to use appropriate linguistic resources and formats and adapting to circumstances, types of audience and diverse cultural contexts, using different languages.

Multilingual communication also requires intercultural understanding, appreciation of cultural diversity and an interest in and curiosity about languages and intercultural communication.

 TC5. Lifelong, autonomous and critical learning. This is defined as updating the lessons learnt, transforming one's way of thinking and acting, taking responsibility for one's decisions and achieving ever greater autonomy in the acquisition of learning.

In the learning processes at the University, it is essential for students to articulate their prior conceptions, critically examine them, and actively develop more scientific or advanced ideas and criteria to form their own judgement. This will enable them to approach the challenges and situations in their field of study rigorously (Paricio, 2019, p. 81). Constructive and deep learning is therefore to be encouraged, and is fostered by learner self-regulation.

• <u>TC6</u>: <u>Digital competence</u>. This is defined as working effectively and efficiently with technology to process information, as well as communicating in the digital world in a critical and responsible way.

This ranges from issues related to information and data, communication, interaction and understanding for appropriate use, to the creation of content, security features and mechanisms for the use of digital tools or resources for problem solving.

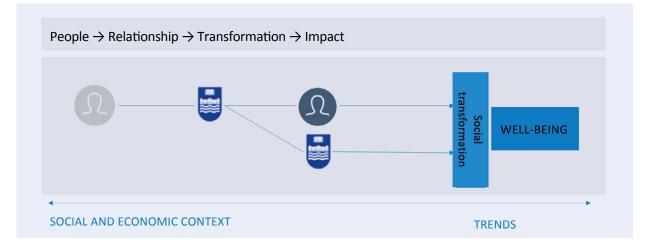
7. The University of Deusto's Social Impact Model through its learning processes

7.1. Global framework

The University of Deusto's conceptual model of social impact is strategically anchored in three pillars: people, the relationship they have with each other (and with the University of Deusto), and the transformation undergone by people as a result of their relationship with the UD. A description of how this was developed can be found in the Deusto Social Lab Reports No. 3 and No. 4. This is aligned with the UD's mission: 'Today, the UD aims to serve society by making a specific contribution to higher education from a Christian and humanist per-

spective As a university, it is governed by a love of wisdom and a desire to understand and study the structure of reality with rigour and scientific methodology. It therefore strives for excellence in research and teaching. Simultaneously, it aims to cultivate individuals who are free, responsible citizens and competent professionals. These individuals should possess the knowledge, values, skills, abilities, and capacities necessary to actively contribute to the advancement of knowledge and the transformation of society'.

The conceptual model of the UD's impact on society is built on these three pillars, which can be graphically represented and summarised as follows:



Source: Prepared by the authors (Deusto Social Lab)

Figure 8. Core Elements of the Impact Mode

For the UD, people (we) play the main role in achieving change, transformation. Hence, the objective is for anyone engaging with the University of Deusto through its numerous activities and services to potentially undergo a transformation or change through reflection. In other words, a transformation or change at the societal level may also ensue by enhancing the personal dimension. We must therefore get to know these people well and understand how their relationship with the UD is enacted. Reflecting on the kind of changes, innovations or transformations to which the UD aspires to contribute is not a trivial endeavour. In general terms, the aim is to move towards a fairer, more humane and sustainable world. On this path of transformation, each person is the guiding thread to follow and move forward with, and the enabler of specific social contributions as they are expressed.

Thus, having established the rationale behind the impact model, and taking into account the commonly accepted

definition of impact (any change brought about by the implementation of a set of services or activities), we must look at the activities that the UD uses to carry out its mission and purpose. The University of Deusto initiates these changes by performing activities or services guided by a systemic and sustained process over time. The UD's objective is to instigate transformations that are valuable to society and, ultimately, contribute to inclusive and sustainable well-being within its role as a Jesuit university.

In conclusion, as transformation is a process, the model enables us to identify and gather the impacts occurring at different stages over time. Therefore, at the end of this process, we will be able to discuss the University of Deusto's influence on societal transformation. This approach is shaped by humility, as we recognise that the University is one of the agents that people come into contact with at specific moments in their lives; consequently, it is each of those people who should inform and substantiate (to a large extent) their contribution to society and how this may have changed after building a relationship with the UD.

Naturally, this process places the individual at the centre. All the people who are part of the university community and the wider ecosystem of people (as part of their organisations or institutions or from other areas) who relate to the UD are agents of social transformation. The model aims to capture their contributions to society.

7.2.

A conceptual framework specific to the social impact of learning processes

The application of the global conceptual framework to learning processes described in the previous subsection is developed further in the report 'The social impact of the University of Deusto. People who transform themselves in order to transform society. An overview focused on learning processes' published in the Deusto Social Lab Report No. 4. As this report continues to elaborate on this subject, it worth summarising this specific framework at this stage. Readers are advised to read the report referred above for a more in-depth analysis.

Following the overall conceptual framework defined, the specific model of the social impact of learning process activities is based on these four elements:

• Economic and social context and trends, which specifically includes the most important context variables for this case.

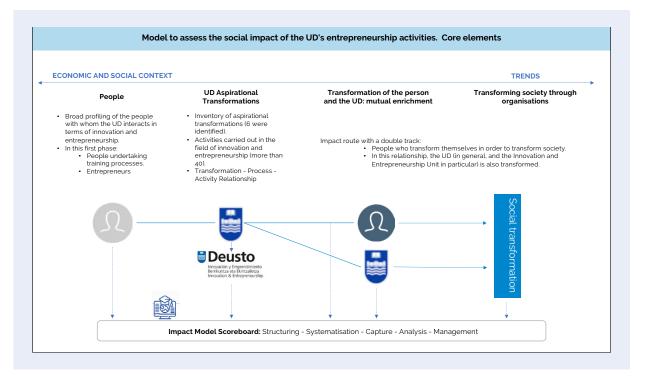
- People with whom the UD has a relationship, firstly identifying the complete map of stakeholders and secondly focusing on the priority groups: students, alumni and partner businesses. In the work carried out in 2020, the impact was studied in depth by looking at the partner companies. In this report, the analysis is focused on the general learning process engaged in by the student body undertaking a UD degree, specifically on students in the final years of their degree.
- The model has enabled the identification of the transformative aspirations that the University of Deusto strives for in its learning processes, which have been confirmed in this report.
- The indicator table proposed in the previous phase of the project, following the stages defined in the theory of change, runs from input to impact for each transformation.

This is shown in Figure 9.

7.2.1. Economic and social context. Trends

In line with the approach developed in the previous phase, the most important context-related aspects for an adequate understanding and subsequent analysis of the social impact of the UD are:

- The socio-economic and demographic characteristics of the region in which the university operates. In this case (as in the others in this sub-section) the territorial vision is important, since the University operates within a specific area at a specific time. Its ability to make an impact will therefore be different depending on the characteristics of the society with which it interacts. Furthermore, this factor also affects the type of activities and services that the University provides in each geographical area.
- Given the specific object of analysis, it is particularly important to thoroughly examine both the educational characteristics of the population and the situation of the labour market in general and of people with university degrees in particular.
- In light of the aforementioned trends and the ensuing challenges involved for the University's work (and specifically, for learning processes), it is important to understand the educational and training needs as stated by employers in the Basque Country.



Source: Prepared by the authors (Deusto Social Lab)

Figure 9. Core elements of the impact model of the UD learning processes

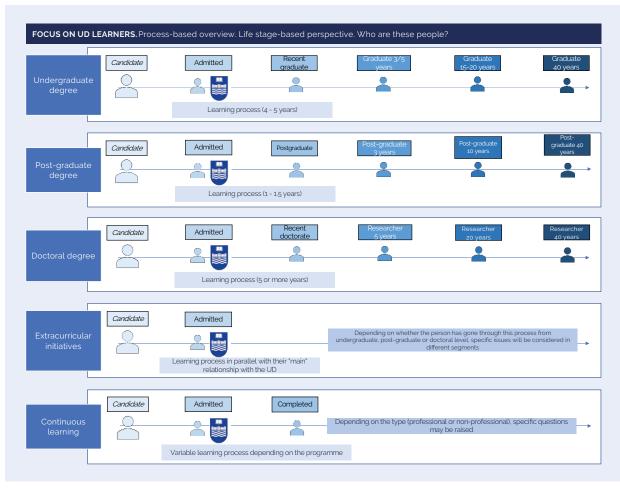
7.2.2. People with whom the UD interacts

Building on the proposal outlined in the report on the work carried out in 2020, the overall ecosystem of stakeholders with whom the University of Deusto interacts as a result of its learning processes is extensive, diverse and heterogeneous. It includes the following:

- People who apply to the UD to study any of the degrees currently offered. These applicants are referred to as candidates throughout the report.
- Undergraduate, postgraduate and doctoral students. From all courses and all qualifications.
- Students who additionally take part in the extracurricular training/education initiatives offered by the UD.
- Other continuing education students.
- · Graduates in general and alumni in particular.
- · Families (mainly parents of students).
- · UD teaching and research staff.

- UD administrative and service staff.
- Lecturers from outside the UD who make a teaching contribution to some degrees.
- Business/social fabric, in their role as employers/hosts of trainees.
- · Educational institutions (both public and private)
 - Public Administrations (Basque Government through the Department of Education)
- Educational institutions
- Vocational Training Centres
- · Other institutions in the field of employment
- Public (Basque Government through both the Department of Employment and Lanbide); Provincial Councils and City/Town Councils
- Private. Business associations and chambers of commerce, among others.

It should also be mentioned that the University of Deusto interacts with other groups (such as Secondary School students, for example), although for the purposes of this



Source: Prepared by the authors (Deusto Social Lab)

Figure 10. People who learn at the UD. View by learning process and life course stage

project they have not been considered at this time due to the nature of their relationship with the UD.

Becoming acquainted with each of these actors must be the next step. The people to whom the UD relates in terms of learning processes, their motivations and expectations of their relationship must be understood in order to contextualise the lessons learnt from the application of the social impact model.

Out of all the people mentioned above, the students are the main priority and the UD supports them directly in their learning processes. Students are involved in different learning processes, namely:

- People whom the UD supports in undergraduate learning processes (including the dual mode).
- People whom the UD supports in postgraduate learning processes (including the dual mode).
- People supported by the UD in doctoral learning processes.

- People whom the UD supports in learning processes linked to extracurricular training initiatives. These processes run in parallel to the three previous ones.
- People whom the UD supports in learning processes linked to lifelong learning (whether related to professional life or not).

From the perspective of a lifelong itinerary, it is possible to gather knowledge about these people from the time they start their relationship with the UD and from then onwards. In order to facilitate the knowledge gathering process and subsequent analysis, a series of milestones in the learning process for each group of people will be identified, which will make it possible to segment these groups into stages throughout their lives.

The figure below only shows the itinerary of the student and subsequent graduate (the key actor of learning processes). However, other groups of people must be mentioned again, with special emphasis on the teaching staff, as they 'revolve around' students and are essential for the learning process to unfold in optimal conditions, as mentioned in the second chapter, given the crucial importance of their role as teachers/facilitators.

This approach is not only theoretical-conceptual but also practical. Gaining specific knowledge of people by prioritising the following segments should include the following information:

- <u>First-year degree students</u>. This group was profiled throughout this phase. It was agreed that it was appropriate to include at least the following variables (which could be expanded in the future). These follow on from those initially proposed in the study conducted in 2020:
 - Gender

Language skills

- Previous international experience
- Previous work experience
- Level of social commitment or involvement prior to joining UD
- Change of residence to pursue a degree at UD
- Parents' education attainment
- Reasons for choosing the University of Deusto
- Reasons for choosing the degree in question
- Faculty, campus and degree
- Final-year degree students: In order to encourage this group to participate in the project, the student profile in this initial piece of fieldwork was simplified to include only the variables of gender, faculty, degree, campus, level of participation in UD activities and social commitment over time.

In the future, the following individualised information will be considered for inclusion in the analysis. These data already exist in aggregate form within the University of Deusto, which is why they have not been prioritised at this time. This matter has been discussed in detail in the section on future lines of work.



- Nationality
- Disability. Diversity.

- Usual place of residence
- Parents' education attainment
- Household income
- Scholarship recipient status
- Other members of the household with an academic education
- Academic record on completion
- Language skills
- Level of participation in other UD activities. Specify
- Assessment of the learning process
- Short and medium-term job prospects
- Expectations to continue with further learning processes (in the short, medium and long term)
- Level of satisfaction
- Level of recommendation
- Level of social commitment or engagement over time
- Faculty, campus and degree
- <u>Degree Teaching staff</u>. A breakdown will be provided for this section in subsequent phases of the project. In addition to the socio-demographic profile, it will include other questions more closely related to teaching and supporting students.
- Companies and organisations employing or hosting <u>UD</u> students (profiled and analysed in the 2020 report and whose findings are used in this report essentially for comparing assessments between this group and the group of final-year students).



- General company information:
- Work sector
- Size (by number of employees)
- Type of ownership
- Legal form
- · Location of headquarters
- Geographical distribution of turnover

- Description of its relationship with the UD:
 - Length of relationship
 - Areas of expertise in which it recruits/hosts UD people
 - Volume of students hosted/graduates recruited in the last three years
- Assessment of people educated in the UD (referring to transversal competencies). For each of them:
 - Importance in the decision to employ them
 - Performance appraisal
 - Comparative assessment
- Level of satisfaction
- Assessment of recruitment processes
 - Referred to different assessed elements
- Importance in the recruitment decision
- Comparative assessment of UD people
 - Other aspects:
- Previous internships
- Preference in recruitment
- Future recruitment intentions
- Channels used
- Assessment of UD services

As will be discussed in chapter four, the model is assessed in greater depth in this case through the groups of students in the final years of their degree, based on the fieldwork specifically conducted for this purpose. The work conducted with first-year students laid the foundations for further work in the following phases of the project.

7.2.3. Aspirational transformations

The UD supports people in their learning processes, encouraging them to acquire knowledge (as a result of these learning processes) through the acquisition of both transversal competencies (necessary and common to all studies) and specific competencies (specific to each profession). The acquisition and development of these competencies is thus a process of personal transformation. This logic leads us to understand competencies as UD aspirational transformations, which are conveyed through people, the real agents of social transformation.

Of particular interest in the proposed model is the focus on transversal competencies (which are the UD's hallmark and distinctive features, to which it is firmly committed).

In addition, as stated in the 2020 analysis, the impact model also considers transformation processes in partnership with economic and social stakeholders (social dimension). These were already included in the first practical approach to the social impact model in the field of entrepreneurship and are deemed to be valid for and applicable to learning processes.

Specifically, the transformations linked to degree learning processes are expressed as follows:

From the individual dimension

· Related to transversal competencies

Self-awareness, ethics, social and environmental responsibility and openness to transcendence

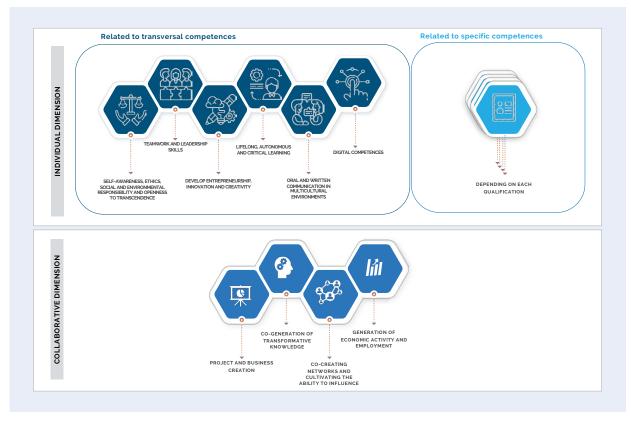
The University of Deusto seeks to enable people to act in an ethical, egalitarian, inclusive, responsible and sustainable way regarding themselves, others, society (social justice) and the planet as a whole (environment). The University uses a set of activities and applies different methodologies (notably including service learning and values training) that help people to acquire these skills.

- Teamwork and leadership training

The University of Deusto seeks to enable people to work collaboratively to achieve common goals by exchanging constructive contributions, mediating in conflicts, sharing knowledge and assuming commitments and responsibilities, carrying out the role of team leader when the occasion or context so requires.

Training in entrepreneurship, innovation and creativity

The University of Deusto seeks to enable people to develop new ideas and engage in actions and projects which have a positive impact on the environment, turning ideas into actions, making decisions and taking risks. To this end, it implements various actions in different forms to work from awareness-raising to training and start-up (both from the



Source: Prepared by the authors (Deusto Social Lab)

Figure 11. Transformations arising from learning processes. Overall view of degree processes

perspective of self-employment and intra-entrepreneurship).

Training in lifelong, autonomous and critical learning

The University of Deusto seeks to help people update their learning, by questioning the usual ways of behaving and addressing issues from a critical perspective, reflecting on their own knowledge and learning styles.

Oral and written communication skills in multicultural environments

The University of Deusto aims to equip individuals with the skills to communicate effectively with others, both orally and in writing, to express and convey feelings, knowledge, ideas, and arguments in a clear, rigorous and convincing manner. This involves the use of various expressive resources, both spoken and written, employing appropriate linguistic tools and formats while adapting to different circumstances, audience types and diverse cultural contexts, as well as using different languages. Multilingual communication also requires intercultural understanding, an appreciation of cultural diversity and an interest in and curiosity about languages and intercultural communication.

- Digital Competencies

The University of Deusto aims for people to use Information and Communication Technologies in a responsible, safe and critical manner both in the academic and professional spheres, in order to process information and communicate and participate in social media and groups ethically and responsibly.

Related to specific competencies

The University of Deusto seeks to make people competent professionals in the different fields of knowledge that each person chooses. To this end, it offers a wide portfolio of qualifications (more than fifty undergraduate degrees, almost sixty postgraduate degrees) in which individuals are supported in developing specific competencies to acquire the knowledge they need for their professional practice, in addition to transversal competencies. This is done using a holistic and all-overall approach.

In terms of partnership with economic and social actors

- Setting up projects and businesses

The University of Deusto seeks to help people identify ideas and turn them into real projects with a purpose. Through their learning processes, particularly in undergraduate and postgraduate degrees, individuals have a chance to work on their final projects or dissertations. These projects allow them to tackle current societal challenges by proposing specific solutions that could lead to future business ventures.

Cogeneration of transforming knowledge

The University of Deusto seeks to provide solutions to social challenges in order to promote the improvement and transformation of society. This requires understanding the changes taking place in our society and being able to anticipate future scenarios, as well as designing projects that provide innovative solutions through co-creation and action research. In the case of learning processes, this co-generation is clearly enacted in the cooperative efforts between students and the organisations and companies involved in the completion of a final dissertation for both undergraduate and postgraduate degrees.

Co-creation of networks and cultivation of the ability to be influential

The University of Deusto seeks to establish interrelationships and generate links between all those stakeholders with the capacity to enrich the learning experience. To do so, they must feel involved, have a shared vision and purpose. Mobilising stakeholders and weaving connections between actors in the learning ecosystem should contribute to the construction of the meaningful learning experience that the UD seeks. In learning processes, the relationship with external teaching staff and partner organisations is essential.

Generation of economic activity and employment

As a result of the learning processes led and promoted by both the University of Deusto and its ecosystem, the UD also contributes to generating regional wealth and employment.

This is an indirect transformation that can be achieved provided that the previous transformations have been effected; both through joint action of all the stakeholders the UD engages with and in its role as a specific stakeholder that acts as an employer and an investor in these activities.

7.2.4. Actions carried out

The actions carried out by the University of Deusto to implement the Learning Model vary according to the fields of knowledge and the specific type of learning process (undergraduate degree, postgraduate, doctorate, lifelong learning, extracurricular initiatives). An overall graphic representation of the activities for the degree processes is shown in Figure 12.

Figure 12 shows the time sequence of the learning processes that take place in the course of a degree, namely, the actions carried out by the UD to enable the transformations sought. To achieve the transformations linked to transversal competencies (six in total, as defined within the Deusto brand) and specific competencies (linked to each specific degree), and the rest of the competencies linked to collaborative transformations (four, as identified and explained in the previous section), the UD implements different actions in line with the teaching methodologies selected as the best alternatives for attaining the corresponding learning outcomes in each case (upper part of the figure). In addition, there is a series of common activities that are used across the board (bottom of the figure). For further details on each of these, please refer to the 2020 report in the Deusto Social Lab Report No. 4.

ACTIVITIES CARRIED OUT AT THE UN THROUGHOUT THE UNDERGRADUAT Guidance and support (tutorials, se	
Guidance and support (tutorials	
called and support (catorials, se	essions)
International experience (Erasmus stays, etc.)	programmes, short
Work experience	
Curricular internships (PRACTICUM	1)
Extracurricular internships (volunta	ary)
Humanistic Values Education	
Service Learning (volunteering in s	social organisations)
Volunteering activities	
Participation in lectures, conference	ces, seminars, etc.
Sports activities	
Cultural activities (theatre, photog	Jraphy, etc)
Participation in other education pr completing the degree (entrepren- etc.)	3
Language learning	
Visits to companies, organisations	
Learning through problem-/projec	t-based methodology
Assignments completed for the dif	fferent subjects
Final dissertation or project	

Table 5. Actions carried out by the UD throughout an undergraduate learning process

Table 5 below presents the list of activities that final-year students were asked to assess in terms of their contribu-

FIRST YR	SECOND YR	THIRD YR	FOURTH YR	FIFTH - SIXTH
	Individual TRAN	NSFORMATION: Aggregate specific of	competences	
	ACTIVITIES:	Through innovative teaching meth	odologies	
	Individual	TRANSFORMATION: Generic compo	etences	
	ACTIVITIES:	Through innovative teaching meth	odologies	
		TRANSFORMATION in partnership		
	ACTI	VITIES: Through collaborative actic	ns	
ities common to all U	ID dearees			
	-			
FIRST YR	SECOND YR	THIRD YR	FOURTH YR	FIFTH - SIXTH
	Humanistic Values Education		Humanistic Values Education	
	< Education in values		Civic and professional	
	(Service Learning)		ethics	
	< company			
	Extracurricular internships	<	Curricular internships:	
		. Internation	al mobility	
	÷		al Programme	
			Final degree project	
	<u>م</u>	-	Multiple themes	
come				
Iniversity Guidance service:				
			Allocation of academic tutors	Allocation of academic tuto
Allocation of a Guidance Tutor	Allocation of academic tutors	Allocation of academic tutors		

Source: Prepared by the authors (Deusto Social Lab)

Figure 12. Typical actions in the learning process involved in an undergraduate degree (specific to the degree and common to all degrees)

tion to the development of the competencies discussed above. The list includes compulsory, optional and voluntary activities. The results of this assessment are included in Chapter 4 of this report.

7.2.5. Transformation-Process-Activity Relationship

The commonly accepted definition of impact is that it is any change brought about by the implementation of a set of services or activities. The University of Deusto initiates these changes by performing activities or services guided by a systemic and sustained process over time. The UD's objective is to instigate transformations that are valuable to society and, ultimately, contribute to inclusive and sustainable well-being within its role as a Jesuit university.

Therefore, the University of Deusto expresses its social impact in terms of transformation. Transformation of people, but also transformation of the University itself, and ultimately, transformation of society towards the construction of a more just, humane and sustainable society. A multitude of impact dimensions emerge from this perspective, depending on the activities carried out by the University, thus forming a holistic, comprehensive and integrative model.

As transformation is essentially a social innovation and the UD strives to see these transformations change the world, the processes to be put in place to achieve them will be consistent with any innovation process. Thus, the vision of the stages of the innovation process must be included into the UD's social impact model, which can be summarised as follows, according to the theory developed by Larrea (2010) :

- Stimulus Stage: This stage includes all the activities aimed at fostering spaces for surprise, creating the conditions in which surprise can emerge, occur and flourish. It is the field of attitudes and emotions, of creativity.
- Conversation Stage: This stage includes activities aimed at encouraging surprise to be transformed into

suggestion by listening to others, exchanging and comparing points of view and opinions.

- Reflection Stage: These activities are designed so that any suggestion resulting from discussing and comparing views can be analysed from a personal perspective, in order to evoke and activate the idea or the project.
- Action Stage: If surprise is suggestive and evocative but it is not applied to anything practical, it does not serve any purpose. Therefore, a step from theory to practice must be taken. This is the stage where activities are designed to establish the optimal conditions for actions to reach their maximum potential.
- Recognition stage: This is the stage where success can be acknowledged and enjoyed, and failure can be assessed. In this way, the usefulness of what has been achieved is returned to the process, so that success can be managed as part of the process.
- Dissemination Stage: The new application provides utility and needs to be both acknowledged and communicated; it must be disseminated to enable a new step forward. All activities that are carried out with this focus should therefore be included here.

At this point, a qualification should be made regarding the classification of the activities into these stages. For some activities, only one of these stages is likely to be relevant; but it is also likely that several stages can be relevant to a single activity. This is shown graphically in Table 6.

The overview of the conceptual framework in Figure 9 highlights the need to create profiles for individuals who have a relationship with the University of Deusto, including both those who are part of the University community and those who engage with the institution at some point. This profiling helps in understanding the desired transformations, the stages of the innovation process addressed by various activities conducted by the Univer-

sity of Deusto (TSA in the figure), and the diverse impact trajectories of these individuals over time. It is important to consider that the time variable is important, as there will be some form of value that can be generated and captured in the short term and other type of value for which the passage of time is essential (long term). It should also be remembered that the UD itself is an agent of social transformation, which is constantly evolving and becoming transformed. As well as the organisations with which it interacts in the course of its activity (and in this particular case, in the course of learning processes).

In conclusion, as transformation is a process, the model enables us to identify the various impacts occurring at different stages over time. Thus, this process will culminate in us being able to talk about the University of Deusto's impact on societal transformation.

Specifically in relation to the impact of the UD on learning processes, it is essential to analyse each intended transformation to ensure it occurs within one or more of the stages outlined in the overall model: Stimulus, Conversation, Reflection, Action, Recognition, and Dissemination. Given the heterogeneity and diversity of actions related to the transformations identified in both the individual (competencies) and social dimensions, this analysis will align the stages of the transformation process with those in which learning processes occur within the UD, based on the MAUD (Table 6):

- Stimulus Stage: This is closely linked to the objectives pursued both in the experiential context stage and in the reflective observation stage, since the aim is to create the conditions for connecting the students' previous experiences with the specific topic to be dealt with. This should cause them to question it and at the same time encourage creativity in the search for answers.
- Conversation Stage: This state has a strong presence in most phases of the learning process. It is therefore important both to properly situate the experiential

FOR EACH TRANSFORMATION:		Stages of the innovation process					
Stages identified in UD learning model (this includes specific activities within the selected teaching methodologies)	Stimulus	Conversation	Reflection	Action	Recognition	Dissemination	
Experiential context		\checkmark					
Reflective observation		\checkmark	\checkmark				
Conceptualisation		\checkmark	\checkmark				
Active experimentation		\checkmark	\checkmark				
Assessment					\checkmark		

Source: Prepared by the authors (Deusto Social Lab).

Table 6. Relationship between the MAUD and the stages of the innovation process

context and to engage in the questioning that occurs in reflective observation, in the conceptualisation and clearly in active experimentation, in which there is intense collaborative work among students.

- Reflection Stage: Similarly to the previous stage, reflection must be part both of the reflective observation stage and in the stages that follow it, conceptualisation and active experimentation. This is due to the fact that an analysis from a personal perspective is required in all cases.
- Action Stage: This is directly linked to the state of active experimentation where theory and practice are linked through different activities aimed at transforming experience into actually lived experience, therefore making learning more meaningful.
- Recognition stage: This clearly relates to the assessment phase, with the aim of recognising the achievements of the learning process.
- Dissemination Stage: As this stage refers to the communication of achievements, it could also be related to the assessment stage of the MAUD, where communication is shaped not only through summative assessment, but also through feedback, as a key element of the learner's progress.

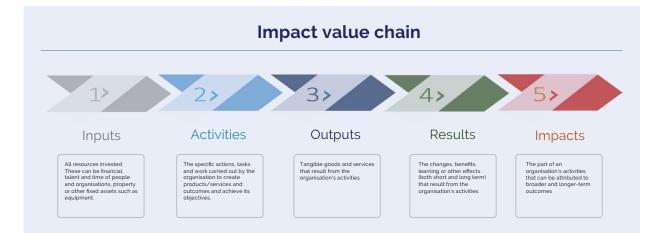
However, efforts should be made in the future to specify this aspect further for each transformation.

Thus, as shown in Table 6, to achieve transformation in competency areas such as teamwork and leadership, the actions to be employed during the experiential context stage will primarily focus on the stimulus phase. This approach ensures that individuals are placed in a contextualised environment during their initial engagement with the topic, adopting stimulating and motivating perspectives. In this way, learners are better placed to move on to the reflective observation phase, which encourages them to ask questions and find answers. The activities used for this purpose correspond to the stages of conversation (listening to others, exchange of opinions, etc.) and personal reflection for internalisation. At this point, activities oriented towards conceptualisation are introduced, bringing students closer to the theory by building on the basic notions they have internalised. These concepts become most useful and lead to meaningful learning when they are put into practice through active experimentation. Finally, the assessment processes lead to the recognition of the learning outcomes achieved.

7.2.6. Impact indicator table. Key Impact Indicators

The structure of the indicator table follows the structure in the previous phases of the project and therefore contains the following information:

- Transformation to measure.
- Related dimension (both individual and collective dimension).
- Stage in which the proposed indicator is (within those included in the theory of change). As stated in section four of chapter two, the value chain is made up of five stages:



Source: European Commission, originating from the European Venture Philanthropy Association.

Figure 13. Impact value chain

- Indicator typology. Indicators have been grouped in order to facilitate their structuring and conceptualisation. The proposed types of indicators (by stage) can be outlined as follows:
- Inputs: Financial resources, personnel, among others.
- Activities: Characterisation (helps understand the nature of the activities carried out, according to different parameters); internal and external mobilisation (identifies the third parties involved in the activity, whether from different areas within the university community or external); and indicators that collect data on volume (of activities, attendees, etc.).
- Product/Service (Output): Volume; coverage (with respect to target universe); take-up (of the total available supply).
- Results: Recommendation; interest; satisfaction; outreach; engagement; influence; volume; academ-

ic results; prestige/positioning; modelling and financial resources.

- Impact: Perception (of the target groups about the different relationships established with the UD); commitment; and macroeconomic indicators.
- Proposed indicator.

The indicator table is detailed on the following pages, with a specific focus on transversal competencies, as these have been the primary focus of this work. The concentration on learning processes in the revision of the proposal from the previous phase has led to the refinement and adjustment of the impact indicators. The structure presented here can be applied to each of the six transversal competencies.

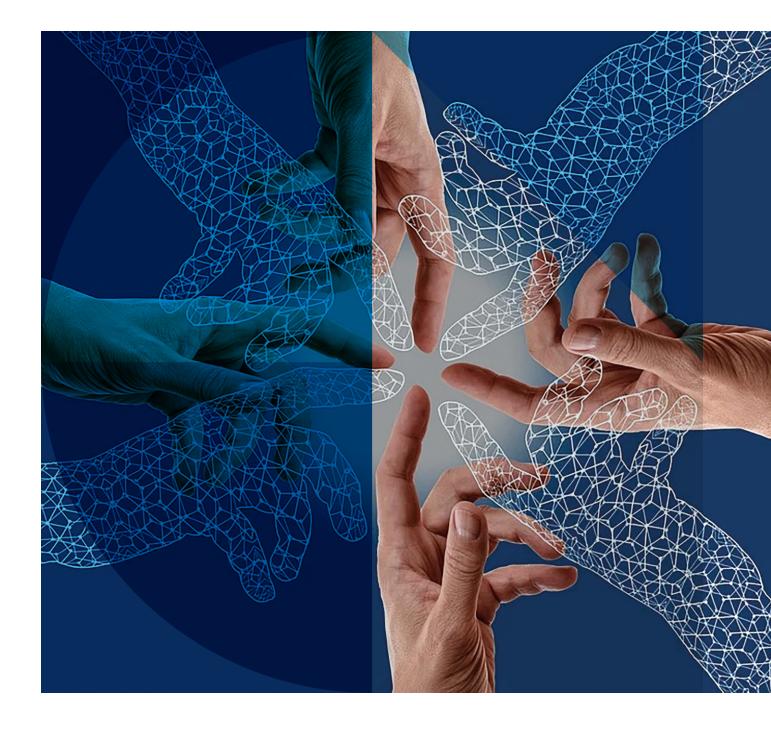
An overview of all the transformations in the learning processes and the proposed indicators can be found in Deusto Social Lab Report No. 4.

ANFORMATION	DIMENSION	TC STAGE	TYPE	DATA/INDICATOR
	Individual	Input	Resources/time used	Hours spent per competency in the 4 / 5 years. Overview for the UD //average per faculty/// avera for the degree programmes.
	Individual	Input	Resources/time used	% of total degree/subject time spent per competency
	Individual	Input	Resources/time used	% of teaching staff supporting students per competency
	Individual	Activity	Characterisation	Innovative methodologies applied
	Individual	Activity	Characterisation	Types of actions carried out. Participation and assessment.
	Individual	Activity	Engagement of third parties	Involvement of third parties to deliver training in this competency
	Individual	Output	Volume	Students who acquired this competency. Overview for the UD //average per faculty/// average of degree programmes
	Individual			
	Individual	Result	Teaching results	Academic performance // assessment
Transversal competency	Individual	Result	Satisfaction	Level of satisfaction
competency	Individual	Impact	Perception	% of students who believed that it is important to acquire the competency
		Impact	Perception	% of students who felt able to use the competency (by proficiency levels)
	Individual	Impact	Perception	% of graduates expressing the need/usefulness of having this competency for their professional performance
	Individual	Impact	Perception	% of people expressing that having this competency has had an impact on others (team members, e Qualifying according to competency
	Individual	Impact	Volume	Level of importance given by employers to this competency
	Individual	Impact	Volume	Level of performance for this competency as rated by employers
	Individual	Impact	Perception	Level of comparative assessment UD- others

Source: Prepared by the authors (Deusto Social Lab)

Figure 14. Impact Indicator Table (transversal competencies)

Chapter four The Application of the model. Discovering our impact



8. Our operational context

A crucial first step in assessing the social impact of the University's learning activities is to examine the key factors relevant to the specific context of the UD's priority geographical area of action, the Basque Country. In this project, the assessment will be made from the students' point of view.

This section therefore presents an overview of the main economic and social characteristics of the Basque Country at present. This section also provides a detailed outline of the educational profile of the Basque population, as well as an overview of the labour market in general and of people with university degrees, in particular. The analysis is complemented by an outline of the talent needs of the business fabric in the Basque Region.

Although it was expected that the impact of the SarsCov2 pandemic would largely dissipate in 2021, the reality is that in early 2022, we are just emerging from the sixth wave. Numerous voices, but not all, suggest that it is nearly over. The effects of the almost two years that have passed have been diverse and far-reaching in the economic and social spheres, where inequalities have increased, in addition to the irreparable human losses. However, there has been a significant recovery in both GDP and employment. Aside from the pandemic, the demographic situation, characterised by an ageing population, is increasingly worrying, as the proportion of young people within the total population of the Basque Country is very low, at less than 15%.

The information in the following sections relies on the data provided in the previous report on the UD's social impact through learning processes (2020). It has been updated on the basis of available references.

8.1. The improvement in the Basque economy and social well-being

The economic situation and the level of well-being of Basque society are generally positive. The Basque economy, which will grow by 5.7% in 2021, is progressing favourably. In terms of employment, Lanbide pointed out that the jobs destroyed during the crisis have practically been recovered, with the unemployment rate standing at 9.9% in the last quarter of 2021. Apart from the level of income and employment, the concept of well-being, made up of additional variables such as satisfaction with life, social life, learning, health and the environment, can also be deemed to be fairly high, according to the 'Informe de Competitividad del País Vasco 2021' (2021 Basque Country Competitiveness Report) prepared by Orkestra.

This report indicated that the Basque Country is currently among the regions in Europe with the highest level of GDP per capita and the lowest level of population at risk of poverty or social exclusion (29th and 26th positions, respectively, out of more than 200 regions in the EU). According to the INE, the income per household (2020) in the Basque Country (37,598 euros) also exceeds the Spanish average (30,690 euros) by 22.5%. However, real poverty in the Basque Country affected 5.6% of the population in 2020, according to the 'Encuesta de Pobreza y Desigualdades Sociales' (Poverty and Social Inequalities Survey) conducted by the Basque Government.

According to Orkestra (2021), the favourable progress of the Basque economy can be attributed to an effective territorial strategy centred on industry, which is successfully driving the transformation towards an internationally competitive region focused on innovation and capable of generating wealth with a high level of inclusivity. Internationalisation, new business models, training and entrepreneurship, among others, have been key factors in this situation.

The Basque Business Confederation (Confebask) is optimistic about the economic prospects for 2022; it estimated that the Basque economy will grow by 5.9%, a rate that would result in pre-Pandemic GDP levels being reached again. However, different risk factors such as the pandemic, business and energy costs, inflation and global shortages could lead to a real growth rate ranging from 4% to 7% in the Basque economy. The 'Next Generation' funds are expected to boost the economic momentum.

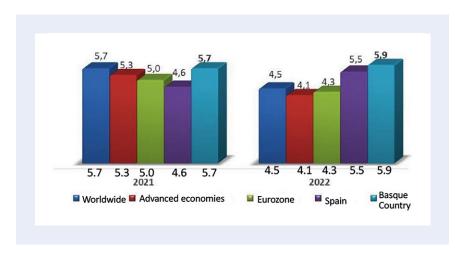
At the sectoral level, while all industries are expected to benefit from the recovery, the services sector is anticipated to lead growth, driven by the expected normalisation of tourism and leisure. This will push industry, which was the main driver of the economy in 2021, into a secondary role. The construction sector is anticipated to grow at a faster rate than in 2021.

Confebask predicts that the unemployment rate should exhibit good behaviour, dropping to 8%. This would be

lower than before the pandemic, would result in a new historical peak in the Basque Country, surpassing one million people in employment.

The Spanish economy is also expected to have positive developments and forecasts in 2021 and 2022, although at a more moderate pace than the Basque economy. The recovery of Spain's GDP to pre-pandemic levels is expected to be delayed until 2023. As illustrated by Figure 15, actual (2021) and anticipated (2022) economic growth in the Basque Region also exceeds that of the Eurozone.

Despite the positive growth of the Basque economy, there are opportunities that necessitate profound transformations, particularly in areas such as the green, digital and demographic transitions (Orkestra, 2021).



Source: EU and Confebask (2021)

Figure 15. Evolution of economic growth in 2021 and 2022

8.2. Educational characteristics of the population and the labour market

According to Eustat, 95.6% of the population of the Basque Country in 2020 aged 16 and over had some kind of official qualification, while 4.4% had none at all. A total of 33.4% of the qualified population had a higher education qualification, which shows their high educational standard; 22.7% of them were university degree holders and 10.7% had higher education qualifications. Out of those with an official qualification, 31.8% had primary education, 21.9% had secondary education and 8.5% had completed some elementary and secondary vocational training.

In terms of gender, the proportion of women with university degrees (25.2%) exceeded that of men (20.1%), while the proportion of men in vocational training at any level was 22.8%, higher than that of women (15.9%). The differences were practically non-existent for primary level qualifications (33.2% of women and 30.3% of men) and secondary level qualifications (21.1% and 22.7%, respectively). Having considered the educational characteristics of the population of the Basque Country, the analysis will now focus on the labour market, which reflects a favourable trend in employment as a result of the positive evolution of the Basque economy. The data presented here were obtained from two different sources and differ slightly, due to the different information systems used. According to the Spanish Labour Force Survey (EPA), the Basque Country will reach an average unemployment rate of 8.4% by the end of 2021, which makes it the Autonomous Region with the lowest unemployment rate in Spain, the national rate being 13.3%. As reported by Eustat, the number of employed people in the Basque Country is 951,400 in the fourth quarter of 2021, with 104,700 unemployed, placing the unemployment rate at 9.9%; the male unemployment rate is 9.5% and the female unemployment rate rises to 10.4%.

The employment-to-population ratio (calculated as the percentage of employed people aged 16 to 64 out of the total of those ages) reached 68.1%; 71% for men and 65.2% for women (Eustat, 2021). By level of education completed, the employment-to-population rate and the unemployment rates are as follows: for individuals with primary education or less, the employment rate was 59.2%, with an unemployment rate of 13.5%; for those with secondary and intermediate education, the employ-

ment rate was 60.4%, and unemployment stood at 11.4%; for those with higher education, the employment rate rose to 83.1%, with the lowest unemployment rate of 6.7%. The higher the level of education, therefore, the higher the employment rate.

Focusing on youth unemployment, according to the Basque Youth Observatory, the youth unemployment rate in the Basque Country stood at 17.1% at the end of 2021, five points lower than the rate at the end of 2020. However, the high unemployment rate among the under-30s, which was more than seven points higher than the general population unemployment rate of 9.9 per cent, remains a cause for concern. This is one of the main areas for improvement, together with the quality of employment and the inclusion of women in the labour market.

An overview of the employment situation of graduates from the three universities in the Basque Country can be provided on the basis of a study of labour market entry carried out by Lanbide at the end of 2020. It analysed the graduating class of 2017. The conclusions were satisfactory, showing a student employment rate of 87% three years after finishing their degree and an unemployment rate of 13%. Compared to the previous two years, there was a slight worsening in the employment-to-population ratio, which reached its highest level in 2015, 92%, a year in which the unemployment rate was the lowest, 8%. In relation to the quality of employment, three years after graduation 85% of students had a job which was in line with their professional abilities, and 79% considered that the job was related to their studies. Around 21% of jobs were part-time, and job stability was rated at 6.9 out of 10, while overall job satisfaction was somewhat higher, at 7.1 out of 10.

Among the factors identified by students as being key to their having entered the labour market, academic factors (such as the degree, the university, international mobility programmes, final degree dissertation/project, academic record) and personal and social factors (including motivation, initiative, personal, social and professional skills) stood out in the top two positions, with similar response rates. The third factor mentioned was relationships with companies and organisations (previous work experience, external university internships/dual training, etc.). Specialisation and language skills, although considered influential, were seen as playing a less decisive role.

In terms of salary levels, the Basque Country's level was higher than the national average, which as reflected in a higher average income per household. According to the INE, the average monthly salary in 2020 in the Basque Country (2,278 euros) was only surpassed by that of Madrid (2,350 euros). Wage differentials were to a large extent conditioned by the economic structure of each region and the weight of the best and worst paid sectors. The lowest salaries (below 1,336 euros) were found in the hotel and catering, domestic service and primary sector, while the highest salaries were in financial and insurance activities, energy supply, education and public administration.

By level of education, the average salary of employees with lower secondary education (1,338 euros) was considerably lower than the earnings of those with higher education (2,553 euros). By seniority, those who had been working in a company for ten years or more earned on average 1,100 euros more than those who had been working for less than a year (2,515 euros compared to 1,409 euros).

8.3. Qualifications demanded by Basque companies

Based on surveys carried out periodically by the Adegi, Cebek and Sea associations, Basque companies were positive about their expectations for recovery in 2022, but they were concerned about the growing difficulty in finding qualified personnel.

Recent statements by the Confebask executive board in December 2021 indicated that '2022 will be a new year of growth, although not without uncertainties and with important challenges ahead'. These challenges and uncertainties included the need to achieve a transformative revitalisation of the Basque economy (along with a definitive recovery from the pandemic), which placed companies on a solid and sustainable competitive path, and the promotion of reforms that reinforce the sustainability of the productive fabric and the welfare state. They stressed 'the importance of relying on public-private partnerships to address the digital, environmental and socio-demographic transition' and considered 'close collaboration' to be essential to ensure that 'companies have people with the right skills', and 'that training needs are established and there is an alignment between the education and business systems'...

As pointed out in the report on the social impact of UD through learning processes (2020), employers reported a strong, widespread mismatch between their needs and workers' skills. This situation was reflected in the conclusions of the Basque Business Confederation Confebask's report '*Necesidades de cualificación de las empresas vascas para 2020*' (Qualification needs for Basque companies in 2020), which noted that 81% of industrial companies in the Basque economy had difficulties in recruiting staff. In the Adecco Report '*Perfiles deficitarios y esca*

sez de talento en España. 2020' (Profile shortfalls and lack of talent in Spain. 2020), eight out of ten organisations stated that they had difficulty recruiting talent, which reaffirmed that there was the gap between company requirements and professional skills.

Among the sectors with the highest demand for profiles, in which there was a shortage of supply, were the IT and telecommunications sector, the health sector and various industrial sectors. They also pointed to the severe shortage of labour with vocational training qualifications at the intermediate and higher levels. They therefore proposed reinforcing education in these shortfall areas.

With regard to the professional and training profiles, as well as the educational levels of the people who will be

hired in the coming years, Confebask pointed out that 90% of the employment opportunities will be offered for qualified professional profiles, with the most in-demand qualifications being vocational training and university degrees. University studies in STEM fields were in the most demand.

In relation to business selection criteria, it indicated that personal attitude, experience and training continued to be the requirements most valued by companies when recruiting. Responsibility and perseverance, a proactive and positive attitude, versatility and adaptability, and autonomy at work are still the most highly regarded traits. The main difficulties they mentioned were lack of training or specialisation, lack of attitude or interest and inexperience of workers.

9. The impact of the UD's activities on the selected learning processes

This section presents the results of the second application of the specific impact model for activities related to the learning processes at the University of Deusto. This phase has focused on the University's core interest group, i.e. its student body, specifically, on final-year undergraduate students degree (fourth or fifth years, depending on each degree). This analysis compares research between the impact assessed by the students and the impact assessed by the companies and organisations that host and hire our students and/or graduates (a detailed analysis of which is provided in the Deusto Social Lab Report No. 4).

The indicators of the proposed model have been assessed primarily relying on two sources of information:

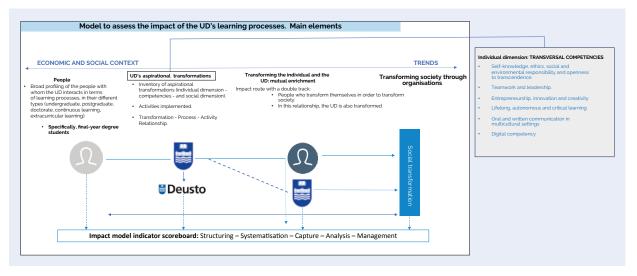
- Internal information available at the University of Deusto.
- Assessment provided by the group of final-year students through fieldwork carried out on an ad hoc basis between December 2021 and January 2022. The questionnaire used and the main process data are available in the Annex to this document. The questionnaire was sent to 1,555 students. A total of 267 re-

sponses were received, all of which were valid, which represented a response rate of 17%, a confidence level of 90% and a sampling error of +/- 4.58%.

The six identified transformations specifically related to transversal competencies were also partly measured, as shown in Figure 16 below.

The results of this application of the model have been structured as follows:

- 1) The analysis focuses on the transformations that have been identified, following the proposed impact model to the extent possible.
 - a. The basic variables of the students participating in this fieldwork were first collected, to ensure that the subsequent analyses can be properly contextualised.
 - b. An initial general assessment of the transformations linked to the individual dimension was made, as well as those derived from the transversal competencies promoted and worked on at the Univer-



Source: Prepared by the authors. Deusto Social Lab.

Figure 16. Transformations resulting from the UD's learning processes assessed during the second phase of the project

sity of Deusto. This gave both a global and consolidated overview as well as a separate overview by transformation.

- c. A comparative analysis was then conducted between the results obtained from the assessments of students in their final year of their degree and the main findings from the analysis of the assessments made by the companies and organisations that host and/or employ UD students and graduates. This analysis was carried out in 2020 and published in Deusto Social Lab Report No. 4.
- d. Finally, the analysis included an assessment of the different activities carried out by students from the perspective of their contribution to the development of the different transversal competencies proposed.

9.1. Individual transformations: a structure for impact assessment

The rationale of the impact model proposed for the UD's learning processes is that competencies are the transformations that the UD seeks to achieve by implementing its learning processes; they are conveyed through individuals, who act as true agents of social transformation. These competencies were classified into two large groups: on the one hand, the UD core competencies (transversal competencies), and on the other, those specific to each particular branches of knowledge (aggregated specific competencies). These are all part of the transformations directly related to the individual dimension.

Each of the competencies (specific and transversal) can in turn be broken down into different specific competencies, the acquisition of which contributes to the former. The survey that was used in the study conducted in 2020 focused on companies and organisations, and proposed a total of twenty items for transversal competencies, along with a selection of three items that were closest to each specific area of knowledge. This was designed to enable companies to measure these competencies effectively. This selection made it necessary to discard other items, since there are many different ways of describing competencies, as indicated in chapter two.

The University of Deusto continued to develop and examine the structure of transversal competencies throughout 2021. This study is specifically focused on the perspective of final-year undergraduate students. Taking this into account, we engaged in joint reflection with various experts from the UD and selected 22 items, all related to the six transversal competencies, to be included in the assessment of this group. The full details of the survey can be found in the Annex to this document. Table 7 traces the process and shows a comparative analysis and under-

Transformation	Assessed by companies	Assessed by student body
TC1 - Self-knowledge, ethics, social and environmental responsibility and openness	Self-awareness and control (making appropriate decisions and demonstrating balanced behaviour in uncertain or adverse situations).	Self-reflection
to transcendence.	Self-esteem, confidence (managing emotions appropriately)	Self-esteem / Confidence
	Ethical and honest behaviour	Ethical and honest behaviour
	Resilience at work / Tolerant to stress	Not measured
		Social commitment
		Questioning the meaning of life and transcendence
		Respect for and commitment to nature and the environment
TC2. Leadership and teamwork	Ability to exercise leadership	Leadership
	Teamwork in any environment (including multicultural settings)	Teamwork
	Adaptation to change	Adaptation to change
	Availability to travel	Not measured
TC3. Entrepreneurship, innovation and	Creativity and innovation	Creativity and innovation (generation of new ideas and solutions)
creativity	Entrepreneurial / intra-entrepreneurial ability	Entrepreneurship (undertaking actions and projects)
	Initiative and proactivity	Not measured
TC4. Oral and written communication in	Oral and written communication ability	Oral communication
multicultural environments		Written communication
		Communication in different languages
		Active listening
		Ability to cope in multicultural and socially diverse environments
TC5. Lifelong, autonomous and critical	Ability to sustain hard work	Commitment to a job well done / Ability to sustain hard work / Discipline
learning	Discipline and commitment to a job well done	
	Ability for lifelong learning	Autonomy and commitment to learning
	Critical thinking	Critical thinking
		Interest in learning
TC6. Digital competences	Digital competences.	Proficiency in the use of technology
		Critical and responsible use of technology

Source: Prepared by the authors. Deusto Social Lab.

Table 7. Relationship between competencies and survey items assessed in the processes with companies (2020) and students (2021)

standing of the results presented in this section. It shows the details of the items that were assessed in the fieldwork with companies for each transformation, and how this evolved into proposing some items for the fieldwork with students. As shown in the table, the vast majority of items remained unchanged; however, there was some variation regarding specific items that were deemed relevant at the time for inclusion in the assessment by companies, as well as others considered pertinent in this context with students.

9.2. Overall assessment of transformations occurred through specific transversal competencies

The impact model of the University of Deusto's learning processes has a clear focus on the transformations derived from the acquisition of transversal competencies. These make up the UD brand, the hallmark or distinctive feature by which it is hoped that the people who studied at the UD will be recognised.

In general terms, the UD implements a set of educational activities and provides a series of services aimed at students in learning processes (specifically for undergraduate learning processes). The analysis presented below has been conducted from a global perspective, that is, considering the feedback provided by final-year degree students. Those directly related to the impact have been analysed from an impact chain perspective. However, the analysis of the assessment of the activities that contribute to the aforementioned impact represents a step forward in the overall vision and assessment of the impact value chain of the UD's learning processes. This analysis is also included in this report.

Thus, considering the impact value chain, this first section has focused on some of the proposed impact indicators, specifically on those that have been assessed in the fieldwork with final-year UD degree students.

The attached table lists the six transversal competencies to be discussed further in the following sections.

TRANSFORMATION
TC1: Self-knowledge, ethics, social and environmental responsibility and openness to transcendence
TC2: Leadership and teamwork
TC3: Entrepreneurship, innovation and creativity
TC4: Oral and written communication in multicultural environments
TC5: Lifelong, autonomous and critical learning
TC6: Digital competencies

Source: Prepared by the authors. Deusto Social Lab.

 Table 8. Aggregate overview of transformations - UD transversal competencies.

9.2.1. Characterisation of the sample of participating students

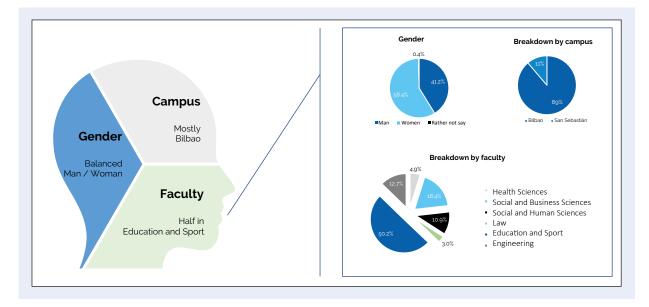
As the assessment of this impact analysis is focused on fieldwork with final-year students (corresponding to the fourth or fifth year, depending on the specific degree programme), it is essential to briefly characterise the participants from this demographic that is key for the University of Deusto. This section presents the results of the fieldwork. As defined in the conceptual model, it is necessary to understand the people and organisations with which the UD has a relationship, in order to contextualise and properly assess the transformations and impact to which they aspire.

The fieldwork was sent to all final year undergraduate students at the University of Deusto during the 2021-2022 academic year. This group consisted of 1,555 peo-

ple, from all degrees and double degrees and from all UD campuses.

As stated at the beginning of this section, 267 valid responses were obtained, and their breakdown in terms of gender, faculty and campus is shown in Figure 17. The sample had a slightly higher proportion of women than of men, most of the responses were provided by students from the Bilbao campus and that the greatest contribution was from the Faculty of Education and Sport. These characteristics reflect those of the universe, namely, the UD as a whole, in which practically 59% of the students are women, 80% from the Bilbao campus and the largest number of students at the UD belong to the Faculty of Education and Sport.

It should be noted at this point that 100% of the UD student body undergoes competence-based learning. That is to say, everyone who undertakes their undergraduate learning process at the UD receives training in these six competencies.



Source: Prepared by the authors. Deusto Social Lab.

Figure 17. Breakdown of final year students participating in fieldwork by gender, faculty and campus.

9.2.2.

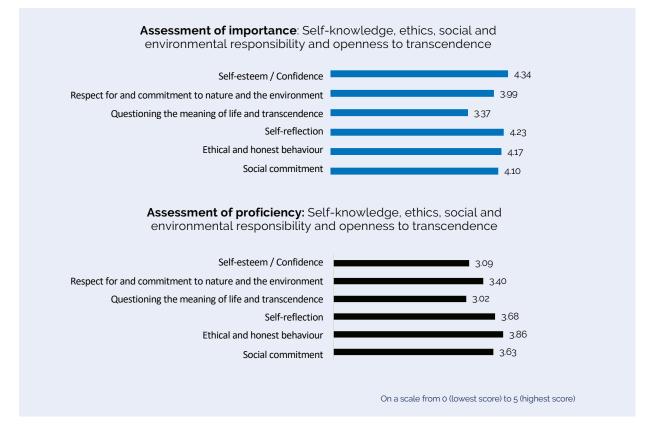
Impact chain relating to 'Self-awareness, ethics, social and environmental responsibility and openness to transcendence'

Before measuring the impact indicators, it is worth highlighting one of the prevailing activities that the UD carries out across the board in the undergraduate learning processes, education in humanistic values, as it is closely related to this transformation. This transformation is in turn the most closely linked to the UD's identity and mission.

Before reaching the final years of their degree, all students are required to take a course on personal values and options in the second year (with a choice of three different modalities and eight different subjects). In relation to the final-year students, totalling approximately 1,555 students, 100% of them took the compulsory subject on civic and professional ethics. University of Deusto students may participate in another set of additionally extra-curricular activities organised by different university bodies (for example, Deusto Campus) that allow them to become familiar with other life situations, engage in volunteering, etc. and therefore also, to a greater or lesser extent, work on and develop this competence.

The impact of this transformation on students has been assessed through an independent evaluation of the following six competencies: self-reflection, self-esteem/confidence, ethical and honest behaviour, social commitment, questioning the meaning of life and transcendence, and respect for and commitment to nature and the environment. The significance that students attribute to each aspect has been evaluated, along with the level of proficiency they believe they have attained during their undergraduate studies at the University of Deusto, on a scale from 0 (lowest score) to 5 (highest score).

Thus, practically all the competencies grouped in this transformation were highly important (more than 4 out of 5) for final-year undergraduate students. Ethical and honest behaviour was reported by students as the one they had achieved the greatest command of in their UD education(with an average rating of around 4 out of 5), followed by self-reflection (3.7 out of 5).



Source: Prepared by the authors. Deusto Social Lab.

Figure 18. Assessment of importance and proficiency. Self-knowledge, ethics, social and environmental responsibility and openness to transcendence

9.2.3. Impact chain relating to 'Teamwork and leadership'

The transformation linked to teamwork and leadership was assessed on the basis of the following three competencies: leadership, teamwork and adaptation to change. The significance that students attributed to each aspect has been evaluated, along with the level of proficiency they believe they have attained during their undergraduate studies at the University of Deusto, on a scale from 0 (lowest score) to 5 (highest score).

The importance attached by students to these competencies was very high, with two of the three competencies being rated above 4 out of 5. Likewise, with regard to the proficiency achieved, the students specifically highlighted the value of teamwork, with a score close to 4 out of 5.



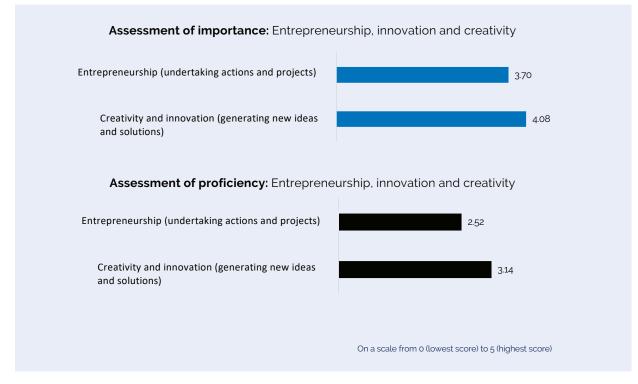
Source: Prepared by the authors. Deusto Social Lab.

Figure 19. Assessment of importance and proficiency. Teamwork and leadership.

9.2.4. Impact chain related to 'Entrepreneurship, Innovation and Creativity'

Students attached high importance to the competence related to creativity and innovation (4.08 out of 5) and considered their level of proficiency to be 3.14 out of 5.

The transformation regarding entrepreneurship, innovation and creativity has been assessed on the basis of two competencies: creativity and innovation (generating new ideas and solutions) and entrepreneurship (undertaking actions and projects). The assessment scale is the same as in the previous cases.



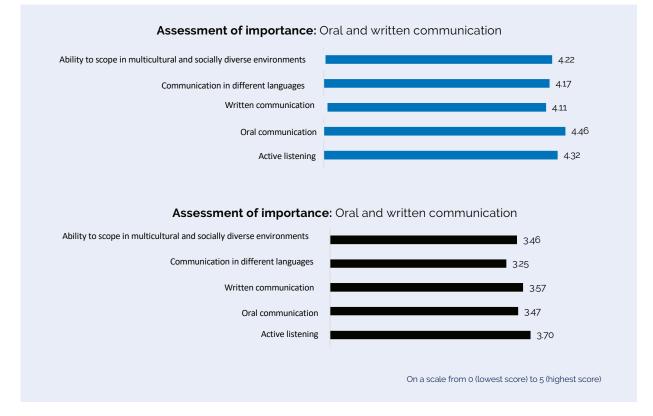
Source: Prepared by the authors. Deusto Social Lab.

Figure 20. Assessment of importance and proficiency. Entrepreneurship, innovation and creativity.

9.2.5. Impact chain related to 'Oral and written communication in multicultural environments'

This transformation was assessed on the basis of the following competencies: active listening, oral communication, written communication, communication in different languages and being ability to cope in multicultural and socially diverse environments. The significance that students attributed to each aspect was assessed, along with the level of proficiency they believed they had attained during their undergraduate studies at the University of Deusto, on a scale from 0 (lowest score) to 5 (lowest score).

This set of competencies stood out for its importance for the participating students. All of them scored more than 4 out of 5, with the importance given to oral communication being rated at 4.5. The analysis of the level of proficiency achieved in each of them showed scores between 3.25 (for communication in different languages) and 3.70 (for active listening).



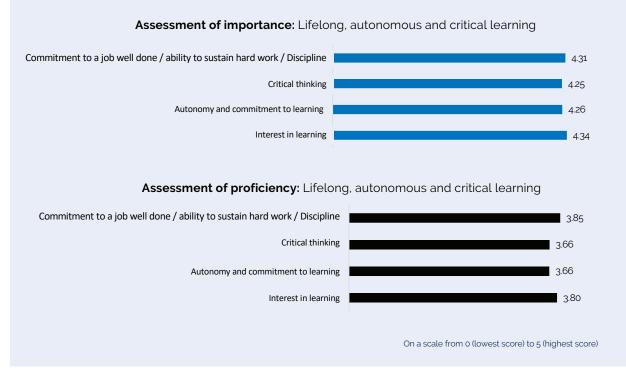
Source: Prepared by the authors. Deusto Social Lab.

Figure 21. Assessment of importance and proficiency. Oral and written communication.

9.2.6. Impact chain related to 'Lifelong, autonomous and critical learning'

This transformation was assessed on the basis of the following competencies: commitment to a job well done, capacity for work and discipline, critical ability, autonomy, involvement in learning and interest in learning. As on previous occasions, the significance that students attributed to each aspect was evaluated, along with the level of proficiency they believed they had attained during their undergraduate studies at the University of Deusto, on a scale from 0 (lowest score) to 5 (highest score).

This set of competencies again was particularly important for final-year UD students. All of them scored more than 4 out of 5, with 4.3 for both interest in learning and commitment to a job well done, work capacity and discipline. These two competencies were also highlighted by students in relation to the proficiency achieved, with scores close to 4 (3.8 and 3.85, respectively).



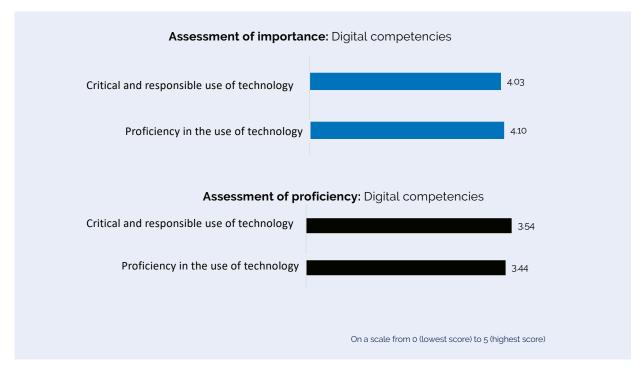
Source: Prepared by the authors. Deusto Social Lab.

Figure 22. Assessment of importance and proficiency. Lifelong, autonomous and critical learning.

9.2.7. Impact chain relating to 'Digital Competencies'

Both competencies were considered by the students to be very important (scores of 4 out of 5), with a rating of around 3.5 for the proficiency achieved in both cases.

This transformation was assessed on the basis of two competencies: proficiency in the use of technology and use of technology in a critical and responsible way. The same scale as in the previous cases was used.



Source: Prepared by the authors. Deusto Social Lab.

Figure 23. Assessment of importance and proficiency. Digital competencies.

9.2.8. Overview

Following the individual analysis, this section provides an overview of all competencies in the following figures:

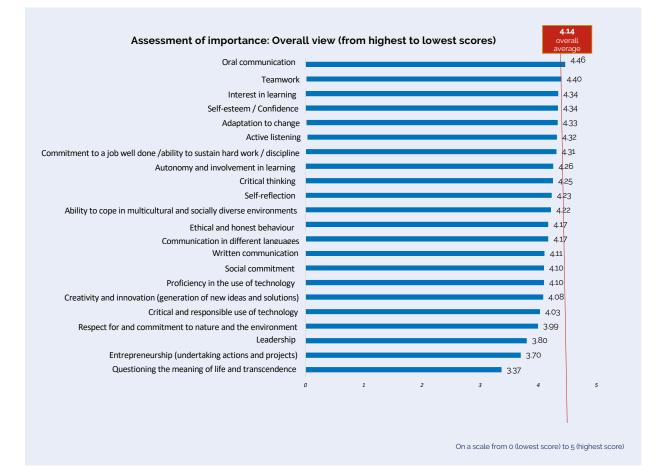
- The first one displays all the competencies in order of importance as assessed by the respondents (Figure 24). The high average importance given to all competencies can be seen, with an overall average of 4.14 out of a total of 5.
- Figure 25 shows the competencies in order of importance according to the level of proficiency achieved. Students rated their proficiency in the competencies analysed at 3.45/5.
- Subsequently, the gap between the importance given by students to the different competencies and the pro-

ficiency they believed they have achieved in each of them is shown globally and ranked from highest to lowest (Figure 26).

• Another table lists the TOP 5 competencies ranked by importance, proficiency and gap (Table 9).

This analysis is of particular interest to the UD, as one of the objectives of this impact project is to supplement the information already available to it in order to plan its future actions to make a social impact wherever it is deemed a priority.

 Lastly, and moving on to the impact value chain, the following section shows how students assessed their current social commitment once they have completed their undergraduate learning process at the UD, as well as their level of involvement in terms of specific actions already undertaken and/or their anticipated behaviour in this regard in the future.



Source: Prepared by the authors. Deusto Social Lab.

Figure 24. Assessment of importance. Overview.



Source: Prepared by the authors. Deusto Social Lab.

Figure 25. Assessment of proficiency. Overview.



Source: Prepared by the authors. Deusto Social Lab.

Figure 26. Gap importance - proficiency

Table 9 below summarises the TOP 5 competencies in the order in which they were assessed by the students. There is some overlap between importance and proficiency in some of them. The table also shows where they believed that there was a greater gap and, therefore, room for improvement.

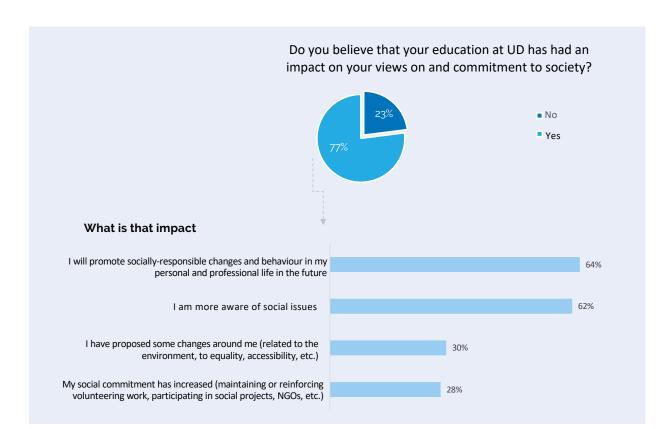
Finally, the study also covers the students' commitment to society, with more than 3 out of 4 students stating

that their education at the University of Deusto has influenced their outlook on and commitment to society, as can be seen in Figure 27. This influence has taken the form of action for 1 in 3 students, as they proposed changes in their environment and/or increased their social involvement. For 2 out of 3 students, this influence will have an impact on their future behaviour, and they reported being more aware of the social situation around them.

	Top 5 in IMPORTANCE	Top 5 in PROFICIENCY	TOP 5 in GAP
1	Oral communication (tc4)	Ethical and honest behaviour (tc1)	Self-esteem / Confidence (tc1)
2	Teamwork <i>(tc 2)</i>	Commitment to a job well done / Ability to work / Discipline <i>(tc 5)</i>	Entrepreneurship <i>(tc3)</i>
3	Interest in learning <i>(tc5)</i>	Teamwork <i>(tc 2)</i>	Oral communication (tc4)
4	Self-esteem / Confidence (tc1)	Interest in learning <i>(tc5)</i>	Creativity (tc3)
5	Adaptation to change <i>(tc2)</i>	Active listening <i>(tc4)</i>	Communication in different languages (tc4)

Source: Prepared by the authors. Deusto Social Lab.

Table 9. TOP 5 by importance, proficiency and gap



Source: Prepared by the authors. Deusto Social Lab.

Figure 27. Social commitment

9.3. Assessment of activities in terms of their contribution to the development of competencies

The actions carried out by the University of Deusto to implement the Learning Model vary according to the fields of knowledge and the type of specific learning process (degree, postgraduate, doctorate, lifelong learning, extracurricular initiatives). An overall graphic representation of the activities for the degree processes can be seen in Figure 28 (further details can be found in Deusto Social Lab Report no. 4).

The UD offers different activities to all students (some of them are compulsory, while others are optional or voluntary). The analysis of the activities carried out (see Figure 29) yielded the following assessment:

- There was no activity that students considered did not contribute to the acquisition of competencies.
- A high level of participation was found in the following voluntary activities:
- Participation in talks, conferences, seminars: more than 8 out of 10 students had participated in this type of activity.
- Sports activities: around 6 out of 10 students had taken part in one of the sports activities offered by the UD.
- Language training: nearly 6 out of 10 students had received language training at the UD.
- Voluntary extracurricular internships: more than 5 out of 10 students had been volunteers.
- Volunteering activities: around 5 out of 10 students have participated in some kind of volunteering activity.

FIRST YR	SECOND YR	THIRD YR	FOURTH YR	FIFTH - SIXTH
	Individual TRA	NSFORMATION: Aggregate specific	competences	
	ACTIVITIES.	Through innovative teaching meti	hodologies	
	Individua	LTRANSFORMATION: Generic comp	etences	
	ACTIVITIES.	Through innovative teaching meti	hodologies	
		TRANSFORMATION in partnership		
	ACT	VITIES: Through collaborative acti	ons	
es common to all U	D degrees			
FIRST YR	- SECOND YR	THIRD YR	FOURTH YR	FIFTH - SIXTH
	Humanistic Values Education		Humanistic Values Education	
	Education in values (Service Learning)		Civic and professional ethics	
	Internships in a			
	Extracurricular internships	<	Curricular internships	
	`	Internation	nal mobility	
			al Programme	
			Final degree project	
		<	Multiple themes	
ne				
ersity Guidance service:				
ocation of a Guidance Tutor				
scation of a duiuance futor	Allocation of academic tutors	Allocation of academic tutors	Allocation of academic tutors	Allocation of academi

Source: Prepared by the authors (Deusto Social Lab)

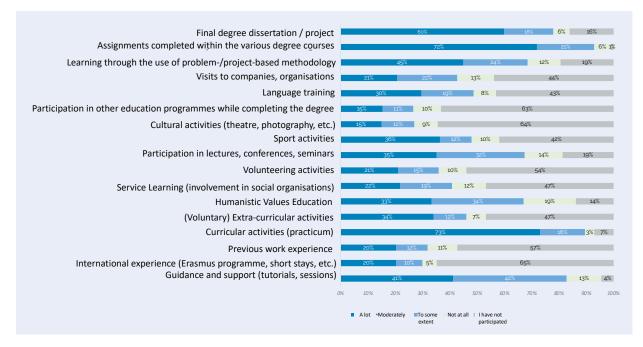
Figure 28. Typical actions of a degree learning process (specific to the degree and common to all degrees)

- On the other hand, some of the activities with the lowest participation were those in which students had different alternatives to choose from. This was the case of international experience, for example through Erasmus, where an eligibility requirement was having sufficiently high grades.
- The activities that students considered contributed most to the development of their competencies were those with a practical component and those that

brought them closer to the practices and knowledge of the business/sector.

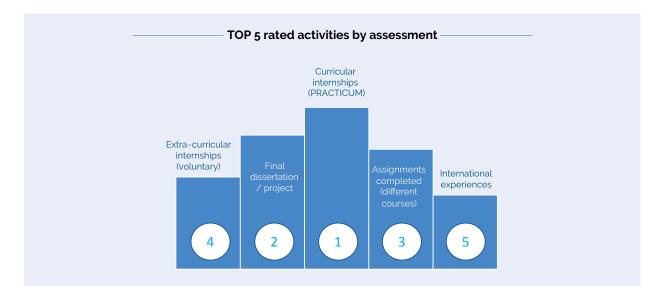
• It was also noted that there was a demand for more of these types of practical activities.

When considering the activities that students valued most among those in which they have participated, the top five were related to work experience activities (both curricular and extracurricular), work that applied the knowledge



Source: Prepared by the authors (Deusto Social Lab).

Figure 29. Assessment of activities in terms of their contribution to the development of competencies



Source: Prepared by the authors (Deusto Social Lab)

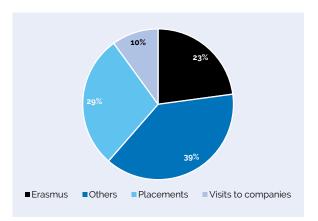
Figure 30. TOP 5 rated activities

they had acquired, and their own international experience, as shown in Figure 30.

On the other hand, when students were asked about the activities they would have liked to have engaged in during their learning process, the main emphasis was not so much on new activities but rather on intensifying existing ones:

- 23% of the proposals focused on potentially extending the Erasmus experience, or in general, international experience over several years (from 2nd to 4th years).
- 29% demanded more curricular and extracurricular placements, extending existing placements and/or allowing them to be carried out in different years throughout their degree.
- For 10% of students, visits to companies, attendance to trials and visits to educational centres should be promoted more intensively.
- The remaining 39% contributed different activities, related to the promotion of training in ICTs, promoting languages, bringing first-year students closer to the experiences of final-year students, leveraging training and values courses, etc.

Finally, the comparison between the activities that students participated in most and those they ranked highest in terms of their contribution to skill development revealed that three of the five most highly valued activities were compulsory (practicum, final degree project/ dissertation, and work assignments in various subjects). The other two activities that received the highest scores were optional activities for students; even so, more than 5 out of 10 students had carried out voluntary extracurricular placements. Nearly 4 out of 10 students had international experience it, and it was highly prized for the way in which it contributed to competence acquisition.



Source: Prepared by the authors (Deusto Social Lab)

Figure 31. Demand for activities

Top 5 in PARTICIPATION	Top 5 in ASSESSMENT
Assignments completed (different courses)	Curricular internships (PRACTICUM)
2 Guidance and support (tutorials, sessions)	Final dissertation/ project
3 Curricular internships (PRACTICUM)	Assignments completed (different courses)
4 Humanistic Values Education	Extracurricular internships (voluntary)
5 Final dissertation / project	International Experience

Source: Prepared by the authors (Deusto Social Lab)

Table 10. TOP 5 activities by participation - scores

9.4. Comparison of final-year students' and companies' scores

The University of Deusto's social impact project helps collect information from the University's key stakeholders and it allows for comparisons to be made between their assessments of the same elements. The focus here is on the transformations that the UD aims to foster through learning processes, specifically those in undergraduate degrees.

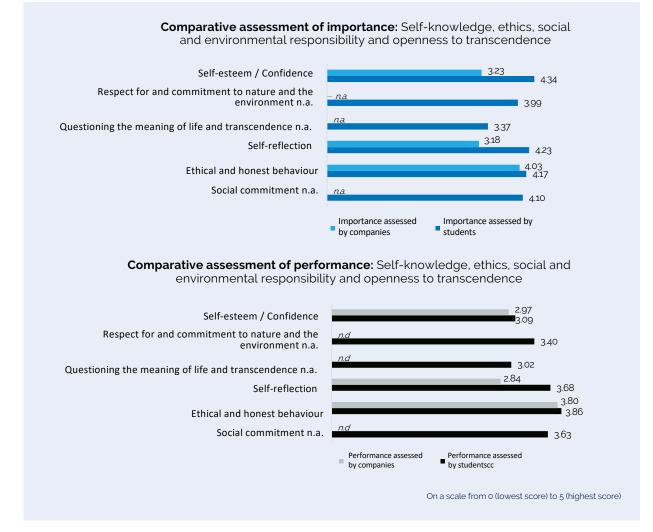
This section compares the assessments made by the companies that host and/or hire our students and graduates, carried out throughout 2020 (analysis presented in the Deusto Social Lab Report no. 4) and the assessment made by students in the final year of their degree in 2021. The structure of section 9.4 is similar to that of 9.3 above, in that the comparative results are initially presented for each of the transformations and then the overall comparative view is presented.

At this point it is necessary to clarify the terms used for the assessment. As analysed earlier in the case of students, the assessment centred on the importance attributed to each of the competencies and the level of proficiency achieved upon nearly completing their degree or double degree. The concept of importance also emerged in the companies' assessment; however, in their case, instead of referring to proficiency, it was deemed more appropriate to assess performance, which essentially means putting into action, exercising, or applying the knowledge acquired. This nuance in this case must also be considered when analysing the results presented in these particular cases. Finally, reference is again made at this point to Table 7, which shows the traceability between the items collected in both cases. Thus, cases where new items appear in the figures are shown with the abbreviation n.a. (comparison not available). In Section 10, which outlines future work, these and other lessons learned from the process are compiled and detailed. This will enable us to progressively develop more consistent instruments while still accommodating the unique requirements of each stakeholder involved.

9.4.1. Impact chain relating to 'Selfawareness, ethics, social and environmental responsibility and openness to transcendence'

When focusing on this transformation, students were asked about six competencies. As three of them were only included in this phase of the study, the assessment made of these by the students could not be compared with that made by companies (indicated as n.a. in the figure).

Within this set of competencies, there was notable agreement on one aspect: ethical and honest behaviour. Both groups ranked it as the most important, with an almost identical score of just over 4 out of 5. The same was true for their performance scores: they were ranked in first place by both groups, with an average of 3.8.



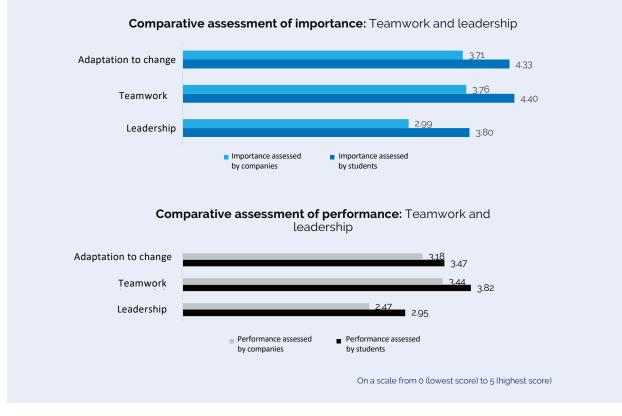
Source: Prepared by the authors. Deusto Social Lab.

Figure 32. Comparative assessment of importance and proficiency. Self-knowledge, ethics, social and environmental responsibility, and openness to transcendence.

9.4.2. Impact chain relating to 'Teamwork and leadership'

Although there were differences in assessment in each of the variables, these were only minor, especially regarding performance. There was somewhat more of a gap in the importance scores, which were higher in the case of the students.

The students and companies were asked about three competencies in this impact chain. Therefore the assessment of the three items included in this transformation could be compared.

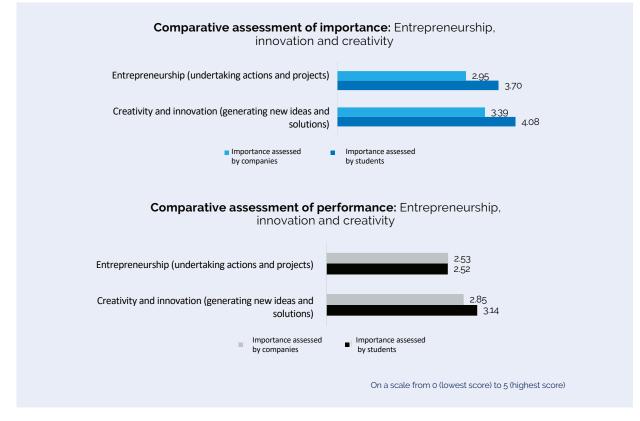


Source: Prepared by the authors. Deusto Social Lab.

Figure 33. Comparative assessment of importance and proficiency. Teamwork and leadership.

9.4.3. Impact chain relating to 'Entrepreneurship, innovation and creativity'

Both the students and the companies were asked about two competencies in this impact chain, so the assessments made of the two items included in this transformation could be compared. The results can be seen in Figure 34.



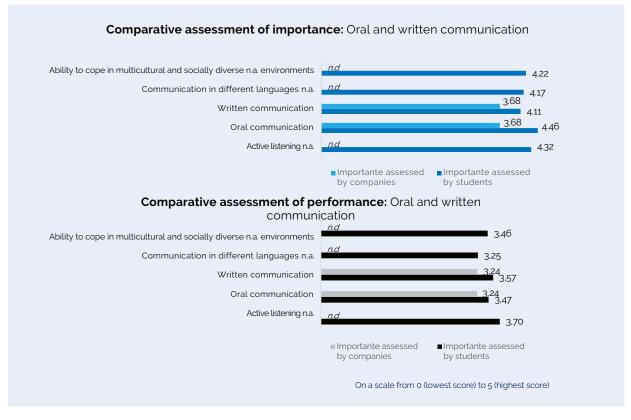
Source: Prepared by the authors. Deusto Social Lab.

Figure 34. Comparative assessment of importance and proficiency. Entrepreneurship, innovation and creativity.

9.4.4. Impact chain relating to 'Oral and written communication in multicultural environments'

In this transformation, students were asked about five competencies; three of these were only included in this

phase of the study, and therefore a comparison with companies was not possible. It is important to note that in the fieldwork conducted with the companies, the assessment was combined with the competency of oral and written communication. This is why the data is currently duplicated, allowing for a comparison of both oral and written communication separately. The results can be seen in Figure 35 and show a slightly larger gap in the assessment of the importance that both groups attached to them, with a very small gap in the assessment of performance.



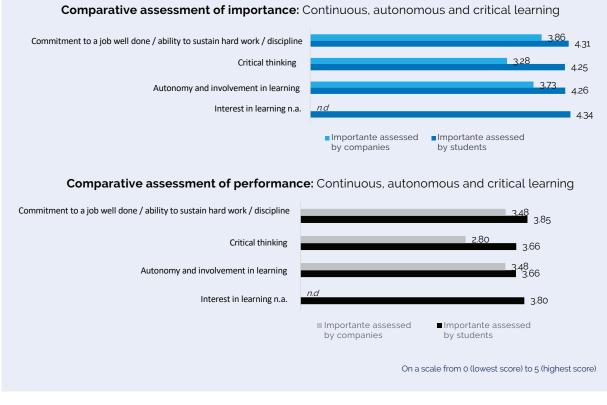
Source: Prepared by the authors. Deusto Social Lab.

Figure 35. Comparative assessment of importance and proficiency. Oral and written communication.

9.4.5 Impact chain related to 'Lifelong, autonomous and critical learning'

While there was a slightly larger gap in the assessments of importance between the two groups, a convergence was observed regarding the competency of autonomy and involvement in learning. In contrast, a greater disparity was noted in the case of critical ability.

In this transformation, students were asked about four competencies, three of them having been only included in this phase of the study. As a result, a comparison with the companies' assessment was not possible.

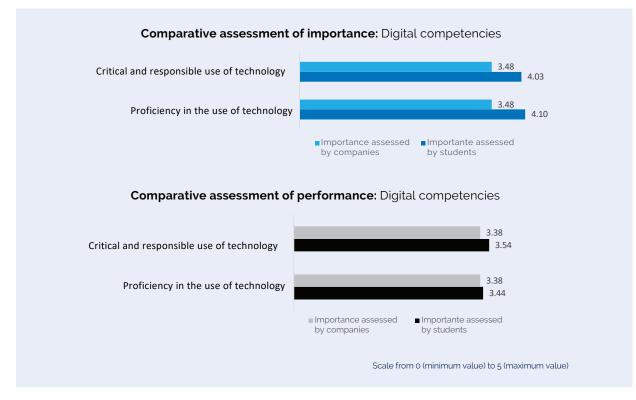


Source: Prepared by the authors. Deusto Social Lab.

Figure 36. Comparative assessment of importance and proficiency. Lifelong, autonomous and critical learning.

9.4.6. Impact chain relating to 'Digital competencies'

In this transformation, students were asked about two specific competencies, which were then compared with the more general competency assessed by companies (hence the same values are applied in both cases). The two participating groups agreed on their assessment of performance, and there was a small difference in the assessment of its importance by each of them.



Source: Prepared by the authors. Deusto Social Lab.

Figure 37. Comparative assessment of importance and proficiency. Digital competencies.

9.4.7. Comparative overview

This section offers a comparative overview of the assessments provided by the two groups analysed, namely, final-year undergraduate students and companies or organisations that host internship students and/or hire UD graduates. The comparison focused on both the importance they attribute to the various competencies presented (with the breakdown of the six transversal competencies of the UD, as detailed above) and the level of proficiency or performance acquired during the undergraduate learning process.

It can be seen that students generally attached great importance to these generic competencies (4.14), more than that given to them by businesses (3.5). If we analyse the top five competencies considered most important by both groups, we can see that:

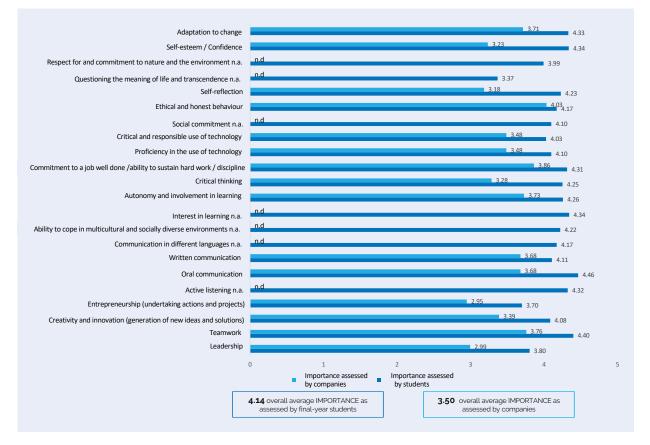
- They agreed on the top 5 regarding the importance of teamwork.
- Companies placed a higher value on competencies related to lifelong, autonomous and critical learning

(TC5, for three specific competencies), while students spread their importance scores over a wider range of competencies.

• While the most important competence for students was oral communication (4.46), companies and organisations considered ethical and honest behaviour to be the most important (4.17).

In terms of performance assessment, the two groups were very close (average of 3.45 among students and 3.14 among companies). The following can be noted regarding the top 5 in both cases:

- Companies placed the highest value on the ethical and honest behaviour of people trained at the UD, and believed that this was the competence in which they performed best. This opinion coincided with that expressed by the students, as they reported that this was the competence in which they had achieved the greatest proficiency during their education at the UD.
- There was also an overlap in the second place: For companies, the commitment of UD individuals to their work and to a job well done stood out, ranking second and fifth, respectively. Students, on the other hand, highlighted that the educational process at UD has



Source: Prepared by the authors. Deusto Social Lab.

Figure 38. Comparative assessment of importance. Overview

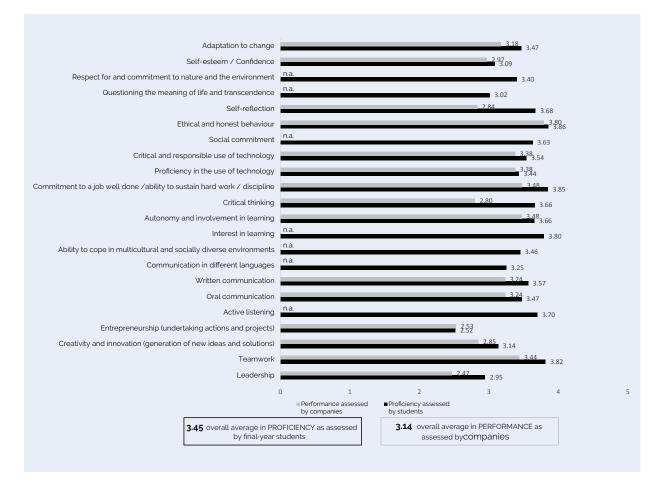
equipped them with a strong ability to sustain hard work, placing this in second position.

- Teamwork appeared in third place for students and in fourth place according to the performance assessed by companies.
- The development of active listening was specifically highlighted by the students, as they felt they had reached a high level of proficiency in this competence.

	Top 5 Importance as assessed by students	Top 5 Importance as assessed by companies
1	Oral communication (tc4)	Ethical and honest behaviour (tc1)
2	Teamwork ((tc 2)	Discipline and commitment to a job well done (tc5)
3	Interest in learning (tc5)	Ability to sustain hard work (tc5)
4	Self-esteem / Confidence (tc1)	Teamwork (tc.2)
5	Ability to adapt to change (tcz)	Lifelong learning competence (tc5)

Source: Prepared by the authors. Deusto Social Lab.

Table 11. TOP 5 by importance as assessed by students and companies, respectively



Source: Prepared by the authors. Deusto Social Lab.

Figure 39. Comparative assessment of performance. Overview

Top 5 in terms of Proficiency as assessed by students	TOP 5 in terms of Performance as assessed by companies
Ethical and honest behaviour (tc1)	Ethical and honest behaviour (tc1)
Commitment to a job well done / Ability work / Discipline (tc 5)	/ to Ability to sustain hard work (ICS)
Teamwork (tc 2)	Ability to engage in continuous learning (tc5)
Interest in learning (tc5)	Teamwork (tc 2)
Active listening (tc4)	Discipline and commitment to a job well done (tc5)

Source: Prepared by the authors. Deusto Social Lab.

Table 12. TOP 5 by proficiency. Students - Companies

Finally, it was deemed valuable to compare the competencies that companies considered most important with those in which students believed they had achieved the highest level of proficiency. As can be seen in Table 13, there was a very clear alignment between them.

	Top 5 in terms of importance as assessed by companies	Top 5 in terms of proficiency as assessed by students
1	Ethical and honest behaviour (tc1)	Ethical and honest behaviour (tc1)
2	Discipline and commitment to a job well done (tc5)	Commitment to a job well done / Ability to work / Discipline (tc 5)
3	Ability to sustain hard work (tc5)	Teamwork (tc 2)
4	Teamwork (tc 2)	Interest in learning (tc5)
5	Ability to engage in continuous learning ((tc5)	Active listening (tc4)

Source: Prepared by the authors. Deusto Social Lab.

Table 13. TOP 5 by importance as assessed by companies and by proficiency as assessed by students

Finally, a final overview will be provided of the set of indicators measured in each of the six transversal competencies. The indicators that could be measured in this phase of the study are displayed with a blue background, while the indicators that were measured in the previous phase of the study in companies and organisations are displayed with a green background.

ANSFORMATION	DIMENSION	TC STAGE	TYPE	DATA/INDICATOR
	Individual	Input	Resources/time used	Hours spent per competence in the 4 / 5 years. Overview for the UD //average per faculty///average for the degree programmes
	Individual	Input	Resources/time used	% of total degree/subject time spent per competency
	Individual	Input	Resources/time used	% of teaching staff supporting students per competency
	Individual	Activity	Characterisation	Innovative methodologies applied
	Individual	Activity	Characterisation	Type of actions carried out. Participation and assessment.
	Individual	Activity	Engagement of third parties	Involvement of third parties to deliver training in this competency
	Individual	Output	Volume	Students who acquired this competency. Overview for UD //average per faculty///average of the degree programmes
Transversal	Individual	Result	Teaching results	Academic performance // assessment
competency	Individual	Result	Satisfaction	Level of satisfaction
	Individual	Impact	Perception	% of students who believed that it is important to acquire the competency
		Impact	Perception	% of students who felt able to acquire the competency (by proficiency levels
	Individual	Impact	Perception	% of graduates expressing the need/usefulness of having this competency for their professional performance
	Individual	Impact	Perception	% of people expressing that having this competence has had an impact on others (team members, etc.). Qualifying according to competency (in this case assessed in relation to social commitment) **
	Individual	Impact	Volume	Level of importance given by employers to this competency
	Individual	Impact	Volume	Level of performance for this competency as rated by employers
	Individual	Impact	Perception	Level of comparative assessment UD- others

Source: Prepared by the authors. Deusto Social Lab.

Figure 40. Summary table of indicators. Overview of indicators as measured by students (blue) and companies (green).

10. Future lines of work

10.1. General project

The strategic and global nature of the project, framed within strategic line L18 'Assess the university's social impact and its contribution to sustainable development' of the Deusto Plan 2022, determines its significance and its breadth and depth. It is a project that affects several processes and involves numerous stakeholders, both internal and external to the UD. Given its complexity, it needs to be addressed in several progressive stages, this report presenting the outcomes of the third stage.

The first stage (carried out in 2019) involved developing the global conceptual model of the impact of the University of Deusto and its application to the area of entrepreneurship. The results were included in Deusto Social Lab Report number 3. The second phase of the project, carried out during 2020 and included in the Deusto Social Lab Report no. 4, dealt with the impact derived from the learning processes at the UD, thus addressing the core activity of the University. As in the previous case, this practical focus was specifically applied to undergraduate learning processes, and its assessment was made possible by both the internal data already gathered by the UD and fieldwork conducted with one of the university's most significant stakeholders: the companies and organisations that host students for internships and/or employ UD graduates. This report outlines the results of the third phase, which delved into undergraduate degree learning processes, focusing on the group that is our core purpose: the students. They have entrusted the UD with their education, in the course of which they and seek their personal and professional development, and aim to become agents of social transformation.

In light of these considerations, some future lines of work have emerged in relation to the overall project:

 Based on the general model already defined, the next step involves moving on to the next phase in the learning processes. This entails gaining deeper insights into students during the early years of their degree (building on the experience initiated in this third phase) and tracking their learning journey through to completion. Additionally, it involves incorporating other essential groups in this process, such as the teaching staff, who guide and facilitate the learning processes.

- It is also essential to extend the process beyond undergraduate learning, continuing after graduates leave the University and begin their professional careers. It is also important to examine other learning processes, such as postgraduate courses.
- Specifically, this social impact work must also focus on research processes, which can be viewed as learning processes involving significant co-generation of knowledge, as will be explored in future phases. These processes demand strong, collaborative relationships between the various stakeholders involved.

10.2. Undergraduate and postgraduate learning processes

10.2.1. Undergraduate and postgraduate learning processes

As became apparent in the study carried out in 2020, the UD engages students in a wide range of complex learning processes, notably including the undergraduate degree, as it is the most intense and involves the greatest number of people. Considerations made about the situation in 2020 led to measuring the impact of the UD through these learning processes by working with businesses and other organisations. In 2021 the context was more favourable for working more closely with the student body, and specifically with students in the final years of their degree. A preliminary pilot project has also been conducted with first-year degree students, which will serve as an initial exploration to facilitate further development in the coming years. This has also made it possible to initiate a new line of work, the comparison between the assessments made by these two groups. The conclusions will be of great value as input for the UD.

The approach to learning processes in the UD's social impact model outlines eleven transformations associated with the activities deployed in them. In 2020, it was possible to partially measure eight of these competencies. In

2021, the focus shifted to measuring six of them, aiming to supplement the insights provided by companies and, most importantly, to gather students' assessments. This is particularly significant for the University of Deusto, as it is aligned with another strategic project that defines the transversal competencies needed for the future.

The measurement has been informed by data published by the University of Deusto, as well as information gathered from the organisations that host UD students for internships and/or employ graduates. Additionally, feedback was collected from final-year students, based on the fieldwork specifically conducted for this purpose. However, the application of the model has been limited due to the lack of availability of some of the data required, either because they are not captured or because they are generated mainly in groups that have not been included in the analysis.

The following lines of future work are based on learning processes. They entail further exploration and use of the specific impact model, as follows:

- Including in the analysis two additional groups which are crucial to undergraduate degree learning processes. These are the first-year undergraduate students and the teaching staff. It is therefore proposed for the next phase to apply the model proposed in this report and complete it with the information to be obtained from the views and perceptions of both groups, which will be based on research to be conducted on an ad hoc basis.
- As information from the different groups becomes available, it will be possible to broaden and deepen the comparative overview of the impact, which began in this report with the comparison of the views of final-year students and those of companies.
- In order to complete the measurement of the indicators defined in the model (or any others proposed if their adaptation is necessary), it is important to advance in the systematic collection, analysis and management of the data required by the model. These aspects require:
 - Collection: establishing a clear system to accurately collect the necessary data in a timely fashion is essential to measure the indicators considered in the model. The specific lessons learnt from the s fieldwork conducted on learning processes to date lead to the following observations:
 - It is essential to establish an inventory of transformations related to transversal competencies, including their name and classification, to enable a comparative and evolutionary analysis of these concepts in the future.

- It would also be necessary to establish assessment scales to make it possible for comparative and evolutionary analyses to be carried out without the need for subsequent adjustments.
- It would be interesting to learn more about student profiles specifically linked to this impact process in order to strengthen the assessments according to the different profile variables identified. A global overview of UD student profiles already exists.
- It is vital to reinforce the instruments to carry out the fieldwork, ensuring that there are some basic fields to be used in the work on every group and a specific, additional body of data that is necessary for each individual group.
- Analysis: it is important to provide both an evolutionary and comparative overview with contextual variables, trends or others to showcase the indicators and the model.
- Monitoring and management: a basic consideration of the impact model is that it should be a management tool, not just a measurement tool.
 - To achieve this, it will be important to plan the frequency of data collection and analysis. This means that the processes within this project should be taken up by different areas and units of the University.
 - It can therefore be deemed to be an impact scorecard with regular monitoring, on which future impact targets could be set.
- Communication: once the impact of the UD on society has been estimated, measured through the key indicators linked to the actions taken to achieve the desired transformations, it is important to communicate it to stakeholders. One possible avenue to do this is to further expand the Deusto Social Lab monographs, but other complementary ones should be explored.
- The proposed application of the model is subject to revision and adaptation, as it depends on other learning-related projects that the UD is currently implementing. This is the case with the project for updating transversal competencies, the main conclusions of which can influence and modify the model, mainly from the perspective of transformations. The consideration of the different groups to be included in subsequent phases may also affect the model and require it to be adapted.

10.2.2. Research processes

Given the importance that the UD attaches to research processes, their impact analysis should be expanded in subsequent phases. This will make it possible to complete the global model while considering all the transformations to which the UD aspires. This section will also focus specifically on doctoral learning processes.

10.3. 2030 Agenda and social impact

As mentioned in the previous report, the 2030 Agenda and its 17 Sustainable Development Goals (SDGs) provide an additional framework for assessing the impact generated by the University of Deusto as an agent of social transformation which should promote inclusive and sustainable well-being. In this regard, the University of Deusto has specifically established the University Vice-Chancellor's office for the University Community and 2030 Agenda within its structure. Therefore, a future line of action will be the inclusion of the SDG approach to measure the impact of the UD in terms of transformation. We believe that this would provide a complementary vision to the UD's own model which is being gradually implemented. Doing this requires:

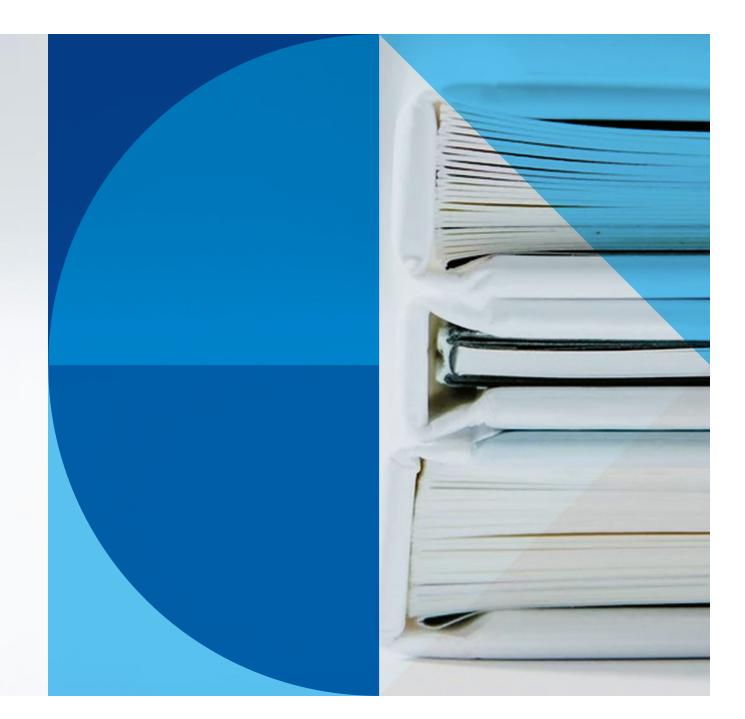
- Defining the interpretation model on how the SDGs are an instrument that favours the expression of the UD's contribution to social transformation.
- Proposing an indicator scoreboard to measure and assess the contribution of the UD in terms of social impact from the perspective of the SDGs.

10.4. Sustained efforts to promote entrepreneurship

During 2020 and 2021, progress was made in implementing the model, with a focus on systematising the collection of information related to the indicators, as well as enhancing analytics and monitoring.

The objective for the year 2022 should be to consolidate the systematic capture and analysis of all actions with a view to updating the impact indicators considered in the model.





Annex 1. Methodology of the action research process

1. Introduction

The aim of the project is to build a model for measuring the UD's social impact. It is based on the premise that this model has to be built collaboratively with both the people who work at the university (internally) and the social agents with whom the UD interacts (externally). A shared vision needs to be constructed, therefore, not only on how to measure the social impact of the university, but also on what is meant by social impact.

Building a shared vision that underpins UD's social impact measurement model is a complex challenge. Complex challenges are those that do not have a single true or false, right or wrong answer; the solution must be arrived at between different actors with various types of knowledge, values and interests (Costamagna & Larrea, 2017). It is necessary to develop processes that include spaces for dialogue in which to build a shared vision to address these challenges.

Therefore, the methodological approach chosen for this project was action research (AR). Unlike other approaches, the goal of AR is not to examine or describe reality, but to change it (Nicholas & Hathcoat, 2014). AR is a strategy for change that can combine both quantitative and qualitative research methods, (Greenwood & Levin, 2007). Another characteristic of AR is its focus on process. These are emergent, inter- and transdisciplinary collaborative processes, consistent with mode 2 knowledge production. Mode 2 knowledge is knowledge that is produced in the context of its application by flexible research teams that change according to the task (Gibbons et al. 1994). The knowledge that is produced in the same setting as where it is applied (Greenwood, 2007).

2. Methodological development

2.1. First stage

The AR process in this third phase of the project was carried out in three stages. In the initial stage, efforts focused on reviewing and updating the trends that most significantly impact academic institutions, particularly their effects on the most sought-after competencies. The existing literature and references have been reviewed and updated.

2.2. Second stage

The second stage of the process consisted of setting up spaces for dialogue, mainly with professionals working at the University, and mainly limited to the people responsible for the transversal competencies project within the University, given the importance of this project at this stage of the project. The table below shows all the meetings held in this context:

Date/s	Participants	Purpose of the session
20.10.2020	Pro-Vice-Chancellor for Academic Organisation: Elena Auzmendi Director of Teaching Innovation: Almudena Eizaguirre Social Impact project team: Víctor Urcelay, Maria Lambarri Villa, Elvira Arrondo Diez	Joint overview of the Social Impact and Transversal Competencies (hereafter TCs) project. Decision to work together with the support of the Deusto Social Lab team on all aspects of the project's impact.
11.02.2021	Members of the teams working to define TCs (TC Teams) + Marijose Bezanilla (coordination) and Elena Auzmendi	Joint meeting held to present work project for each competence
11.02.2021- 16.04.2021	TC teams + Marijose Bezanilla (coordination) Maria Lambarri participated in one of the groups, which met on five occasions.	TC teams work on each competence
03.2021	Social Impact project team: Víctor Urcelay, Maria Lambarri Pro-Vice-Chancellor for Academic Organisation: Elena Auzmendi	Presentation of the study carried out by Deusto Social Lab on the UD's social impact and the results related to TCs.
15.09.2021- 15.11. 2021	Elena Auzmendi, Marijose Bezanilla, Víctor Urcelay, Maria Lambarri Villa, Elvira Arrondo Subsequent meetings were held to validate the final questionnaires to be sent to final-year students, as well as to first-year students.	 Joint work on the competency impact measurement questionnaires: Reviewed questions already asked Assessment of issues and how to include competencies Formulated different proposals until the final versions were finalised. Reported to the UD's Board of Directors Approved dates for the launch of fieldwork
16.11.2021	Juanjo Etxeberria, Patxi Álvarez de los Mozos, Elena Auzmendi, Almudena Eizaguirre, Marijose Bezanilla, Mabel Segú, Jorge Canarias, Natxo Gómez, Javier Mtz Contreras, Pello Azpitarte, María Lambarri	SDGs and TCs. Meeting held to review the work carried out by the driving team.

Source: Developed by the authors (Deusto Social Lab)

Table 14. List of meetings held

2.3. Third stage

Once the questionnaire to be disseminated among final-year undergraduate students (fourth and fifth years respectively) of the 2021-2022 academic year had been shared and validated, the third stage involved carrying out fieldwork.

Methodology sheet: The fieldwork started on 2 December 2021 and continued until 7 January 2022. The database of final-year undergraduate students for the academic year 21-22 included 1,555 people. A total of 267 responses were received (all of them valid), which represented:

- A 17% response rate
- A 90% confidence level
- A sampling error of +/- 4,6%.

The questionnaire used was as follows:

Questionnaire to final-year undergraduate students

As a final year student, you have received this questionnaire because you are finishing your education-learning process at the UD. At the UD we are taking different initiatives within our teaching-learning model and the social impact we have as a university and we would like you to provide feedback on different issues. We would be grateful if you could answer the following questions. The estimated response time is 10 minutes.

The data you provide will be treated as confidential at all times and will be used exclusively for the purposes of this study. You can also find the relevant University of Deusto's data protection information policy at: https:// www.deusto.es/cs/Satellite/deusto/es/universidad-deusto/sobre-deusto-0/la-institucion/privacidad/politicas-de-privacidad/proteccion-de-datos-atencion-al-usuario-/generico.

Thank you very much for your cooperation.

BLOCK 1: DETAILS OF THE PERSON COMPLETING THE SURVEY (STUDENT)

- 1. Gender
 - Female
 - Male
 - Non-Binary
 - I prefer not to say
- 2. Faculty (list)
- 3. Select the campus you belong to (list))
- Qualification (drop-down field based on the previously selected options)

BLOCK 2: COMPETENCE ASSESSMENT

5. 22 COMPETENCIES are identified below, for which we would like you to assess:

- The level of IMPORTANCE you give to each of them (for your future personal and professional development).
- Your current competency score or LEVEL OF PROFI-CIENCY in each of these.

The structure of the questions is oriented to facilitate their completion, on a 5-point scale ranging from the lowest score (none) to the highest score (very high).

	Importance	Current level of proficiency
Self-esteem / Confidence		
Leadership		
Teamwork		
Creativity and innovation (generation of new ideas and solutions)		
Entrepreneurship (undertaking actions and projects)		
Adaptation to change		
Active listening		
Oral communication		
Written communication		
Communication in different languages		
Ability to cope in multicultural and socially diverse environments		

	Importance	Current level of proficiency
Interest in learning		
Autonomy and commitment to learning		
Critical ability		
Commitment to a job well done / Ability to sustain hard work / Discipline		
Proficient use of technology		
Critical and responsible use of technology		
Social commitment		
Ethical and honest behaviour		
Self-reflection		
Questioning the meaning of life and transcendence		
Respect for and commitment to nature and the environment		

BLOCK 3: ASSESSMENT OF ACTIVITIES CARRIED OUT AT THE UNIVERSITY

- 6. For each of the activities identified below:
 - Could you tell us to what extent you think they have contributed to improving your competencies? On a scale of 1-5, where 1=I did not participate, 2=Not at all, 3=Moderately 4=To a large extent 5=Extremely.

	To what extent have they contributed to improving your competencies?
Guidance and support (tutorials, sessions)	
International experience (Erasmus programmes, short stays, etc.)	
Previous work experience through DUALITY	
Curricular internships (PRACTICUM)	
Extracurricular internships (voluntary)	
Humanistic Values Education	
Service Learning (volunteer services in social organisations)	
Volunteering activities	
Participation in lectures, conferences, seminars, etc.	
Sports activities	

	To what extent have they contributed to improving your competencies?
Cultural activities (theatre, bhotography, etc)	
articipation in other training rogrammes at the same time s the degree (entrepreneurship rogrammes, etc.).	
anguage training	
isits to companies, organisations	
earning using problem-/project- ased methodology	
ssignments completed in the ifferent subjects	
inal degree dissertation/project	
ther (specify)	

_____ _____ _____ _____ _____

8. Could you please tell us about any other activity you would have liked to do and the course in which you think it would have been more appropriate to include it?

- 9. Do you believe that your education at the University of Deusto has influenced your outlook on and your commitment to society?
 - ۰No
 - Yes

If yes, please indicate how it has influenced these aspects. Tick all the options that apply to you from the list below:

- · I am more aware of social circumstances
- My social involvement has increased (maintaining or reinforcing volunteering, being involved in social projects, NGOs, etc.).
- I have proposed a change in my personal/professional environment (from environmental, equality, accessibility perspectives, among others).
- I will promote socially responsible changes and behaviours in my personal and professional life in the future
- Other (specify) _____

Before submitting your responses, please feel free to share any comments, suggestions or observations.

Thank you very much for your cooperation

Annex 2. References

Main references analysed by chapter:

Conceptual foundations of competencies, knowledge and learning

ANECA. Agencia Nacional para la Evaluación de la Calidad y Acreditación. ANECA (2012). Guía de apoyo para la elaboración de la memoria de verificación de títulos oficiales universitarios. Retrieved from: https://www.uchceu.es/

ÁLVAREZ-ARREGUI, E. and ARREGUIT, X. (2019). El futuro de la universidad y la universidad del futuro. Ecosistemas de formación continua para una sociedad de aprendizaje y enseñanza sostenible y responsable.

BASTIDAS, J. A. (2018). La Enseñanza Reflexiva: Un Enfoque para la Enseñanza de las Disciplinas del Conocimiento. Hechos y Proyecciones del Lenguaje, 24(4), 67 – 85.

BEZANILLA, M.J., EIZAGUIRRE, A. and PAÑOS, J. (2016). El desarrollo de competencias transversales en la universidad: análisis de modelos institucionales en España y América Latina. In J. Rodríguez Torres, Retos docentes universitarios como desafío curricular (pp. 53-66).

BEZANILLA, M. J., GARCÍA-OLALLA, A. M., PAÑOS, J. and POBLETE, M. (2019). A model for the evaluation of competence-based learning implementation in higher education institutions: Criteria and indicators.

BUENO, E. (2001). Propuesta integradora del concepto de Dirección de Conocimiento. In A.L. Arboníes, Cómo evitar la miopía en la Gestión del Conocimiento, Clúster del Conocimiento (pp. 251- 268). Madrid: Díaz de Santos.

BUENO, E. (1998). El capital intangible como clave estratégica en la competencia actual. Boletín de Estudios Económicos, liii, pp. 207-222.

DELORS, J. (1996). 'Los cuatro pilares de la educación' in La educación encierra un tesoro. Informe a la UNESCO de la Comisión internacional sobre la educación para el siglo XXI, Madrid, España: Santillana/UNESCO. FELDMAN, R. S. (2005). Psicología: con aplicaciones en países de habla hispana. Mexico DF: McGrawHill.

GARCÍA, E. (2009). Aprendizaje y construcción del conocimiento.

GIBBONS M., LIMOGES C., NOWOTNY H., SCHWARTZ-MAN S., SCOTT P. and TROW M. (1994). The new production of knowledge.

KARLSEN J. and LARREA M. (2015). Desarrollo territorial e investigación acción. Innovación a través del diálogo. Orkestra.

KEGAN, R. (2009). What 'form' transforms? A constructive-developmental approach to transformative learning. In K. Illeris (Ed.), *Contemporary theories of* learning (pp. 35-52). London: Routledge.

KOLB, A. (1984). Experiential learning: Experience as the source of learning and development

LARREA, J.L. (2017). Contribución de los procesos de generación de conocimiento transformador a la misión de la universidad. Aprendizajes desde la experiencia vital. PhD thesis, TDIVC-008.

MARINA, J.L. (2015). Retrieved from: https://www.joseantoniomarina.net/

MEZIROW, J. (1991). Transformative Dimensions of Adult Learning. San Francisco: Jossey-Bass.

ORMORD, J.E. (2005). Aprendizaje Humano. (Pearson)

POBLETE, M. and VILLA, A. (2007). Aprendizaje basado en competencias. Una propuesta para la evaluación de competencias genéricas. Bilbao Mensajero.

TORRES, R.M. (2013). El paradigma del Aprendizaje a lo Largo de la Vida (ALV). Retrieved from: https://otra-educacion.blogspot.com/2014/01/aprendizaje-lo-largo-dela-vida-alv.html.

WENGER, E. (1998). Communities of Practice: Learning, Meaning, and Identity. Cambridge: Cambridge University Press. ISBN 978-0-521-66363-2.

General and university-specific trends

ÁLVAREZ-FLORES, EP., NÚÑEZ-GÓMEZ, P. and RRODRI-GUEZ CRESPO, C. (2017). Adquisición y carencia académica de competencias tecnológicas ante una economía digital. *Revista Latina de Comunicación Social*, 72, pp. 540-559. DOI: 10.4185/RLCS-2017-1178

ARANGUREN, M.J., CANTO-FARACHALA, P, CA-RO-GONZÁLEZ, A. and LARREA, J.L. (2021). La universidad co-transformadora. Orkestra

ARMENDÁRIZ, E. (2015). El Nuevo perfil del profesional de la Comunicación y las Relaciones Públicas. Una visión desde la perspectiva del Mercado. *Revista Internacional de Relaciones Públicas*, 9(5), pp. 153-178.

AZNAR-MINGUET, P., Ull, M.A., Martínez-Agut, M.P. and Piñero, A. (2017). Evaluar para transformar: evaluación de la docencia universitaria bajo el prisma de la sostenibilidad. *Enseñanza de las ciencias: revista de investigación y experiencias didácticas*. Vol. 35, no. 1, pp. 5-27. https:// doi.org/10.25267/Rev_educ_ambient_sostenibilidad.2019.v1.i1.1202

BRINK, H., PACKMOHR, S., VOGELSANG, K. (2020). The digitalization of universities from a students' perspective. En 6th International Conference on Higher Education Advances (HEAd'20). Editorial Universitat Politècnica de València. 967-974. https://doi.org/10.4995/HEAd20.2020.11181

COMISIÓN EUROPEA (2007). Competencias clave para el aprendizaje permanente. Retrieved from: https://www.educacionyfp.gob.es/

COMISIÓN EUROPEA (2020). Marco europeo de competencias digitales DIGCOMP. Retrieved from: https://epale. ec.europa.eu/es/

CRUE (2020). Universidad 2030. Qué sociedad queremos dentro de diez años.

CRUE (2018). Encuestas Universidades Españolas y la Agenda 2030.

DOMINGUEZ FIGAREDO, D. (2014). La digitalización como factor de cambio en la educación superior. Cuadernos Hispanoamericanos, 769-770, pp. 51-63

FUNDACION C&D (2021). Informe CYD 2020: tendencias y oportunidades de la universidad española. Recuperado de: https://www.fundacioncyd.org/

GÓMEZ LLORENTE, L. (2008). El aprendizaje a lo largo de toda la vida. CEE Participación Educativa, 6, pp. 7-13. Recuperado de: https://redined.educacion.gob.es/

GIL PÉREZ, D. and VILCHES, A. (2017). Educación para la sostenibilidad y educación en derechos. humanos: dos campos que deben vincularse. Teoría de la Educación, Revista Universitaria, 27. DOI:10.14201/teoredu29179100

MARTIN, E. and MORENO, A. (2007). Competencia para aprender a aprender. Alianza Editorial. ISBN: 9788420684109.

MARTÍNEZ LIROLA, M. (2018). La Enseñanza de la Justicia Ambiental en el Marco de la Educación para el Desarrollo Sostenible en la Universidad. *Revista Internacional De Educación Para La Justicia Social*, 7(1). https://doi. org/10.15366/riejs2018.7.1.003

MICHELSEN, G. (2016). Policy, politics and polity in higher education for sustainable development. In M. Barth, G. Michelsen, M. Rieckmann e I. Thomas and (Eds.), Routledge Handbook of Higher Education for Sustainable Development (pp. 40-55). London: Routledge.

MONGE, S. and ETXEBARRIA, J. (2017). Competencias más valoradas por los profesionales de la publicidad de la Comunidad Autónoma Vasca. Comparación 2008-2016. Communication & Society, 30(2), pp. 97-111 DOI:10.15581/003.30.2.sp.97-111

OBSERVATORIO EMPRESAS VODAFONE (2021). Los retos de la Universidad del futuro. https://www.observato-rio-empresas.vodafone.es/

OECD (2018). The future of education and skills. Education 2030. Retrieved from: https://www.oecd.org/

SÁNCHEZ, A., GISBERT, M. and ESTEVE, F. M. (2019). La competencia digital de los estudiantes universitarios de primer curso de grado. *Innoeduca: international journal of technology and educational innovation*. Málaga, 2019, v. 5, (2) pp.104-113. DOI: 10.24310/innoeduca.2019. v5i2.5598

UNESCO (2012). Education for All Global Monitoring Report: EFA GMR 2012. Youth and skills: Putting education to work. Retrieved from: https://goo.gl/dTfFp

UNESCO (2020). Educación para el Desarrollo Sostenible: hoja de ruta. Paris: UNESCO. 67 pp. ISBN: 978-92-3-300145-9. Retrieved from: https://unesdoc.unesco.org/

About the University of Deusto and other Jesuit universities

AGUNDEZ, M. SJ. (2008). El paradigma universitario Ledesma–Kolvenbach. Revista de Fomento Social 63 (2008), 603–631. https://doi.org/10.32418/ rfs.2008.252.2044

GIL CORIA (2002). La pedagogía de los jesuitas. Ed. Universidad pontificia de Comillas.

GUIBERT, J.M. SJ (2017). Servicio y compromiso. Zerbitua eta Konpromisoa. Discursos Universitarios (2013-2017)

GUIBERT, J.M. SJ (2020). Para comprender la pedagogía ignaciana.

KOLVENBACH, P.H. SJ. (2001). Prepósito General de la Compañía de Jesús. El servicio de la fe y la promoción de la justicia en la educación universitaria de la Compañía de Jesús Estados Unidos.

NICOLAS, A. SJ (2008). Misión y Universidad: ¿Qué futuro queremos? Retrieved from: https://goo.gl/pZZbKZ

SOSA, A. SJ (2017). La Universidad, sus egresados y el compromiso con la democracia. Discurso del Padre General Arturo Sosa SJ en el Centro Universitario FEI São Bernardo do Campo, Brasil. 26 de octubre de 2017.

UNIJES (2012). Sector de Educación Universitaria. Unijes documents. Retrieved from: https://unijes.net/

UNIVERSIDAD DE DEUSTO. (2001). Marco pedagógico. Modelo de aprendizaje UD.

UNIVERSIDAD DE DEUSTO. (2016). Deusto al servicio de valores humanizadores.

UNIVERSIDAD DE DEUSTO. (2019). Intervención del Rector Magnífico en el acto de Apertura del Curso 2019-20.

UNIVERSIDAD DE DEUSTO. (2020). Intervención del Rector Magnífico en el acto de Apertura del Curso 2020-2021.

UNIVERSIDAD DE DEUSTO. (2019). Modelo Deusto de Formación Dual.

UNIVERSIDAD DE DEUSTO. (2019). Plan Estratégico Deusto 2022.

UNIVERSIDAD DE DEUSTO. (2018). Plan director de formación a lo largo de la vida de la UD.

UNIVERSIDAD DE DEUSTO. (2021) Anuario 2021

About general trends and context

ADECCO GROUP INSTITUTE (2020), The Global Talent Competitiveness Index (GTCI) 2020. Global Talent in the Age of Artificial Intelligence. Retrieved from: https:// www.adeccogroup.com/

BCG (2020). Fixing the Global Skills Mismatch. Retrieved from: https://www.bcg.com/

CARITAS Y FOESSA (2022). Informe evolución de la cohesión social y consecuencias de la Covid-19 en España. Retrieved from: https://www.caritas.es/

CONFEBASK (2021). https://www.confebask.es/

CUADERNOS DEUSTO SOCIAL LAB. El impacto en la sociedad de la Universidad de Deusto. Una mirada desde los procesos de aprendizaje. No. 4. Retrieved from: http:// www.deusto-publicaciones.es/deusto/index.php/es/sociallab-es/sociallab01c

CUADERNOS DEUSTO SOCIAL LAB. El impacto en la sociedad de la Universidad de Deusto. Una mirada desde el emprendimiento. No. 3. Retrieved from: http://www.deusto-publicaciones.es/deusto/index.php/es/sociallab-es/ sociallab01c

CUADERNOS ORKESTRA (2021). Economía y sociedad digitales del País Vasco. DESI 2020. Retrieved from: https://www.orkestra.deusto.es/es/investigacion/publica-ciones

DELOITTE (2020), Tech Trends 2020. Retrieved from: https://www2.deloitte.com/

EUSTAT. Estadística municipal de educación. Nota de prensa de 28/09/2021. Retrieved from: https://www.eus-tat.eus/

EUSTAT. Encuesta de población en relación con la actividad. IV/2021. Nota de prensa de 21/01/2022. Retrieved from: https://www.eustat.eus/

EUSTAT (2020). Estadística universitaria 2019. Retrieved from: https://www.eustat.eus/

EY y FUTURE FOR WORK INSTITUTE (2020). Informe Las empresas españolas frente a la revolución del reskilling. Retrieved from: https://www.ey.com/es_es

FERRES PRATS, J., AGUADED-GÓMEZ, I. and GARCÍA-MATILLA A. (2012). La competencia mediática de la Ciudadanía Española. Dificultades y retos. *Icono* 14, 3(10), pp. 23-42. doi: http://dx.doi.org/10.7195/ri14. v10i3.201

FUNDACIÓN TELEFÓNICA (2021). Sociedad Digital en España 2020-2021. Retrieved from: https://www.fundaciontelefonica.com/

GARTNER (2020). Stop Training Employees in Skills They'll Never Use. Retrieved from: https://www.gartner.com/

GOBIERNO DE ESPAÑA (2020). España digital 2025. Retrieved from: https://portal.mineco.gob.es/

GOBIERNO VASCO (2021). Encuesta de Pobreza y Desigualdades Sociales 2020. Retrieved from: https:// www.euskadi.eus/

INFOEMPLEO Y GRUPO ADECCO (2021). XXIV edición del Informe Oferta y Demanda de Empleo en España. Retrieved from: https://www.adeccoinstitute.es/

INSTITUTO NACIONAL DE ESTADÍSTICA. INE. Renta por hogar por Comunidades Autónomas. 2020. Retrieved from: https://www.ine.es/

INSTITUTO NACIONALD E ESTADÍSTICA. INE. Encuesta de población activa. Cuarto trimestre de 2021. Retrieved from: https://www.ine.es/

INSTITUTO NACIONALD E ESTADÍSTICA. INE. Encuesta Anual de Estructura Salarial. 2019. Retrieved from: https://www.ine.es/

LANBIDE (2020). Estudio de inserción laboral 2020. Promoción universitaria 2017. Retrieved from: https://www. lanbide.euskadi.eus/estadistica/ MANPOWERGROUP (2021). Estudio Escasez de Talento 2021 (The Talent Shortage). Retrieved from: https://go.manpowergroup.com/

MANPOWERGROUP (2021). Skills Revolution Reboot. Retrieved from: https://workforce-resources.manpowergroup.com/white-papers

McKINSEY (2020). The COVID-19 recovery will be digital: A plan for the first 90 days. Retrieved from: https://www. mckinsey.com/

McKINSEY (2021). Three keys to building a more skilled postpandemic workforce. Retrieved from: https://www.mckinsey.com/

McKINSEY (2021). The future of work after COVID-19. https://www.mckinsey.com/

OBSERVATORIO EMPRESAS VODAFONE (2021). Estudio sobre el Estado de Digitalización de las Empresas y Administraciones Públicas españolas 2020. Retrieved from: https://www.observatorio-empresas.vodafone.es/

ORKESTRA (2021). Informe de competitividad del País Vasco. Retrieved from: https://www.orkestra.deusto.es/es/

WORLD ECONOMIC FORUM (2020). The future of Jobs. Retrieved from: https://www3.weforum.org/docs/WEF_ Future_of_Jobs_2020.pdf

Annex 3. Index of figures and tables

Index of figures

Figure 1.	Trends that shape the world (2050)
Figure 2.	Challenges for the University of the future. A focus on the challenges closely linked to the learning process
Figure 3.	Delving deeper into levers of change for learning processes
Figure 4.	Competencies that companies are focusing on for re-skilling
Figure 5.	Objectives of the Deusto Learning Model
Figure 6.	Main elements of the UD Learning Model
Figure 7.	UD transversal competencies. 2018
Figure 8.	Core Elements of the Impact Mode
Figure 9.	Core elements of the impact model of the UD learning processes
Figure 10.	People who learn at the UD. View by learning process and life course stage
Figure 11.	Transformations arising from learning processes. Overall view of degree processes
Figure 12.	Typical actions in the learning process involved in an undergraduate degree (specific to the degree and common to all degrees)
Figure 13.	Impact value chain
Figure 14.	Impact Indicator Table (transversal competencies)
Figure 15.	Evolution of economic growth in 2021 and 2022
Figure 16.	Transformations resulting from the UD's learning processes assessed during the second phase of the project
Figure 17.	Breakdown of final year students participating in fieldwork by gender, faculty and campus.
Figure 18.	Assessment of importance and proficiency. Self-knowledge, ethics, social and environmental responsi- bility and openness to transcendence
Figure 19.	Assessment of importance and proficiency. Teamwork and leadership.
Figure 20.	Assessment of importance and proficiency. Entrepreneurship, innovation and creativity.
Figure 21.	Assessment of importance and proficiency. Oral and written communication

Figure 22.	Assessment of importance and proficiency. Lifelong, autonomous and critical learning.
Figure 23.	Assessment of importance and proficiency. Digital competencies.
Figure 24.	Assessment of importance. Overview
Figure 25.	Assessment of proficiency. Overview
Figure 26.	Gap importance - proficiency
Figure 27.	Social commitment
Figure 28.	Typical actions of a degree learning process (specific to the degree and common to all degrees)
Figure 29.	Assessment of activities in terms of their contribution to the development of competencies
Figure 30.	TOP 5 rated activities
Figure 31.	Demand for activities
Figure 32.	Comparative assessment of importance and proficiency. Self-knowledge, ethics, social and environ- mental responsibility, and openness to transcendence
Figure 33.	Comparative assessment of importance and proficiency. Teamwork and leadership.
Figure 34.	Comparative assessment of importance and proficiency. Entrepreneurship, innovation and creativity
Figure 35.	Comparative assessment of importance and proficiency. Oral and written communication
Figure 36.	Comparative assessment of importance and proficiency. Lifelong, autonomous and critical learning
Figure 37.	Comparative assessment of importance and proficiency. Digital competencies.
Figure 38.	Comparative assessment of importance. Overview
Figure 39.	Comparative assessment of performance. Overview
Figure 40.	Summary table of indicators. Overview of indicators as measured by students (blue) and companies (green)

Index of tables

Table 1.	Typology of competencies. Overview of the most commonly used approaches	23
Table 3.	Soft skills most valued by Spanish companies. 2020	26
Table 2.	Comparison of the most in-demand Soft Skills in 2020	26
Table 4.	Typology of competencies. Overview of the most commonly used approaches	30
Table 5.	Actions carried out by the UD throughout an undergraduate learning process	46
Table 6.	Relationship between the MAUD and the stages of the innovation process	48

Table 7.	Relationship between competencies and survey items assessed in the processes with companies (2020) and students (2021)	57
Table 8.	Aggregate overview of transformations - UD transversal competencies.	58
Table 9.	TOP 5 by importance, proficiency and gap	68
Table 10.	TOP 5 activities by participation - scores	71
Table 11.	TOP 5 by importance as assessed by students and companies, respectively	80
Table 12.	TOP 5 by proficiency. Students - Companies	81
Table 13.	TOP 5 by importance as assessed by companies and by proficiency as assessed by students	81
Table 14.	List of meetings held	88

DeustoDual DeustoEmprende DeustoAlumni