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SHOUT

*State-of-the-art and good practices
on SSH students and graduate
innovativeness potential*



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Social Sciences and Humanities for Sustainable Innovation

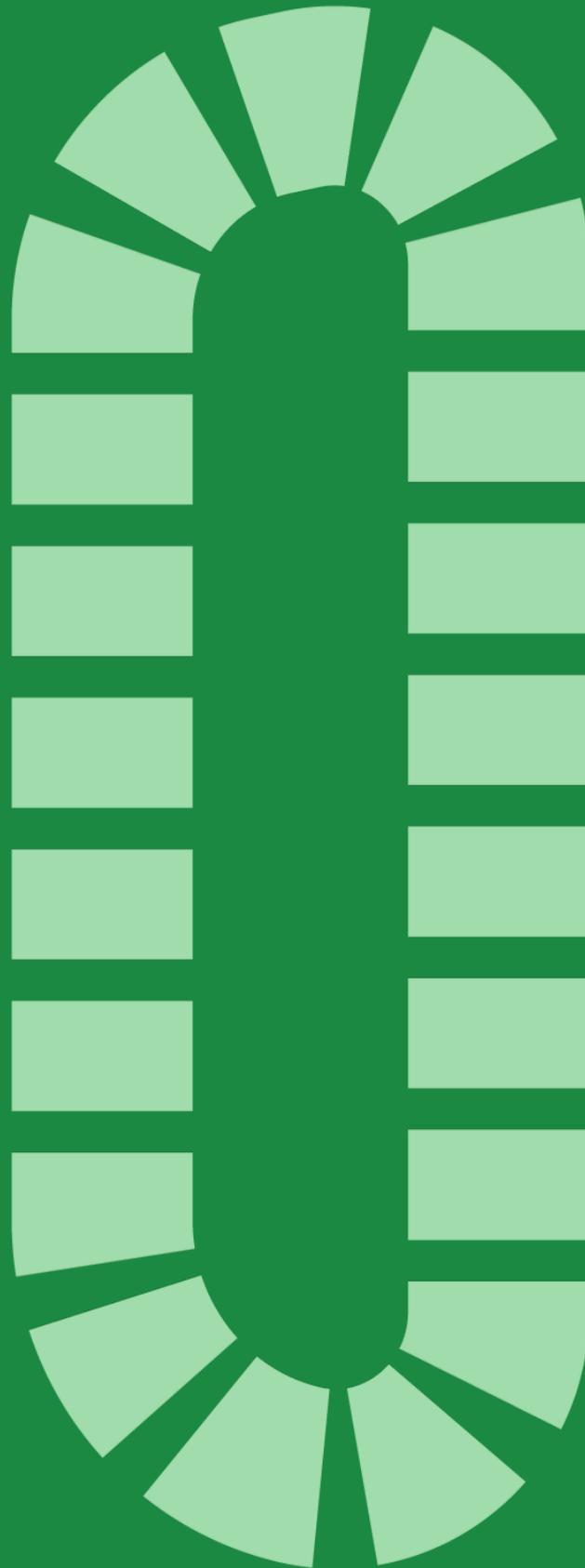


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SHOUT

Introduction

Social Sciences and Humanities (SSH) usually see themselves as producing the forms of knowledge which are important for humanist and inter/cultural activities. They emphasize the development of key skills, e.g. empathy, understanding of cultural differences, which are necessary for living in contemporary multicultural societies, or the cultivation of skills e.g. critical thinking, which are necessary for the citizens of democratic countries. On various occasions, and in different contexts, SSH argue that they increase the understanding and appreciation of the national cultural heritage, teach creativity and innovation as well as develop the aesthetic sense. Prominent SSH scholars increase their countries' international visibility and global prestige, and, usually through creative industries, contribute to their economic growth.

The wider contributions of SSH to the global, or rather glocal political, environmental, cultural and social developments, however, rarely get the attention they deserve. The policies aimed at dealing with these issues do not usually address SSH directly and thus fail to recognize and employ their contributions in solving them. The UN initiative to achieve the Sustainable Development Goals is an example of such policies as well as a field where the policy implementation might fruitfully apply the potential of SSH. The SHOUT project aims to bring these two perspectives (the impact of SSH and the implementation of the SDGs) together. SHOUT aims at creating new opportunities for SSH where students, recent graduates, young professionals and researchers work together with practitioners from Small and medium enterprises (SME) and non-governmental organizations (NGOs) to develop solutions and generate value for civil society, public policy, business and service industries.

The overall objective of this project is to strengthen the innovation capacity and transformational role of Higher Education institutions (HEI), SME and NGOs while dealing with complex problems presented in SDGs. In addition, it aims to develop innovative sustainable solutions through inter-sectoral cooperation models, and enhanced sharing of knowledge between different stakeholders in eight European countries participating in the project consortium – Croatia, Cyprus, Germany, Greece, Italy, Lithuania, Portugal, Slovenia.

To reach these goals, the first step of our project was to conduct research on state of the art and existing practices in the intersection of the two realms – SSH and the SDGs. This research consisted of the following steps:

- The analysis of the relevant legislation, policy, and practices across participating countries;
- The overview of statistical data concerning SSH in HEI's;
- Identification of the needs of students and teachers and job market trends;
- Description of state of the art: SSH Skills Ecosystem in relation to SDGs related jobs.

There were three main tools used to obtain diverse data and gain wider understanding – desk research, online surveys, and semi-structured interviews.

Desk research was intended to widen knowledge of the subject and learn from already existing research. This is to broaden our understanding of SSH's role in solving important SDGs problems.

Online surveys were used to see what competencies are valued by students, teachers and employers. They also helped to identify what didactic approaches are being used by teachers and how they are perceived by students.



Interviews deepened the insights received from surveys and desk research. Interviews have served as a tool for identifying best practices and creating descriptive narratives about them.

The quantity of respondents of the surveys and interviewees are presented in the table below:

Surveys						Interviews					
	Students	Teachers	NGOs	SMEs	TOTAL		Students	Teachers	NGOs	SMEs	TOTAL
LT	43	18	9	14		LT	4	2	2	3	
SI	10	7	4	0		SI	3	4	1	1	
IT	67	23	18	11		IT	4	1	1	2	
HR	32	23	17	35		HR	3	1	1	4	
DE	20	13	11	25		DE	0	0	1	1	
UK	2	0	0	0		UK	0	0	0	0	
PT	9	10	8	11		PT	1	0	2	1	
CY	21	7	11	22		CY	0	0	1	1	
GR	33	13	10	5		GR	0	0	1	2	
OC ¹	5	2	1	0		OC	0	0	0	0	
	242	116	89	123	570		15	8	10	15	48

Table 1: Quantity of respondents of SHOUT surveys and interviewees

The three tools used to conduct our research are embodied in the structure of this report. Starting with the desk research. First, a general overview of global and European SSH is presented, before focusing on the situation of SSH and their connections to SDGs in the consortium-partners countries. The desk research is followed by the analysis of the online surveys and the interviews. The report is finished with conclusions, encompassing the findings of all three types of research.

¹ OC – other countries



1. Desk Research

1.1 General Overview

1.1.1 Legislation and Policy

In 2015, The World Economic Forum proposed a list of the most useful skills for thriving in the current climate. The list was renewed in 2020. The skills/competences in the two lists are almost identical, although their ranking changes. The only considerable change is that instead of Attentive listening (Gray 2016), the 2020 list proposes the more complex notion of Emotional Intelligence and Cognitive Flexibility, instead of Quality Control (the full comparison of the lists see in a table below).

in 2020	in 2015
1. Complex Problem Solving	1. Complex Problem Solving
2. Critical Thinking	2. Coordinating with Others
3. Creativity	3. People Management
4. People Management	4. Critical Thinking
5. Coordinating with Others	5. Negotiation
6. Emotional Intelligence	6. Quality Control
7. Judgment and Decision Making	7. Service Orientation
8. Service Orientation	8. Judgment and Decision Making
9. Negotiation	9. Active Listening
10. Cognitive Flexibility	10. Creativity

Figure 1: World Economic Forum 2020 and 2015 most useful skills

Both lists emphasize the importance of SSH/humanist education because most of the listed skills are less likely to be learnt at STEM classes – the WEF openly admits this point of view (Phelps 2014). The question, however, is, whether the policy makers, society or even the SSH scholars themselves realize the importance of the education their disciplines provide.

In the United States of America, because of differences in the University system and its relation to the labour market, future employment of graduates is an important issue. SSH advocacy groups pay particular attention to job opportunities (The Arts and Humanities in the 21st Century Workplace 2014). The learned societies, such as American Academy of Arts and Sciences – collect statistical data, concerning various issues of the SSH in present day society, including their workforce participation (American Academy of Arts & Sciences 2020). The matters of employment are discussed in the American white papers, concerning Humanities and Social Sciences – e.g. The Heart of the Matter. The Humanities and Social Sciences for a Vibrant, Competitive, and Secure Nation (2013).

On the other hand, global initiatives for SSH policy, such as the Leiden statement (2014) on the importance of SSH in the global scientific research or the Cardiff statement focusing on the societal impact of SSH, do not pay sufficient attention to the demands of the changing labour market. The Leiden statement (2014) echoes the WEF list of skills, which students taking classes in SSH obtain:



“These institutions will provide opportunities for students from other disciplines to benefit from exposure to social sciences and humanities. In particular, universities will promote the benefits of SSH study and research in supporting generic skills such as: skillful communication, critical and independent thinking based on sound evidence and transparent analysis, the ability to recognize and move beyond a personal perspective, the ability to acknowledge and respect differing perspectives by developing an empathy with those holding them, an ability to accept ambiguity, and a recognition that local conditions and cultures can be as important as universal laws, especially when the intent is to change rather than just describe the world.”

The Cardiff statement (2017), in its turn, is confined to the urge to “facilitate entrepreneurship within SSH where possible”.

European white papers concerning SSH hold a similar position concerning employability of SSH scholars and their skills and competences, helping to adjust to the requirements of the contemporary economy. For example, in the paper *Prospering Wisely: How the Humanities and Social Sciences Enrich Our Lives*, published by the British Academy (2014), lists the skills SSH disciplines teach and points to the areas where these competences might be applied:

“More than three-quarters of the UK economy is now in services, which flourish by employing people with knowledge and skills from the humanities and social sciences – skills of critical analysis, problem solving, negotiation and communication, teaching and listening, and speaking other languages. These contributions go far beyond sectors classified as ‘services’, into companies in manufacturing or natural resources. An oil company, for example, needs the skills of geologists and engineers but, just as important to its ability to function successfully, it also needs skilled human capital and specific sector skills in a range of other areas. These include international relations, political economy, law, marketing, finance, management (particularly of risk), geography and logistics, the history, culture and languages of places where it produces and sells, and so on.”

However, the Norwegian Ministry of Education in the report *Humanities in Norway* (2017) warns that:

“Unless those who teach and carry out research in the humanities can serve as examples by demonstrating that they have something to contribute, private and public employers alike may have difficulty in appreciating the skills of humanities graduates. Just as importantly, the students themselves must be systematically informed about the relevance of their special expertise to working life and be able to describe it convincingly.”

These points, we briefly overviewed here provide the guidelines for further research. Apparently, SSH face an ambiguous situation. On one hand, it is hard to doubt that the potential positive impact of SSH is acknowledged not only in research and education policy, but in the business world too. On the other hand, however, the collaboration between SSH scholars and students and businesses is still insufficient. This is not only because of the reported hesitation of SSH people to accept their own capabilities and go forward, but also because of prevailing mistrust in the competences of SSH graduates from employers. This ambiguity becomes even clearer moving from the general level of declarations into the realm of the job market.

1.1.2 Job market trends

Western social thought as well as lay worldview is permeated by the distinction between the self and the work one does. Work is perceived as a means for achieving one’s life ends (e.g., salary defines one’s hobbies and leisure). This distinction is underpinned by hedonic premises; hence, it suggests that in order for work to be



considered a part of one's real life it should attain at least a minimal characteristic of pleasure. Workers engagement has become increasingly dependent on this aspect too. Studies by the Queens School of Business and by the Gallup Organization found that disengaged workers had 49% more accidents, 37% higher absenteeism, and 60% more errors and defects. In organizations with low employee engagement scores, they experienced 16% lower profitability, 18% lower productivity, 37% lower job growth. Businesses with highly engaged employees got two times more job applications, and the workforce is constantly moving to places where the hedonic aspect of work is apparently higher. Therefore, the turnover of employees within organizations nowadays has become the norm and executives are trying to adjust.

Another prevailing trend is the increase of responsibilities delegated to young employees as well as the impact of younger generations on the work culture. The concept of work / life balance, encouraging creativity and innovations at both the workplace and in one's personal life, is turning industries and businesses attention to ecological challenges (such as climate crisis) and sustainable growth.

Yet another important trend is the rapidly increasing automation of the workplace. It raises the question concerning the human role in a highly technologized world. As Robert C. Wolcott (2018) puts it in Harvard Business Review: "[T]his then raises a second, more vexing challenge: as the benefits of technology become more widely available — through reform or revolution — more of us will face the question, "When technology can do nearly anything, what should I do, and why?". This certainly seems to be the big coming challenge for employers. The upcoming trend is the demand for specialists who could shape the organizational cultures into purpose-driven systems by understanding what matters for people and how to engage them via communal structures of work. The spread of technology also points to the issues concerning the increase of data flows which inevitably follow it. However, in order to apply the data for particular purposes, one needs to make sense of it – i.e. to transform it into meaningful information.

These trends in general suggest the following future perspectives:

- executives will be chosen more by the way they can deal with complexity and people, not by specific knowledge. Broader education with niche practical experiences will be on high demand;
- work culture will be officially defined more by social aspects than a rigid system of tasks and performance. Employers will seek experts that can navigate well in uncertainty, adapt quickly to novelties and see principles behind the work. More of interdisciplinarity will be awaiting from the market;
- the interest in purpose driven activities will be sought amidst distancing between technical work and inner need for meaning. Value-driven organizations will grow and exceed ones that miss this change. Organizations will become more like organisms with a variety of perspectives needed. Therefore, the market for different job types will be available.

However, despite the growing global consensus that graduates from the SSH disciplines provide practical tools to create objects, services, innovations, cultures for the contemporary economy will be in high and in the foreseeable future increasing demand, we would like to point to some peculiarities of the dominant discourse. The aforementioned list of skills for thriving in the future economy as well as other bright perspectives for the SSH we mentioned here are a part of a particular discourse. This discourse emphasizes economic freedom and the free market, which assure constant economic growth, the increase in the standard of living and the development of innovations. It also suggests that the human thriving is unintelligible apart from the economic growth, and this growth is the sole reliable measurement of human development.



This somehow dominant discourse we might call Neoliberally-oriented (although we fully consider all the misconceptions, ambiguity and vagueness the term implies). The neoliberally-oriented discourse has its own demands; the SSH should supply them by providing the so-called 4Cs - creativity, critical thinking, communication, and collaboration – teaching these skills in contemporary HEI are crucially important (in fact, the 4Cs summarize the other, much longer and detailed lists) in the economy-based perspective on the world and its future. This perspective, however, excludes all other issues as less relevant or not worth considering. Yet the persisting poverty, hunger and inequality, shortages of healthcare and education, lack of gender equality in a considerable part of the world and other social, economic and environmental maladies suggest that the neoliberal approach is not capable of listing the problems of the contemporary world properly.

The United Nations put these issues under the Sustainable Development Goals (SDG). One of the aims of this project is an attempt to propose a different discourse about SSH, which would be more complex and describe the state of art as well as the value of SSH in Europe from the SDG perspective.

But before we turn to the findings of our research, first we have to deal with the question of the concept of the SSH. The traditional answer, which we arrived at during the end of 19th century, when it was discussed by the German philosophers such as Wilhelm Windelband and Wilhelm Dilthey, points to the dichotomy between the Natural sciences and the Cultural sciences (Geisteswissenschaften – sciences of the spirit as they were initially called). In the long run, however, the different European academic milieus structured their SSH fields differently and while speaking of the SSH the representatives of the different countries might mean different things.

1.2 What are the SSH?

Although there is a lack of intentional definition, which would specify necessary and sufficient conditions of a scholarly discipline to be a part of the SSH, various countries provide their extensional definitions, i.e. lists of the disciplines which form the sets of the SSH.

Perhaps the most complicated, or perhaps the most liberal, case is Cyprus. HEI in **Cyprus** consist of Public Universities, Private Universities, Public Institutions of Tertiary Education and Private Institutions of Tertiary Education. Although the Higher Education System in Cyprus is shaped by the European Higher Education Area, as outlined by the Bologna Process, there is no national legislation or definition of what fields Social Sciences and Humanities must constitute in Cyprus and the classification of the fields of tertiary institutions in Cyprus is not strict since each university categorizes its departments differently. However, the Social Sciences usually include: Sociology, Political Science, Law, European Studies, Psychology, and Journalism. Whereas Humanities are - Languages, Literature, Linguistics, Cultural Studies, Turkish Studies, Philosophy, and Gender Studies.

In the traditional **German** university system, Humanities (Geisteswissenschaften - sciences of mind) are a set of human sciences such as Philosophy, History, Philology, Musicology, Linguistics, Theatre studies, Literary studies, Media studies, and sometimes even Theology and Jurisprudence. Social sciences include the following disciplines: Anthropology, Demography, Ethnology and folklore, Childhood research, Communication science, Media science, Journalism, Art science, Cultural studies, Ecotrophology (household and nutritional science), Pedagogy, Political science, Psychology, Health sciences, Religious studies, Law, Social work, Social or human geography, Social history, Nursing Science, Social economy, Social psychology, Social philosophy, social ethics, sociology, Socioeconomics, Sports science, Speech science, Administrative science and Economics (business administration and economics).



In the **Greek** educational system, the scientific field of Social Sciences consists of the departments of Sociology, Social Anthropology, Social Policy, Psychology, Political Sciences, Social Work, History, Law, Public Administration and Economics. The field of Humanities consists of Philology, Archaeology, Language, Philosophy, Arts and Theology².

In **Italy**, the whole field of SSH is structured rather not according to the disciplines, but into the subfields, according to the research topics: SH1 Individuals, Institutions and Markets - Economics, finance and management; SH2 Institutions, Values, Beliefs and Behaviour - Sociology, social anthropology, political science, law, communication, social studies of science and technology; SH3 Environment, Space and Population Environmental studies, geography, demography, migration, regional and urban studies; SH4 The Human Mind and Its Complexity - Cognitive science, psychology, linguistics, education; SH5 Cultures and Cultural Production - Literature and philosophy, visual and performing arts, music, cultural and comparative studies; SH5 Cultures and Cultural Production - Literature and philosophy, visual and performing arts, music, cultural and comparative studies.

The **Lithuanian** list of disciplines of humanities consists of: Philosophy, Theology, Art History and Criticism, Philology, History and Archaeology, Ethnology. The disciplines of arts are also added to the Humanities pool (since there is also a possibility to get a doctoral degree in Arts): Music, Cinema and Theatre; Architecture, Visual arts, Design. The Social Sciences are: Law, Political Science, Management, Sociology, Psychology, Education science, Communication and Information Sciences.

In **Croatia**, Social sciences are: Economy, Education, Geography, Law, Political science, Public administration, Psychology, Social work, and Sociology. Humanities: Philosophy, History, Theology, Language (Linguistics), Literature, and Anthropology.

According to the **Portuguese** National Classification of Education and Training Areas, Humanities include: Religion and theology, Foreign literature and languages, National literature and mother language, History and archaeology, Philosophy and ethics. Social Sciences include: Social and behavioural sciences, Psychology, Sociology and other studies, Political science and citizenship, Economy³.

And finally, the classification used in **Slovenia** list the following disciplines of Social Sciences: Educational studies, Economics, Sociology, Administrative and organisational sciences, Law, Political science, Criminology and social work, Urbanism, Psychology, Sport, Ethnic studies, Architecture and Design, Information science and librarianship. Whereas Humanities are: Historiography, Archaeology, Anthropology, Ethnology, Linguistics, Culturology, Literary studies, Musicology, Art history, Philosophy, Theology, Geography.

² However, as in Cyprus, the classification at the universities is not strict and each university categorizes the departments in the schools differently e.g. at the National & Kapodistrian University of Athens, the School of Economics and Political Sciences consists of the Department of Communication and Mass Media, the Department of Economics, the Department of Sociology, the Department of Political Science and Public Administration, the Department of Turkish and Contemporary Asian Studies, the Department of Business Administration, Digital Arts and Cinema as well as, the Department of Port and Shipping Management.

³ However, often the existing statics for Portugal often refer to the macro group level, which in our case considers together Arts and Humanities (additionally including arts, fine arts, performative arts, audio-visual, design, crafts) and Social Sciences, Information and Journalism, Business Sciences and Law (additionally including information and journalism; librarianship, archiving and documentation; business sciences; trade; marketing and publicity; finance, banking and insurance; accounting and taxation; management; administrative work and law).



The variety of disciplines of SSH in European countries might seem to blur the idea of SSH and to threaten the very object of our research. However, a careful look into the national lists of the disciplines suggests that despite the national differences, the core disciplines in Social Sciences are:

- Economics
- Sociology
- Political Science
- Psychology
- Education Sciences

The Humanities usually consist of:

- Philosophy,
- History
- Language and literature studies
- Art studies
- Anthropology



2. Setting the scene: Integration policy and practices

2.1 Legislation and Policy

First of all, we note that there is virtually no official legislation concerning SSH, apart from the legislation concerning research and education in general. However, there are some policy proposals, white papers, national development strategies, governmental resolutions and similar documents discussing the role of the SSH in social, political, economic, and cultural lives of the respective countries (e.g. Croatia, Lithuania, Slovenia). On the other hand, legislation and policy statements, concerning the SDG abound (especially in Germany and Italy), yet there are virtually no attempts to bring the legislation on research and education and the legislation on the SDGs together.

On the level of SDG legislation, **Italy** seems to be one of the leading countries in Europe where strategies, policy, and analysis papers on this topic by governmental as well as non-governmental organizations and alliances are produced every year. One year after the adoption of the 2030 Agenda, The Italian Alliance for Sustainable Development (ASviS) produced a report that analysed the situation in Italy covering the economic, social, environmental and institutional objectives contained in it. A permanent committee on the implementation of the 2030 Agenda and the objectives of sustainable development was set up by the Italian parliament in 2016.

The important aspect is that the HEIs and the whole education system are deeply involved in this process. In 2016, the Italian University Network for Sustainable Development (RUS)⁴ was created. Its main goal is to spread the culture of sustainability, both within and outside the universities, sharing skills and experiences, with the aim of increasing the positive impact in terms of environmental, ethical, social and economic actions. Furthermore, RUS is working to incentivise the collaboration between universities and to provide cultural stimuli for the entire country's system by promoting new national politics for sustainability and sustainable growth. In December 2016, the Global Compact Network Italy (GCNI) started working on a new collection of business practices focusing on the implementation of strategies, policies and projects to support the achievement of 17 Sustainable Development Goals 2030. The first publication (Italian business 2016) offers conceptual tools, case studies and analysis to support business, civil society actors and political leaders ready to act, in processes of organizational transformation and business models adaptation.

The sustainable development education sector has witnessed significant progress since 2017. The Ministry of Education, Universities and scientific research have introduced efforts to involve schools of all levels and Italian Universities in the education for sustainable development. In 2019, following Greta Thunberg's visit to Italy, the Undersecretary of State wrote to university rectors recommending them to:

- introduce interdisciplinary courses and research projects linked to the 2030 Agenda. Given that the transition to a sustainable approach requires, above all, a cultural and conceptual revolution, students and researchers must be encouraged to think and act in a "systematic" way, based on an approach that involves different disciplines and that acknowledges the relationship between social and natural sciences;
- promote concrete actions by, for example, making every university, research center, academy, conservatoire and art college plastic free, in line with best national and international practices. Energy

⁴ Website: <https://sites.google.com/unive.it/rus/home>



- efficiency, clean energy production (by installing renewable energy plants) and the responsible use of water can play an equally important role in reminding everyone that the world of research and training is a sector where innovation is a part of everyday life;
- integrate sustainability principles into the way they run their institutions. In order to boost the impact of innovative practices, it can help to give sustainable development principles an integral role in the day-to-day and extraordinary management of research centers and universities (for example, by adopting sustainable procurement practices and introducing sustainable development considerations into universities' "third mission", focusing on engagement with local businesses and other institutions.

The universities replied to the recommendations by organizing the fifth edition of the Magnifici Incontri, a series of events organised by the Conference of Italian University Rectors (CRUI). The meeting involved representatives from 65 universities, who discussed issues relating to sustainable development, and signed the "Universities' Sustainability Manifesto". The Manifesto acknowledged the key role played by universities in implementation of the SDGs and indicated the concrete actions to be taken in the near future in various areas, adding a series of professional roles linked to the principle of sustainability to the training courses on offer. (ASVIS, 2019)

In addition, the University Network for Sustainable Development (RUS) working group was created with the aim to promote the organisation of courses on the 2030 Agenda aimed at young university students. Moreover, the Italian version of the manual, "Education for Sustainable Development Goals", produced by the Commissione Nazionale Italiana per l'UNESCO (Italian National Commission for UNESCO or CNIU) and its Comitato Nazionale per l'Educazione alla Sostenibilità (National Committee for Sustainability Education or CNES), the Italian Alliance for Sustainable Development (ASviS), the UNESCO Centre, and the University of Turin, was published. The aim of the document is to educate about sustainability, and to foster awareness of the 2030 Agenda and the 17 Sustainable Development Goals. The document contains learning objectives, themes and activities for each SDG and describes its implementation at various levels, including course design and the various national educational strategies. (ASVIS, 2018)

Having strong traditions of SSH, relevant **German** legislation now focuses on the issues concerning the SDGs. When the United Nations adopted the 2030 Agenda with its SDGs in 2015, Germany had already had a National Sustainable Development Strategy (GSDS) for 13 years. This strategy has been so far followed (and surely amended, according to the new needs and challenges) and monitored by the State Secretaries' Committee (SSC) - the central steering institution of the Sustainable Development Strategy. Germany's whole-of-government approach also requires all ministries to participate actively in the Sustainable Development Working Group (UAL-AG) which prepares the meetings of the SSC and helps to implement and further develop the strategy.

Germany also encourages cooperation between politicians and scientists. The newly established Science Platform Sustainability 2030 has also started working and contributing to SDGs concepts being implemented and applicable to various contributors when it comes to improvement of sustainable development conditions. It was conceived by the three German ministries (BMU, BMZ and BMBF) in 2016 and officially launched in May 2017. The platform is intended to act as an interface between academia, society, and policy in order to support the implementation of the GSDS and the SDGs with scientific expertise. Firstly, its task is to collate the latest scientific evidence and deploy it in a targeted manner in GSDS implementation processes. Secondly, it addresses any issues raised in practice and feeds them back into the scientific discourse. In order to ensure that the platform has a broad and independent base, ownership of the platform was transferred to three



scientific organisations: The Institute for Advanced Sustainability Studies in Potsdam (IASS), the Sustainable Development Solutions Network (SDSN) Germany and German Committee Future Earth.

Germany also already disposes of a broad spectrum of initiatives and good practices in the area of Education for Sustainable Development. Innovative and successful activities have been taking place in all educational areas, and throughout the entire country. The intensity of such efforts can vary from activity to activity, however, and not all activities have been spread and disseminated to the necessary degree. Over the coming years, it will be necessary to refine such activities, to emphasise their interrelationships and to integrate them into the entire educational sector. In the process, such efforts must reach all types of educational institutions – from schools, universities and continuing education facilities – and be spread throughout the broad spectrum of informal learning. Sustainability must be established as a subject for lifelong learning.

Other countries disperse the focus of the relevant legislation between SDGs and the research and education (and in rare cases - SSH in particular). The latter documents encompass some important as well as interesting issues.

The **Greek** government through the law 4440/2016 (Article 43) has set a central government structure responsible for the coordination and monitoring of the implementation of the UN Sustainable Development Goals at a national level.

On the level of legislation concerning education there is nothing particularly relevant to the field of SSH. The legislation frameworks refer mostly to the operation of universities, modifications at the names of the departments and to the professional rights of graduates.

However, there are important developments: the introduction in 2019 of exams in Sociology to replace Latin in the Pan-Hellenic exams (at the end of secondary education) was considered as a strong support for the entire field of SSH in Greece. Consequently, the demand of Social sciences graduates as school teachers increased. The professional rights of SSH graduates are defined by the law too. Presidential Decree no. 159/2009 on the professional rights of the graduates from the departments of Sociology, states that based on the general and specialized knowledge students acquired during their studies, they can be employed both as freelancers and as employees with any work relationship in the public and the private sector, such as in education, in public services, ministries, social services, in non-governmental organisations, in research and others. To apply for job positions in the public sector, SSH graduates are included in the educational branch of higher education “Social Sciences” (ΠΕ78) qualified by the study titles from the departments of Sociology, Social Anthropology, Social Policy, Political Science, International and European Studies and others.

The Sustainable Development Strategy of the Republic of **Croatia** was adopted in 2009 as the key document serving as a guideline for economic and social development as well as environmental protection for the sustainable development of the country. Subsequently, Croatia created platforms for monitoring the success of the implementation of sustainable development goals, the dissemination of the results and the status of realising the sustainable development key indicators to the wider public.

The SDG legislation, however, bears no direct connection to the issues concerning SSH. Yet they appear in other official policy papers, such as *New Colours of Knowledge - Strategy for Education, Science and Technology* (2017) published by the Ministry of Science and Education, which in rather general terms emphasizes the importance of education in general, and the SSH in particular for life in a contemporary highly technological society. It states: “Institutes of social sciences and humanities fulfil their role by conducting research on the social changes that are relevant for the country’s future and socially relevant forthcoming



topics, by preparing scientific backgrounds for social reforms and by presenting critical reviews of policies and legal solutions.” (*New Colours of Knowledge - Strategy for Education, Science and Technology 2017:234*). The presence of SSH in the process of secondary education is regulated by *the National Document of the SSH Area of The Curriculum*, published in late 2017. It is a joint curriculum for SSH. “The SSH are taught throughout all educational cycles. It is realized within compulsory and elective subjects, interdisciplinary topics, additional and extracurricular activities and projects. In the first and partly in the second cycle, competencies are acquired within the subjects Nature and Society and Religious Instruction, and at the end of the second and in the third cycle within the subjects History, Geography and Religious Instruction. In the fourth and fifth cycles, learning and teaching in the field of social sciences and humanities continues in the subjects History, Geography, Philosophy, Sociology, Politics and Economics, Psychology, Logic, Religious Instruction and Ethics.” (*National Document of the SSH Area of The Curriculum 2017: 3*).

Lithuanian research and education legislation do not pay much attention to neither the SDGs, nor to SSH. Furthermore, they do not pay much attention to the skills and competences of the graduates neither in general, nor concerning perspectives of social, political and economic development. *The Lithuanian Law on Research and Education* does not focus, or even mention, any links that might exist between education and future employability. *The National Education Strategy 2013-2022* as well as *The White Paper on Science and Technology in Lithuania*, published in 2001, discusses these issues vaguely, although pointing to the necessity of collaboration of HEIs and businesses.

On the level of policy proposals and practices there are, however, few attempts to establish the value of SSH for contemporary society: *Strategy for Development of Humanities and Social Sciences in Lithuania* (2004; commissioned by the Ministry of Education and Research), *Lithuanian National integrated program on SSH* (2012; commissioned by the Ministry of Education and Research too), and the *Red List of Lithuanian Humanities* (Adomėnas et al. 2019), authored by the prominent Lithuanian scholars in humanities. All three documents, however, emphasise the value of SSH for the economy, the education of the skills and competences, which might be monetarised. Yet the competences are described in general and vague terms and lack detailed discussion.

Notably, there is a new positive trend of involving the cultural sector and sustainability (SDG) in Lithuania while developing national strategies. The *National Comprehensive Plan of the Republic of Lithuania 2050* included the culture sector for the first time in their strategy as well as making a considerable attempt to align its strategy with the SDGs.

In **Portugal**, there is not specific legislation for SSH too. The existing legislation frameworks refer mostly to the operation of universities, degrees’ attribution and certification.

Concerning the SDGs, the HE community has been fully accepted and has been integrating in many ways into the 2030 agenda and the SDGs problematic, being a reference to its overall campus management; implementing specific students’ projects or even in their research topics. As a result, some Portuguese universities have created the Sustainable Campus Network (Rede Campus Sustentável) which advocates for more sustainable management of campuses, in their multiple dimensions, such as efficiency in the use of resources, waste management, mobility, training, research, interaction with the surrounding communities and sustainability management. However, these infrastructural innovations have no direct impact on the changes in curricula.

The legislation in **Cyprus** concerning education covers primary, secondary, and tertiary education and offers a general overview of the rules, rights and obligations of education and institutions.



Some progress regarding the legislation concerning the SDGs has been made since Cyprus' membership in the European Union (e.g. Cyprus has established a National Strategy for Adaptation to Climate Change in order to implement the Paris Agreement on Climate Change. Furthermore, national policies on sustainable development are currently guided by "Europe 2020", the European Union's strategy for the years 2010 - 2020, with the aim of smart, sustainable, and inclusive growth in each Member State).

In **Slovenia**, there are several relevant strategic documents related to SDG, the role of SSH in attaining these goals and the role of HE. However, those relevant interconnections are not always explicitly highlighted. Many of these strategic documents are not well integrated and mostly offer particularistic and atomistic approaches to the focus domains. Among these documents there are *Slovenian Development Strategy 2030* in which the role and importance of HE in and for society is emphasized in a general way, with no special mention of SSH, but the SDGs are mentioned directly as recognized and included in the 2030 Agenda; *Resolution on the National Higher Education Program 2011-2020* in which the role and importance of HE in and for society is emphasized generically, with no special attention of SSH too; *Slovenian Strategy for strengthening the European Research Area 2016-2020 (ERA)* which emphasizes the necessity to integrate the SSH with the other sciences, in order to address societal challenges more effectively.

As we see from this section, politicians acknowledge the importance of the academia for the dealing with SDGs. However, on the level of implementation of the SDGs in various European countries the collaboration between the governments and the HEIs is not sufficient (although there are some examples of activists sparking or increasing this collaboration, e.g. the aftermath of Greta Thunberg's visit to Italy).

However, one might ask if HEIs, and their SSH departments in particular, have sufficient resources to participate in the implementation of the SDGs nationwide and beyond? Further we will provide a statistical overview of the situation of the SSH.

2.2 Statistics

Intellectual capital has become the most valuable asset to respond to economic, social and environmental transformations. The development and transfer of knowledge is the primary mission of higher education, and the education at college or university plays a central role in helping people and societies to cope with and respond to these significant changes. The employment rate of adults with a university degree, in OECD countries, is 9% higher compared to those with upper secondary education and they earn, on average 57% more. The enrolment of students to university or college has increased significantly over the past decades and will continue to grow (OECD, 2019).

The question, however, is what disciplines these students choose to study. In other words, it is not evident that they choose SSH instead of other subjects. Our research suggests that SSH are doing rather well in this academic competition. Despite the varying numbers in the countries and the decrease of SSH students in some of them (e.g. Italy), SSH students mostly outnumber their STEM or biomedical colleagues.

The **Lithuanian** Department of Statistics provides detailed information concerning the number of students. According to their report, most young Lithuanians who graduated from school continued their education in the same year (69%): 37% - at universities, 23 % - in colleges, 9 percent - at vocational training institutions. This means that 40% of young people (20-24 y. o.) study in HEIs. In order to satisfy this need, there are currently 43



HEIs in the country - 21 universities and 22 colleges. At the beginning of the 2017–2018 school year, 117.7 thousand students were enrolled in higher education institutions (82.3 thousand at universities and 35.4 thousand at colleges).

At the beginning of the 2017-2018 academic year, more than half (52.7 thousand, or 64%) of all university students studied at undergraduate level, while master's qualification degree reached 25.2 thousand, doctoral degree - 2.4 thousand, also 1.8 thousand medicine students studied in residency⁵.

The education management information system (the data is for 2016-2017) adds the division of students: fields of STEM had the total of 16,384 students, the SSH – 32 331. On the MA / MSc level the gap between the two remains rather unchanged with 4897 in STEM and 10,945 in SSH. These students create jobs for 14,339 pedagogical personnel in higher education institutions (Education management information system, 2018-2019).

In **Greece**, a vast variety of data from multiple resources such as OECD, Hellenic Statistical Authority (ELSTAT) and Hellenic Quality Assurance and Accreditation Agency (HQA) are also very informative on the situation of tertiary education as well as on the labour market and the rates of youth unemployment. Greece has the fourth highest tertiary enrolment rate among OECD countries and over the last decade has increased the tertiary education attainment. Greece has one of the highest rates of student population in analogy with its population (6,83%) among EU countries higher than the EU average (3,87%). This is because in Greece there is a high number of enrolled students that are inactive and have not graduated. Thus, the graduation rates are the lowest in Greece (9,41%), far lower than the EU average (24,1%).

Particularly in the field of SSH and according to OECD data, Greece holds the second highest position between the EU countries in tertiary graduates in Social Sciences (Tertiary graduates by field 2019). The field of Social Sciences was the one that Greece had the highest rate compared to the European countries while the other scientific fields were education, arts, engineering, health and business. The scientific fields that Greek students seem to prefer to study according to the Annual Report on the Quality of Higher Education 2018 (ADIP: 54), are Mechanics in first place (21,84%), secondly Business and Law (20,44%), in third place come Arts and Humanities (13,8%) and in the fourth Social Sciences and Communication Media (12,67%).

Concerning the teaching staff in tertiary education, the report shows that Greece has the highest ratio of students per teacher, 38,7 students per teacher, while the average of the E.U. is 15,4 students per teacher. Another first place for Greece concerns the gender of the teaching staff since the country has the highest rate of male teachers (65,71%) succeeding the EU average (57,22%).

Concerning the labour market, statistics demonstrate that Greece has relatively significant problems. Although employment rates increase with educational attainment, they are lower than the OECD average and adults with BSc or MSc degrees have the lowest employment rates across all OECD countries. The percentage of employment in 25-64-year olds who have tertiary education is the lowest between EU countries, at 74,1% while the average of OECD is 85,4%. Due to economic crisis, Greece is the country with the highest loss in employment rate of tertiary education graduates in ages 25-34-year olds, which fell from 80% in 2007 to 68% in 2017 (ADIP 2018) At the same time, the unemployment rate of youth labour aged from 15-24 years old is the highest in Europe, at 35,2% while the OECD average is at 11,2%.

⁵ Additionally, according to Eurostat, in 2016 7900 students attended higher education institutions in European countries. Most Lithuanians studied in the United Kingdom (49.7%), Denmark (18.3%), and Poland (11.2%).



The **Croatian** Bureau of Statistics also reports that the social sciences are leading with 43.1% of all students enrolled. They are followed by the field of technical sciences with a share of 26%, then the field of biomedicine and health with 11.2%, then the field of humanities with 7.1%, the field of natural sciences 4.1%, the field of arts with 1.9% and interdisciplinary fields, the sciences in which 1.5% of the total number of students are enrolled. In the social sciences, most students are law students and economics students. If we add together social and humanistic science, we sum to 50,2 percent. More than half of the student population study SSH.

In **Portugal**, there are 30 public HEIs (15 universities and 15 polytechnics) and 41 private (26 universities and 15 polytechnics) (private HEIs include cooperatives as well). Portuguese numbers are perhaps the most optimistic: the number of students in HE has been rising steadily from 2015 to 2019 and the same trend applies to the number of students in the SSH areas, in this case, "Arts and Humanities" and "Social Sciences, Commerce and Law" clusters. Together, these two areas registered 166.883 students of the total 385.247 students (43%) enrolled in higher education, in 2019, thus accounting for the scientific area with more students enrolled from 2015 to 2019. The number of graduates in Portugal also confirms the predominance of SSH as the most common choice of study for higher education students. Thus, in 2016, Portugal counted around 22.000 graduates in "Social Sciences, Journalism and Information; Business, administration and Law" fields as opposed to 15.500 in "Engineering" and only 5.700 in "Natural Sciences, Maths and Statistics; Information and Communication Technologies

In **Italy**, on the contrary, the situation seems rather less optimistic. The achievement of a tertiary education qualification is increasing for younger generations; however, it remains relatively low. In 2018, the share of 25-64-year olds with tertiary education was 19% compared to 28% among 25-34-year olds. In the last 10 years, SSH degree courses have lost over 23,000 students (-16%). After hitting the lowest peak in the academic year 2015/2016, they have started growing again in the last two years, recovering over 5,000 students and reaching the highest value of the last five years. (OECD, 2019). The data of 2018 shows that the employment rate of adults with tertiary education in the field of humanities, social sciences and the information sector is relatively low (77%), although these remain among the most popular degrees.

The first level courses are distributed in sixteen disciplinary areas, with a higher density in the economic-statistical (15.0%), engineering (13.0%), political-social (12.3%), and health professions (11, 9%). Single-cycle master's courses, however, enduring at least five years, are concentrated in a few subject areas: legal (37.0%), medicine and dentistry (28.8%), pharmaceutical (13.8%), architecture (9.0%), primary education sciences (8.8%) and veterinary medicine (2.5%). Graduates who have already obtained at least a first-level degree have access to the two-year master's courses. Two-year master's degrees are distributed in sixteen disciplinary fields, concentrating mainly on four: economic-statistical (18.8%), engineering (18.6%), literary (10.4%), and political-social (10.2%). Furthermore, out of the total number of graduates in 2018, 51.6% belong to Social Sciences and Humanities (scientific group 6.9%, statistical economic group 27.5%, education group 9.4%, literary group 15.5%, linguistic group 13.2%, social-political group 19.5%, psychological group 8%). (Almalaurea, 2019)

As regards the sample made up of teachers in the Italian university context, the teaching and research staff includes professors, fixed-term researchers, holders of research grants, and contract teachers. The contract teaching staff includes all professors who have been assigned teaching assignments - even free of charge - for a necessary, related, or supplementary training activities not already covered by tenured teaching staff. In Italy, there are 96.126 teachers and researchers, including 38.379 women (MIUR) Specifically, 84.111 are the teachers present in state universities.



However, there is more troublesome data in Italy: since the peak reached in 2008, the total number of university teachers has recorded an uninterrupted drop. In 2017, the level reached was 14.9% lower than the historical maximum. This decrease has raised the number of students per teacher (in 2017 equal to 31), which today is among the highest in the OECD area. Besides, despite the temporary decrease in the average age of associate professors in 2013-2015, the average age of teachers rises: only 0.2% of the ordinary are under the age of 40, and 50% are over 60 (ANVUR, 2018).

Slovenia is another country that produces some worrying data. In the academic year 2018/19, 75,991 students were enrolled in tertiary education, 0.7% fewer than in the previous academic year (76,534) and 34.2% fewer than ten years ago (115,445). The number of tertiary education students dropped for the ninth year in a row. In the last nine years, the number of tertiary education students decreased by almost 39,000 or on average 4,320 students per academic year. For the last few years, the number of students in tertiary education has been decreasing significantly.

In the academic year 2018/19, 10,566 students were enrolled in higher vocational education and 65,425 in higher education. Compared to the previous academic year, the number of enrolled students increased the most in education leading to doctorate (third Bologna cycle) (from 2824 to 3089 or by 9.4%) and in higher vocational education (from 10353 to 10566 or by 2.1%). On the other hand, the number of students decreased the most in Masters education (second Bologna cycle) – uniform Masters (from 4,687 to 4,514 or by 3.7%). Moreover, 45,863 students were enrolled in study programmes to obtain their first higher education diploma, i.e. professional and academic higher education (both first Bologna cycle) and Masters education (second Bologna cycle) – uniform Masters, which is 1.4% fewer than in the previous academic year (46,527).

Even though the number of tertiary education students in the academic year 2018/19 decreased, the number of newcomers in the higher education increased. In the academic year 2018/19, 15,156 students were enrolled for the first time in the first year of undergraduate studies, which is 4.1% more than in the previous academic year (14 560).

At the end of this section, we underline some key observations drawn from the statistics. Despite the fact that the SSH disciplines prevail in the HEIs of project partner countries, there are a couple of important issues to which the statistics point.

First, there are noticeable fluctuations in the numbers of students, depending on the demographic changes. Some countries (e.g. Lithuania) are facing the overall decline of population, which definitely leads to the decline of students.

This, however, is not the sole problem, for as Slovenian statistics show, the general decrease of students is somehow inversely proportional to the number of freshmen at the HEIs increasing. This might mean that the satisfaction of the students with their studies decrease in the process. But does that mean that their studies do not meet their expectations and needs? Or do they finally perceive that the SSH graduates are not welcome in the labour market and their career perspectives are rather limited?

In the following section we turn to these issues.



2.3 Identifying needs of students and teachers and job market trends

A discouraging factor for the SSH students might be a widespread belief that the SSH graduates are facing a threat of unemployment more often than STEM graduates. But is the labour market really so adverse towards the SSH graduates?

The forecasts for some countries (e.g. Greece, Cyprus) suggest the increase in general employability, including the SSH graduates. The particular research into the skills and competences required by the labour market point to the high demand of the skills provided first and foremost by the SSH disciplines. However, this research is usually conducted by public or governmental labour agencies or their private counterparts. The problem is that these attitudes find their way into academia. Croatian research shows that neither teachers, nor students generally speaking, are rather not inclined to see the processes of education as a creation of the general transferable skills adaptable to the changing work environment. Though the latter claims are based on Croatian data only, it might be probable that many students / teachers across Europe would subscribe to Croatian data and conclusions.

In general, the forecast for the SSH students in the labour market in Cyprus is rather optimistic. The recent study carried out by the Cypriot Human Resource Development Authority (HRDA) foresees an increase in the employment prospects from 2017 until 2027 in the Legal, Social and Cultural Professionals and sectors that include services, health and social care, public administration, education and counselling services (Αρχή Ανάπτυξης Ανθρώπινου Δυναμικού Κύπρου, 2017). Particularly, over the next 10 years until 2027, the overall employment rate in Cyprus is estimated to be increased up to 21% (almost 78,000 jobs); hence recovering from the economic instability created due to the previous economic crisis (ibid). The total employment similarly is expected to also present an upwards trend of around 449,000 in 2027 (in comparison to the numbers 398,000 in 2011 and 358,000 in 2015). It was also estimated that the labour market will return to its pre-crisis level no earlier than 2021. Lastly, the average employment growth rate is supposed to be at 1.9% until 2027, peaking at 2.3% in 2017 and slowly decreasing to a growth rate of 1.7% until 2027 (ibid).

The case study "Information on Graduates of the Sociology Degree" (2018) suggests the optimistic employability prospects for sociology graduates. They have various options depending on their engagement with social research to several positions in the public sector, at non-governmental organisations and at corporations in Cyprus. More specifically, the academic skills that Sociology students acquire could be considered valuable not only in fields such as social research or the production and analysis of social data, but also social policy planning and evaluation, the implementation of policies related to the welfare state and social rights (e.g. health, education, insurance, housing, gender equality sectors), social development programme advising, social intervention and management of social problems in various areas (e.g. unemployment, violence, etc), the sectors of communication, information, and public relations, etc.

In 2012 and 2013, feedback from graduates of 2006 and 2007 respectively was collected by the Department of Social and Political Sciences of the University of Cyprus regarding their employment status. Based on the data collected so far, it has been concluded that the majority of Social and Political Sciences graduates continue their postgraduate studies either in Cyprus or abroad and secure employment within six months of graduating (ibid). Moreover, it has been seen that within 5 years of their graduation, the majority of students were employed in the public and private sector, semi- and non- governmental organisation in Cyprus, in positions that were more or less related to their degrees (and more prominently at the Social Welfare Services, Social Care Centres, Government Ministries, Media Organisations, CYTA and Local Administration Authorities) (ibid). There are some remaining obstacles, especially with the recognition of social science credentials by the



Cypriot labour market as well as the graduates' transition from university and integration into the labour market due to economic (and other individual) factors.

Yet according to Hellenic Sociological Association, due to the economic downturn the prospects of sociology graduates in Greece are limited because there is no awareness and acceptance of the potential of science for the effective resolution of a variety of problems and malfunctions in both the public and private sectors. The Association argues that significant institutional changes should be implemented in the educational system, in order to be more sufficient and sustainable both for the students and the teachers. The students need to be more qualified with better skills and competences in order to be more competitive in the job market. The job market on the other hand, as well as the work policies of the state need to provide more job positions and opportunities to the SSH graduates. The teaching staff, as well, needs to be supported by the state and encouraged to participate in tertiary education and academia. The state needs to focus on reducing the gender gap that exists in Greek teaching staff by demonstrating strategies towards the inclusion of women teachers.

In the five-year forecast period 2019-2023, the needs of graduates from the entire Italian national economic system should be between 958,800 and 1,013,400 units. The largest share of requirements (23% of the total) will involve graduates from the economic and social area, not much lower will be the need for graduates in the humanities area, for which a number of employees between 208,000 and 221,000 is expected, for a share of 22% (UnionCamere, 2019). According to the Excelsior Information System, created by UnionCamere in collaboration with Anpal, in 2018 private companies planned to include over 10 thousand graduates from their Literary, philosophical, historical and artistic group within their structures (2% of all graduates marketed in Italy). Most humanities graduates are sought after by companies operating in the fields of education, private training services, cultural, Media and communication services (Osservatorio Talents Venture, 2019).

According to a research⁶ by the Osservatorio Talents Venture, soft skills such as managing interpersonal relationships, the ability to approach a problem by "thinking outside the box" and looking for alternative and creative solutions and effectively promoting own initiatives could be well developed in those students who attend a degree course in humanities such as anthropology. (Osservatorio Talents Venture, 2019). This would suggest that humanities degrees are conducive to entering the job market. However, due the raise of new challenges related to globalization, climate change and the expansion of technologies, it is reasonable to affirm that humanistic skills alone are not enough but should be combined with other skills, perhaps scientific, technical, managerial, engineering etc.

The problem with the Italian professional landscape does not lie in the lack of humanities graduates in general, but in graduates with different backgrounds who have not developed humanistic skills that can give even further value to their professional preparation and train them to deal and cope with new challenges (Osservatorio Talents Venture, 2019).

Although in **Lithuania** it is widely considered that the job market is in high demand for IT specialists or qualified blue-collar workers (construction workers, bricklayers, carpenters, etc.) the Employment Services Under the Ministry of Social Security and Labour of the Republic of Lithuania reports⁷ that in the first quarter of 2020 the most demanded professionals in 9 out of 10 Lithuanian counties were advertisement-marketing managers. The top 10 lists of white-collar jobs in demand also include (the demand varies depending on the county): social workers, specialists in professional orientation, HR managers.

⁶ Website: <https://www.talentsventure.com/wp-content/uploads/2019/09/La-rinascita-delle-lauree-umanistiche.pdf>

⁷ Website: <https://uzt.lt/darbo-rinka/paklausios-profesijos/>



Moreover, the report on Human Resources by The Lithuanian Government Strategic Analysis Centre (STRATA 2019) suggests that in job advertisements employers value the qualities and skills of prospective employees, which first and foremost are introduced by the SSH disciplines:

Qualities – responsibility, initiative, communicability, thoroughness, creativity, orientation towards result, independence, and honesty.

Skills – communication, teamwork, negotiation skills, computer skills (including particular programs), knowledge of foreign languages (particularly, English and Russian, other languages being rather an advantage, not a requirement).

These trends are also confirmed by the **Portuguese** experience. The contemporary business climate puts pressure on companies to become increasingly flexible, innovative, and creative and to gain a foothold in the market. Therefore, many studies point to a new set of 21st century skills that are considered essential to people's ability to function and actively participate in today's world (Silvério, 2018). However, they emphasize the importance of not only particularly applicable competences, but also of the competences of more general sort. Any restructuring of the labour market and training, they argue, must include these three types of capabilities to have a meaningful result - critical thinking, flexibility, the ability to adapt to change and have an ethical commitment to society (Silvério, 2018).

Adaptability, rather than specific skills, is the new demand, suggests the other research by Hays Portugal (2019). It also adds that the top-5 skills desired by employers include: ability to work in a team (56%); technical skills (55%); ethics / values (54%); proactivity (53%); and work capacity (48%).

Despite the impression that these skills are provided by the studies of SSH, rather than other fields, the data on the employment (albeit from 2010) shows that Social Sciences graduates are the second group with a higher rate of unemployment, rounding 12%. This rate is only surpassed by the group of Business Sciences graduates (with percentages varying from 14,4% to 19,3%). Although not so high, Humanities graduates register unemployment percentages ranging from 4.8% to 6.7%. Disciplines related to health, environment, Natural sciences; Physics; Mathematics; Computer Sciences are the ones that perform better in terms of employment, registering lower percentages throughout the four-year span.

Does the apparent low employability have anything to do with the peculiarities of SSH education? A possible answer is suggested by **Croatian** researchers. In 2015, the Croatian Agency for Science and Higher Education published the research results of *The Survey on student satisfaction with study programs and readiness for the labour market* where, among other topics, students' satisfaction with study programs in Croatia was researched (Mrnjavec; Pivac 2015). The students complained to the researchers that study programs are primarily focused on the acquisition and memorization of the content of a particular profession, and much less on the development of independent research skills, selection skills, and skills for rapid acquisition of necessary new knowledge. Students also feel that studies do not contribute to the development of knowledge in other fields and disciplines, analytical thinking, and the ability to negotiate effectively (Mrnjavec; Pivac 2015). Less than a third of students believe that studies show a certain level of flexibility and openness to new knowledge and opportunities. This indicates a conservative approach in study programs. In addition, research results show that students are not prepared for managerial and entrepreneurial positions (Mrnjavec; Pivac 2015). Students claim that they do not have an opportunity to develop the competencies of entrepreneurship, initiative and risk-taking, and responsibility during studying. Students also feel that study programs do not provide them with the development of competencies necessary for the ability to articulate and express their own views. Respondents agree in the relatively low assessment of the program's contribution to the



development of the ability to create new ideas and opportunities. Unfortunately, according to the survey, study programs are based primarily on the adoption of a given set of knowledge and skills, and students are insufficiently encouraged to question their own and others' ideas, which should be a key part of future creative employment of increased independence and responsibility (Mrnjavec; Pivac 2015).

Potočnik (2014), however, turns the tables and states that students in Croatia are mostly focused on graduating and finding a job, mostly in their own profession. Most students want to work in public companies. It is also interesting to find that the second most accepted facilitating factor in employment in the perception of respondents is "good demand for the profession" (40% of respondents), and almost a quarter of respondents consider it "work in the profession" during their studies (Potočnik, 2014). The most common aspiration, represented by 40% of respondents, is that they want to be experts in their field, and slightly lower are those whose goal is only employment or obtaining a degree. Significantly lower on the scale of desirable professional goals is a well-paid job, because less than a fifth of respondents point to it as a goal. Among the surveyed social science students, less than a dozen surveyed students would start their own business, and humanities students are underrepresented (Ilišin and Potočnik 2008). Two-fifths of social sciences and humanities students believe that the poor position of the profession and high unemployment in the profession are an obstacle to achieving goals (Ilišin and Potočnik 2008).

Another survey was conducted in 2014 on the Attitudes of University Teachers in Croatia on the Competences of the Academic Profession. A total of 1,130 respondents completed valid questionnaires, which makes up between 10 and 13% of the total population of university teachers employed at Croatian universities. Based on the presented results, it can be seen that academic staff in Croatia, in addition to general (academic) competencies, consider traditional academic competencies - teaching and scientific research competencies - to be the most important for successfully performing the role of a university teacher at the beginning of a scientific-teaching career (Turk and Ledić, 2014:93). Given the results, it is clear that teachers list as the least important competencies, for example, knowledge in the field of intellectual property, then the competencies needed for management in higher education and specific teaching competencies (e.g. adapting the teaching process for students with special needs). University teachers also consider that the competencies needed to contribute to the well-being of wider society (involvement in public debates of general social importance from a professional perspective and cooperation with the civil sector) are also irrelevant (Turk and Ledić, 2014: 94). Previous research has also shown that university teachers show very little interest in the competencies needed to understand the concept of civic advocacy, as well as a reluctance to include these concepts in teaching and research (Ćulum, 2010; 2013; Ćulum and Ledić, 2011). Respondents also rated the importance of competencies that contribute to society and the community the lowest (e.g. encouraging students to get involved in volunteer programs, cooperating with civil society) (Turk and Ledić, 2014:100).

Thus, this section argues that the skills and competences provided by the SSH are in high demand by the contemporary labour market and would still be in the foreseeable future.

On the other hand, our research suggests too theoretical / expository driven education, prevailing in SSH leads to the situation in which students are not introduced to practical methods, research projects and other collaborative learning methods which would allow them to better develop key skills and competences that the current job market looks for.



3. The state of art: SSH Skills Ecosystem in relation to SDGs related jobs

After the overview of the SSH situation in the countries participating in our project, we will turn to the relationship between the SSH disciplines / education and the SDGs. In this chapter we aim at bringing them together.

One of the key prerequisites for achieving desired SDGs awareness among all participants is to create the network of all relevant parties and make sure that collaboration is in place as well as clear determination in bridging the gap between theory and practice. On the one hand, this network would comprise of teachers and scholars having an abundance of theoretical knowledge and on the other hand, business people who manage enterprises and they would have plenty of practical knowledge as to what's required in terms of SDGs when conducting regular business operations. Apart from these 2 groups, the network would have other stakeholders such as students, practitioners, NGOs, etc.

As previous sections suggested, there is no doubt in the relevance and even importance of the SDGs for the HEIs. It is emphasized by activists as well as policy makers.

Despite the practical awareness of the SDGs in HEIs (particularly visible in the idea of the sustainable campus), their presence in the curricula is insufficient. Are there any university programs providing the degree in the area of studies directly connected to the SDGs? And if yes – how may? The answer surely depends on the country. Yet the scope of our research gives no basis for deep pessimism. The picture varies from country to country - from none (e.g. Cyprus) or three programs (e.g. Lithuania) to many (Germany, Italy).

The following overview of the countries gives detailed information of the situation in each country. Here we will focus on profile of target groups: amount / characteristics of SSH students and teachers at national level, amount / characteristics of SMEs and NGOs active on SDGs themes; needs and opportunities for target groups in the education system and job market; HEI institutional structure (general and if there is, specific to SDGs integration into the curriculars), post-graduation qualification system and its requirements; formal and informal. Collection of assessment tools; system of competences / specific skills assessment.

In 2018, **Cyprus**, along with Romania and Bulgaria, was ranked 28th out of the 28 EU Member States in relation to the assessment of the implementation of the Sustainable Development Goals, with a score of 55 out of 100 ("2019 Europe Sustainable Development Report - Towards a strategy for achieving the Sustainable Development Goals in the European Union", 2019).

As already mentioned, each HEI in Cyprus collects their own data regarding their number of SSH students since there is not a unified statistical survey provided online by the Government of Cyprus for both public and private universities and non-university institutions to monitor the number of students in Social Sciences and Humanities and their employability potential. Nonetheless, the percentage of graduates from tertiary education graduating from Humanities and Arts programmes, for both sexes in Cyprus was reported at 8.5867% in 2016, according to the World Bank collection of development indicators, compiled from officially recognized sources ("Cyprus - Percentage Of Graduates From Tertiary Education Graduating From Humanities And Arts Programmes", 2020). In arts and humanities, the share of graduates at tertiary level was below 8% in Cyprus, whereas they recorded a high number of graduates in the field of education (23%) in 2017. Moreover, from the research conducted, there is no direct / visible connection between SSH and SDGs (except indirectly



through the course of their curriculum) and no online data is available on whether HEIs in Cyprus integrate into their curricula the SDGs. Hence, there is an urgent need for a clear connection between SSH and the SDGs with the development of training/educational material integrated into the SSH curriculum. Students are receiving knowledge on the topics which concern the SDGs because of the nature of their course and, in a way, they develop competences that are linked with sustainability; however, they lack the practical connection between theory and industry and a knowledge on the UN 2030 Agenda. It is important then for HEIs in Cyprus, to offer specific courses on sustainable education and explicitly focus, through their teaching methods, on how SSH can contribute to sustainable innovation. Lastly, SSH students should be given the opportunity to enhance their sustainable competencies related with social, economic and environmental sustainability (both in theory and practice) in order to be more capable of participating in innovative projects once they graduate.

Regarding the third sector industry, some NGOs and SMEs in Cyprus are particularly active on the recognition of the SDGs through the course of their work. Despite the ranking of Cyprus in the realisation of the SDGs, presented above, there was a recent turn and interest by SMEs and NGOs to include the UN 2030 Sustainable Development Goals in their agenda as priorities. They might not work explicitly on the 2030 UN Agenda, but they work on different fields, for instance, youth, education, gender, environment, inclusion, migration, arts, entrepreneurship, peace building, etc. It is interesting to mention that a great number of organisations which might have an SME structure, are registered as NGOs due to the fact that there is no legislation on Social Entrepreneurship in Cyprus yet, although parliamentary discussions are taking place on the matter. Hence, this is the reason why there are no statistical data available about the third sector in terms of their course of work and impact on a local level regarding the Sustainable Development Goals in Cyprus. A theme highlighted by our research is that the SMEs which actively work towards the SDGs, usually receive most of their funding from relevant EU funding programmes. The rest of the SMEs work on more technological and industrial topics or are individuals who produce their own goods. Most of those NGOs and SMEs who work with projects related, implicitly or explicitly, with the SDGs produce among others, research papers and frameworks, policy making papers and hence contribute to awareness raising of the SDGs on a national level. It must be noted that over the last few years, the Government of Cyprus has been working collaboratively with civil society organisations (CSOs) active in the field of SDGs in Cyprus, to implement the 2030 UN Agenda. An example could be the participation of CSOs in the development of the Voluntary National Reviews of Cyprus and their contribution to the evaluation of Cyprus in maintaining or progressing with the SDGs (CARDET, 2017).

The number of CSOs has been increasing through the years, and it is encouraging that in the near future, especially with the new entrepreneurship legislation almost being in place, the industry will play an important role in the sustainable development of the Cypriot community. The third sector is the milestone in the realisation of the 17th goal in Cyprus which will create new coalitions or strengthen the existing ones. Specifically, the INNOVATE Cyprus project has launched a research and innovation strategy framework for the years 2019 to 2023 which adopts the vision of *“Cyprus to become a dynamic and competitive economy, driven by research, scientific excellence, innovation, technological development and entrepreneurship, and a regional hub in these fundamental areas”* (National Board for Research & Innovation, 2019, p. 7).

However, the connections between SDGs and the quality of education, which is considered as one of the most efficient ways to promote the SDGs and build competences to contribute not only towards Goal 4, is rather a challenge for Cyprus. Promoting Education for Sustainable Development (ESD) and active citizenship will contribute to shifting the political narrative and discourse to adopt the 2030 Agenda in targeting policymaking. Several measures have been announced in Cyprus about SDG 4, which have been implemented in the past years, and NGOs and CSOs have been proven crucial in promoting ESD. Some obstacles remain, and local organisations could further contribute by expanding their activities in collaboration with



national/governmental bodies to offer training, and the Government could support more initiatives regarding the SDGs in Cyprus. Cyprus' education system faces the following challenges:

- Lack of political will and gaps in the urgent need for an in-depth education reform.
- Need for more flexible curricula and school processes which will include the SDGs in their agenda. The Ministry of Education should take advantage of the various resources developed as part of EU-funded projects, and include them in their teaching curriculum.
- Education policy-makers and members of Parliament should realize the importance of the 2030 Agenda and its integration within regulations and policies.

Hence, to work actively and effectively towards the implementation of the UN 2030 Agenda in Cyprus, there should be a dedicated recurring budget line to support local initiatives. The UN Economic Commission for Europe (ECE) and the Permanent Mission of Cyprus to the UN in Geneva (2016) have stressed in their report that *“the government does not envisage any changes in the budgeting process due to the SDGs at the moment. Many commitments, especially concerning ODA, are already included in budgeting due to EU obligations”*. Based on the Decision of the Council of Ministers no. 85,050, date 30.5.2018, is responsible for the coordination and monitoring of the implementation of the commitments of Cyprus regarding the Strategic Objectives of Sustainable Development 2030 of the United Nations. In this context, it participates in the relevant Working Group of the Council of the EU (Working Party on the 2030 Agenda for Sustainable Development) and contributes to the preparation of the relevant participation of the Republic of Cyprus in the United Nations Summit.

Lastly, a positive outcome of 2012, is that the Cypriot government has enhanced their efforts to promote business responsibility and sustainability as defined by the European Commission through the Corporate Social Responsibility (CSR). The national action plan for CSR in Cyprus was prepared and approved by the Council of Ministers in 2013 (Corporate Social Responsibility, 2020). Cyprus has also adopted the law on CSR, and since 2016, the organisation of CSR in Cyprus has been developed, seeking to promote the concepts of CSR and sustainability to Cypriot organisations. CSR enhances cooperation and dialogue between the relevant stakeholders to ensure transparency, trust and promote sustainability principles.

Despite the many legislative measures concerning the SDGs in **Germany**, it is notable that graduates quite often complete University and College without having enough “marketable” knowledge when it comes to SDGs. For example, the students studying social sciences and humanities are even more obliged and required to adopt and continually develop their SDGs principles and concepts. Assuming that the job they will perform, regardless of the industry, will potentially have wider social impact, it is imperative that appropriate studying programs are developed and implemented in order to achieve a satisfactory level of skills that the graduates will come out of their educational institutions with. Due to the current gap in the job market, in which there is a lack of people who have required SDGs skills and abilities, there is a need to bridge the gap between what our target groups know and what they need to know from the perspective of evolving market and industry needs. Target groups that we will examine here are Students/recent graduates from SSH disciplines, Teachers, SMEs, and NGOs. One of the efficient ways to overcome the evident obstacles would be developing good practices and training programs through which the target groups would be able to benefit and enhance their skills when it comes to the field in question here. When it comes to Teachers, they are also required to develop skills and acquire relevant materials that would bridge the gap when it comes to knowledge transfer to their students. Having that said, it is crucial that Teachers are familiar with market trends and job requirements so that they can provide adequate curriculum and be aware of where to put emphasis when it comes to selecting what to supply their students with. SMEs need to focus on SDGs; they need to fulfil and



“live” during regular business operations. However, it is important that SMEs do not see these measures as a burden but to understand the importance of sustainable development principles profoundly embedded into companies’ ways of thinking and behaving because, in the long run, that’s the only way for company’s sustainable existence and future prosperity.

However, Germany already disposes of a broad spectrum of initiatives and good practices in the area of Education for Sustainable Development. Innovative and successful activities have been taking place in all educational areas, and throughout the entire country. The intensity of such efforts can vary from activity to activity, however, and not all activities have been spread and disseminated to the necessary degree. Over the coming years, it will be necessary to refine such activities, to emphasise their interrelationships and to integrate them into the entire educational sector. In the process, such efforts must reach all types of educational institutions – from schools, universities and continuing education facilities – and be spread throughout the broad spectrum of informal learning. Sustainability must be established as a subject for lifelong learning. The basic principles of sustainable development are supported by nearly everyone. Education helps promote such support. By imparting relevant knowledge and values, it facilitates implementation of such principles in everyday life, in the workplace and in society. The UN Decade of Education for Sustainable Development, acting through projects, persons and organisations throughout Germany, is expected to enhance public understanding of the fact that each person can support and help shape sustainable development. It is the task of education to give people the tools they need to shape the development of their societies in a sustainable manner. It is education that must pave the way to sustainability.

The number of SSH students in Germany has been between 550,000 and 650,000 every year for the last 3 years. This segment of our target group requires to be addressed properly through applicable means of supplemental materials related to SDGs topics. Within this large group, students who are already getting basic level of SDGs education would benefit by raising their sustainable development knowledge and getting practical connection points between theory and practical industry examples. On the other hand, SSH students not having the opportunity of grasping SDGs concepts would be introduced to these topics and given the skills that would make them more aware of relevant concepts as well as make them marketable in terms of job pursuit once they graduate.

Another segment of the target group comprises Small and Medium Enterprises in Germany. The amount of these entities goes beyond 2.4 million employing over 18 million people. Not only are SMEs a huge wheel of overall German economy, but it is expected that they will achieve the full potential in upcoming years and decades because it is forecasted that their share in all industries across the entire economy will continue on the growing trend which isn’t expected to cease anytime soon.

In Germany, NGOs were quite active during the revision of the sustainable development strategy and this is still the case. They publish position papers, release spotlight reports that critically analyse whether Germany’s development model is sustainable (Forum für Menschenrechte, FUE, Venro, 2016), and organize conferences and workshops. In addition, NGOs were invited to comment on Germany’s Voluntary National Review during the HLPF (The United Nations High-level Political Forum on Sustainable Development). The most significant added value of the SDGs for advocacy NGOs is that they are an opportunity to create new—or to strengthen existing—coalitions. They enable NGOs to speak with a louder voice and to have a greater impact on decision-makers. As one NGO representative put it: “The SDGs appeared on the scene and I realised that there were no connections between the different sectors. We now have a joint position with more than 70 NGOs. This puts us in a powerful position, which the decision-makers understand, and so they want to meet with us.” These coalitions are also a way to set the example for the government in terms of overcoming silos. “When we work



across sectors as NGOs, we are setting the example. If we can overcome silos, so can ministries”, said one NGO. Such coalitions can be seen in Germany, where an environmental and a development organisation have launched an informal network to strengthen their cross-sectoral collaboration, leading to common accountability activities on the SDGs. Around 40 NGOs (development NGOs, social welfare organisations, peace organisations, environmental NGOs, etc., as well as trade unions) published a joint position paper in which they set out how Germany should implement each of the 17 goals (Hege and Demailly 2018).

Fostering sustainability at universities, and especially its institutional implementation has increased worldwide in recent years due to the global challenges that come along with climate change, the growing consumption of natural resources, and the transformation of science as well as educational systems. In Germany, different approaches of implementing the notion of sustainability at higher education institutions (HEIs) can be observed: Some HEIs focus on topics of sustainability in their curricula and study programs and conduct corresponding research projects, others relate to sustainability as an overall governance concept and define their organizational profiles accordingly. Some HEIs use a systematic Whole Institution Approach to implement Education for Sustainable Development (ESD) while some others have redesigned single parts of their institutional structures, e.g. to reduce their universities’ ecological footprint (Rath and Schmitt, 2018).

Both the overview of practices and discourse at universities and an evaluation of academic literature show that an understanding of sustainability transfer can draw on both HEI concepts of transfer and sustainable development. Transfer can be described as a partnership between practitioners and universities exchanging technologies, knowledge, and ideas in the focal areas of teaching, research, and a third mission. When the protagonists relate their transfer activities to sustainable development, it can be termed as sustainability transfer. There are even specific approaches that are in line with sustainability transfer in teaching, namely in ESD, and in research, especially transdisciplinary sustainability research. Reliable, as well as innovative, approaches are problem and project-based learning, service learning, research-based learning, as well as transdisciplinary research projects (such as action research or real-world laboratories).

Even though there are interesting and inspiring cases, sustainability transfer has so far hardly been explicitly addressed by HEIs and does not play a significant role in university governance in Germany. Considering the enormous potential for HEIs to contribute to sustainable development through direct interaction with practitioners, it would seem to be a promising endeavour to systemize and conceptualize the notion of sustainability transfer for analysing the broad range of activities to attain a better understanding of transfer mechanisms and their impacts in the university setting. Such a science-based concept can be used as a reference by the actors involved for further developing their transfer activities.

The institutional structure of HEIs in **Greece** is divided into two sectors. The university sector (AEIs) that includes universities, national technical universities and the Higher School of Fine Arts and the technological sector that includes Technological Educational Institutes (TEIs) and the School of Pedagogical and Technological Education (ASPETE). The first cycle of studies, in the Universities of SSH, studies the last 4 years. Each academic year is distributed in semester modules and includes educational activities that correspond to 60 ECTS credits. The second and the third cycle of studies involve the attendance of a postgraduate program and a doctorate study program respectively⁸. As far as our research is concerned, there is no particular integration of SDGs in the curricula of SSH. Only one postgraduate program was found from

⁸ All data are retrieved from Eurydice https://eacea.ec.europa.eu/national-policies/eurydice/content/higher-education-33_en#HE



University of Piraeus on Bioeconomics, Circular Economy and Sustainable Development that incorporates in its curriculum the principles of the SDGs, but it is in the field of Economics.

The requirements of students to apply to a postgraduate program concern the following academic criteria such as, the overall degree grades, the grades obtained in undergraduate modules relevant to those of the postgraduate programme, the student thesis, any research experience the student might possess and the knowledge of at least one foreign language. The assessment and progression of students is based on their passing written or oral exams on the courses of the postgraduate study program, in combination with their participation in the overall research, writing and educational activities of the program⁹.

Tertiary education in Greece is public, therefore University attendance is free of charge and HEIs cannot charge tuition fees. It is mainly financed directly from public resources, through the Ordinary Budget and the Public Investments Programme, and less by private institutions such as non-government resources and Households¹⁰. The State Scholarships Foundation IKY, is the responsible institution for providing grants, contributing in that way to the empowerment of the Greek scientific community. IKY is also the Greek National Agency for Erasmus+. The foundation grants scholarships for undergraduate students of vulnerable social groups, postgraduate and doctoral studies including the scientific field of Social Sciences and Humanities, investing in research and innovative activities. Furthermore, in order to reinforce the employability of graduates, the universities promote the completion of a scientific internship in domestic or foreign laboratories, organisations, research centres, facilities etc¹¹.

Past legislative initiatives (e.g. COP21) must be considered in the specific context of the **Italian** situation, characterized by discrepancies with respect to most other European countries. ISTAT's SDG Report notes that, although employment has risen slightly in the last four years, the unemployment rate in 2017 is still almost double that of the pre-crisis level, standing at 11.2%, compared to the European average of 7.6%. Since 2013, unemployment in Italy has fallen by one percentage point, and in Europe by 3.3 points. Unlike most European countries, even per capita GDP is still well below its pre-crisis level. Finally, while the number of people in employment has recovered, returning to the pre-crisis level, the same may not be said for the number of hours worked, which is still 5% lower than the levels of 2008. In this context, it underlines the need to act from a triple line: institution, businesses and NGOs. It is not a single entity, but a collective problem that requires a common response. In Italy, the themes of the Agenda 2030 have inspired not only the efforts of the government, but also those of many other stakeholders, such as the confederation of Italian industry, Confindustria, and labour union. In fact, sustainability is one of the cornerstones of the proposals "The vision and the proposal" (By Confindustria), which contains the Italian industrialists' programme for the next legislature. At the same time, in March 2018, the "Integrated Platform for Sustainable Development" (national branch of the CGIL) presented the which aims to keep environmental protection, legality and job creation. What we are experiencing is a historical phase marked by two radical transitions - environmental and technological - which is inevitably linked to two other aspects. On the one hand, the need for professional profiles capable of responding to regulatory changes (environmental and technological). On the other hand, the need on the part of the institutions to develop a training plan in line with the new working needs of the youngest. The data confirms that investing in education pays off. Graduates, in fact, enjoy important employment advantages compared to secondary school graduates during their working life: in 2018, the employment rate of the 20-64

⁹ All data are retrieved from Eurydice https://eacea.ec.europa.eu/national-policies/eurydice/content/second-cycle-programmes-33_en

¹⁰ All data are retrieved from Eurydice https://eacea.ec.europa.eu/national-policies/eurydice/content/funding-education-33_en

¹¹ All data are retrieved from Eurydice https://eacea.ec.europa.eu/national-policies/eurydice/content/second-cycle-programmes-33_en



age group was 78.7% among graduates. In addition, a graduate earned an average 38.5% more than a high school graduate (AlmaLaurea, 2019).

According to the Excelsior report produced by Unioncamere, there could be up to 3.2 million job vacancies in the next 5 years. In particular, the report explains that the greatest employment needs in the coming years will be in two sectors: the digital revolution (Big data, artificial intelligence or "Internet of things") and sustainability. The leading sectors of the labour market which together represent around 30% of the total needs. As for the eco-sustainability sector, however, the best "Green Jobs" - that is, the most requested by companies - are: expert in energy management; green chemist; green purchasing expert; environmental marketing expert; installer of low environmental impact systems. So, companies will be looking for professional figures who are able to take the best advantage of the opportunities that the circular economy offers, so as to have a figure capable of guiding production processes in this direction.

The Italian education system is organized according to the principles of subsidiarity and autonomy of educational institutions. The State has exclusive legislative competence for the "general education rules" and for determining the essential levels of benefits that must be guaranteed throughout the national level. The State also defines the fundamental principles that the regions must respect in exercising their specific competences. In contrast, the Regions have concurrent legislative power in education and exclusive in vocational education and training. State educational institutions have didactic, organizational and research, experimentation and development autonomy.

In particular, the Italian higher education system is a binary system, divided into two large sectors, institutionally and functionally distinct: The University sector and the Higher Artistic, Musical and Coreutic Education sector, called AFAM.

The Italian university sector is composed of higher education institutions divided into:

- public universities;
- legally recognized non-state universities;
- telematic universities;
- special order schools or colleges.

The Italian university system is divided into three sequential cycles. It also adopts the ECTS [*European Credit Transfer System*] to estimate the study commitment necessary to achieve each cycle. ECTS is based on a system of credits and procedures widely accepted within Europe. **One credit** corresponds to **25 hours** of student work, including lectures and individual study. Sixty (60) credits measure the workload of a full-time student during one academic year. Credits are awarded to students who have passed an examination. In the Italian grading system, the minimum pass mark is 18 out of 30 points and the top mark is 30 *cum laude*. The final degree mark ranges from 66 to 110 points *cum laude*. Each cycle corresponds to specific academic qualifications that allow to continue the studies or to enter in the world of work and professions.

In detail, a first-cycle degree programme (called *Laurea Triennale*) leads to a Bachelor-level degree that lasts 3 academic years (each of which requires 60 credits). To join a first-cycle degree programme a secondary school diploma or comparable foreign qualification is necessary. *Laurea Magistrale* refers to second-cycle degree programme and leads to a Master-level degree that lasts 2 academic years (120 credits). To join a second-cycle degree programme you must have a first-cycle degree either from an Italian or a recognised foreign university. In both cases, some programmes have limited access and entry is determined by passing a



competitive examination. At the same level there are single-cycle master's degree programmes (*Laurea Magistrale a ciclo unico*) and take 5 or 6 years to complete.

Degree and Master of Science programs that share objectives and educational activities are grouped into "classes" (classes of study courses). The educational contents of each course of study are determined independently by the individual universities: they must obligatorily insert some educational activities (and the corresponding number of credits) determined at national level. These requirements are established in relation to each class. The securities of the same class have the same legal value.

A third-cycle level of study includes advanced scientific programmes: Doctoral research programmes last 3-4 or 5 academic years; Specialization schools last from 2 to 6 academic years, depending on the field. Entry requirements to these programmes are specified each year in a "Bando di concorso".

Finally, there are a number of short master programmes, intended for those who have already held a first-cycle or second-cycle degree. These are called *Corso di Perfezionamento* (Short professional programme), *Master di I livello* (Vocational Master Programme) and *Master di II livello* (Advanced Master Programme). These qualifications are not equivalent to a Master Degree and do not give access to a doctoral programme. University qualifications confer different academic titles on the holder: The Degree gives the right to the academic qualification of "Doctor"; the Master's degree gives the right to that of "Master's degree"; the PhD grants the title of "PhD". Italian universities can establish joint study courses in cooperation with other Italian and foreign universities, at the end of which joint or double / multiple degrees are issued.

Referring to the non-university sector is mainly composed of the institutions of Higher Artistic, Musical and Coreutic Education (AFAM) divided into: State Academies of Fine Arts; Legally recognized academies of fine arts; Higher institutes for the artistic industries (ISIA); Music conservatories; Higher Music Studies Institutes; National dance academy; National Academy of Dramatic Art. AFAM institutions carry out training, production and research activities in the artistic field in the fields of visual, musical, choreutic, dramatic and design arts.

The in-depth study of the Italian education system and related courses allows to connect SSH to the important topic of the SDGs. Clearly, the situation *as-is* is not yet manifesting this link. In detail, the first table explains the link between SSH and Italian degree courses with the relevant aspects in terms of SDGs. The second, on the other hand, highlights the link between the topics of goals and doctoral courses that are active to date and that deal with sustainability.



	1 People	2 Quality	3 Health	4 Education	5 Gender	6 Water	7 Energy	8 Work	9 Industry	10 Equity	11 Climate	12 Life	13 Planet	14 Life	15 Life	16 Life	17 Life
SH1_2	LM 81																
SH1_3	L33; LM 56																
SH1_4	LM 59																
SH1_5	LM 77																
SH1_6	L41; LM 83; LM 82																
SH1_8	LM 16																
SH1_10	L16; L18																
SH1_12	LM 63																
SH1_13	L36																
SH2_1	L37																
SH2_2	D5/S; L39; LM 87																
SH2_4	LM 64																
SH2_7	LM 62																
SH2_9	LM 52																
SH2_10	LM 92; L31																
SH2_11	L20; LM 88																
SH3_1	L32																
SH3_2	LM 76																
SH3_4	LM 75																
SH3_5	LM 70; LM 61																
SH3_8	L15																
SH3_9	L7; L21; LM 69; LM 73																
SH3_10	LM 48																
SH3_11	LM 80																
SH3_12	LM 74; LM 87																
SH4_2	LM 60																
SH4_4	LM 55																
SH4_5	LM 51																
SH4_6	LM 39																
SH4_7	L11; L12; LM 94																
SH4_10	LM 78																
SH4_11	L19; LM 85; LM 57;																
SH5_1	L10																
SH5_3	LM 36; LM 37																
SH5_5	L5; LM 12; LM 78																
SH5_8	LM 65																
SH5_10	LM 89																
SH6_1	LM 2																
SH6_6	LM 84																
SH6_12	LM 1																

Figure 2: Italian Degree and SDGs

Table 2: Italian Degree and SDGs





Management - innovation, sustainability and healthcare			✓	✓	✓			✓		✓		✓					✓
Politics, human rights and sustainability	✓	✓		✓	✓	✓			✓							✓	✓
Economics and management of sustainability and innovation				✓			✓				✓						✓
Environmental sustainability and wellbeing	✓	✓	✓	✓	✓						✓						✓
Technologies for sustainability and environmental recovery				✓			✓		✓				✓				✓
Engineering, architecture and economy for the sustainability of the urban and rural environment				✓		✓	✓		✓		✓		✓		✓		✓

Figure 3: PhD program and SDGs

According to the Voluntary country report on SDGs, **Lithuania** has distinguished the following priority areas: reduction of poverty, social exclusion and income inequality, promotion of employment; strengthening of public health; increasing the quality of health care and accessibility of health services; development of innovative economy and smart energy; quality education; development cooperation. For instance, in 2016 exposure to poverty risk or social exclusion affected 30% of the Lithuanian population. To address these problems, the state is implementing significant reforms which contribute to the increase of retirement pensions, promotion of employment opportunities, provision of more favourable financial conditions for families and increase of state-subsidised income. There are actions taken in other areas as well.

Lithuania also focus on investment in new technologies or the promotion of eco-innovation. The impact and the size of this effort could be followed while evaluating findings of Statistics departments. Regarding soft investments, it is important to notice that the Lithuanian population is among the most educated nations in the world. Since 2011, Lithuania has been a leader among the European Union Member States by number of the population aged between 25 and 64 with secondary and/or higher education and number of the population aged between 30 and 34 with higher education. On the policy level, Lithuania devotes much attention to the sustainable development of cities and communities. The new general plan of the territory of Lithuania that is currently in the process of development will integrate the SDGs. This plan will become the key instrument for ensuring inclusive and sustainable urban development, reducing the socio-economic exclusion of cities and the negative impact of built-up territories on the environment, and securing the protection of natural and cultural heritage.

According to the Lithuanian official information on the *SDG Knowledge platform*¹² “Lithuania has distinguished the following priority areas: reduction of poverty, social exclusion and income inequality, promotion of employment; strengthening of public health; increasing the quality of health care and accessibility of health services; development of innovative economy and smart energy; quality education; development cooperation”. The contribution of the SSH to these priority areas is of utmost importance. Lithuania, however, does not seem to be employing its SSH potential for reaching these goals. There are only a few research projects on the

¹² Website: <https://sustainabledevelopment.un.org/memberstates/lithuania>



relevant topics and the HE system in general is not yet oriented toward them. And the national review on the implementation of the SD Agenda does not show a considerable breakthrough yet.

On the other hand, Lithuanian HEIs¹³ offer three various degree programs, connected to SDG:

- Sustainable Business Management – Professional Bachelor in Business Management; Marijampolė College;
- Sustainable Development of the Built Environment – MA in Business administration Vilnius Gediminas Technical University;
- Sustainable Management and Production – MSc in engineering sciences; Kaunas University of Technology.

All the programs are related to SSH (the description of the engineering program shows that it provides interdisciplinary education, providing many courses in SSH – management, business administration and sociology). There is also a dozen of relevant non-formal education programs offered by various HEIs and accredited by Lithuanian Ministry of Education, Research and Sports.

In **Portugal**, the number of students in higher education has been rising steadily from 2015 to 2019 and the same trend applies to SSH areas, in this case, “Arts and Humanities” and “Social Sciences, Commerce and Law” clusters (as seen previously in table 1). As such, in 2019, there were: 40.345 students in Arts and Humanities degrees and 126.537 students in Social Sciences, Commerce and Law degrees.

Portugal played an active role in drafting the 2030 Agenda, including in the framework of defining the position of the European Union (EU), in particular: i) the need to give more attention to issues related to peace, security and good governance, with emphasis on fragile states; ii) in the promotion and defence of the conservation and sustainable use of the Oceans, which is of the greatest importance for Portugal; and iii) the integration of a strong dimension of Human Rights and the fight against inequalities, with particular attention to issues of gender equality.

Portugal also endorsed the need for this Agenda to be based on a real sharing of responsibilities, between public and private actors and between developed and developing countries, in addition to the traditional North-South approach. Concerning the debate on the adaptation of the United Nations system to the challenges inherent to the Agenda 2030, Portugal has defended an adjustment that will allow following the scale of the political commitment assumed, underlining the need to guarantee the efficiency and effectiveness of a system that should be based on articulated cooperation and complementarity between the different actors, at the global, regional and national levels, exploring the synergies and interdependencies between the respective competences and strategies, avoiding duplication and seeking to maximize capacities and impact (Ministério dos Negócios Estrangeiros, 2017).

As such, and following the approach adopted by the Portuguese government, the SDGs Portugal Alliance (Aliança ODS Portugal), managed by the United Nations Global Compact Network Portugal (UN GCNP), was launched. UN GCNP was thus mandated to organize the contribution of the Business Sector to the achievement of the SDGs, without exception, since everyone is expected to contribute from Companies and Business Organizations. It is, therefore, its duty, following the SDG 17, to create opportunities for multi-stakeholder dialogue, to provide companies with a better view of the expectations of their stakeholders. In short, the SDGs Portugal Alliance has the mission of raising awareness, informing, implementing, monitoring, and evaluating

¹³ Information retrieved from: <https://www.aikos.smm.lt/>



the contribution of the business sector and other civil society partners to the SDGs at the national level. Its objective is to promote bridges of dialogue and cooperation, as advocated by the SDG 17, as well as to create sustainable bases for the development of partnerships and the creation of projects, programs, and actions, within the framework of Agenda 2030.

Higher education in Portugal is structured according to the Bologna principles to ensure solid scientific and cultural preparation, plus technical training that qualifies students for professional and cultural life while developing their capability to innovate and apply critical analysis (Eurydice, 2018). The Portuguese higher education system is a binary system that includes the university and the polytechnic systems. Universities are geared towards offering solid scientific training, gathering the efforts and competences of teaching and research units, while polytechnics focus on vocational and advanced technical training for the world of work. University studies are taught at universities, university institutes, and all other institutions within university education, and polytechnic studies are taught at polytechnic institutes, and other institutions within polytechnic education and both are offered by public, private and cooperative institutions. Despite this binary division, some polytechnic institutions are part of universities.

Portuguese higher education institutions enjoy scientific, pedagogical, cultural and disciplinary autonomy (Eurydice, 2018):

- Scientific autonomy consists of the ability to define, program and execute research and other scientific activities.
- Pedagogical autonomy encompasses the ability to prepare study plans, define the object of the curricular units, define teaching methods, allocate resources and choose knowledge assessment processes.
- Cultural autonomy translates into the ability to define the training program and cultural initiatives.
- Disciplinary autonomy confers the power to punish, under the terms of the law and the statutes, disciplinary infractions committed by teachers, researchers and other employees, as well as students.

Thus, within the scope of the aforementioned autonomies, aspects such as the specific conditions of entry into the study cycles, the operating conditions of the study cycles, the study plans, the precedence and assessment regimes, the prescription regime, training accreditation, curriculum transition rules, deadlines for issuing academic documentation, changes to schedules and operating regimes or deadlines for responding to requests are made.

Higher education in Portugal follows the Bologna principles and thus counts with three levels: Bachelor degrees; Master degrees and Doctorate degrees. In Portugal, from the total number of 5,974 degrees, there are around 1,699 degrees in Social Sciences, Communication, and Law; as well as about 792 degrees in Arts and Humanities.

Portugal materializes in the SDGs 4, 5, 9, 10, 13 and 14 its strategic priorities in the implementation of the 2030 Agenda for Sustainable Development. In this plan, as defined in the National Reform Program, Portugal attaches central importance to education, training and qualification, throughout life, seeking to reverse historical delays and exclusions, with direct impacts on people's well-being, on economic performance, combating poverty, promoting equality and social cohesion, citizenship and the environment (Ministério dos Negócios Estrangeiros, 2017). For this reason, the SDG4 - Quality Education is recognized as a priority design and transversal way to achieve several other Sustainable Development Goals. Acknowledging the key importance of SDG4 and their role as active agents of society, Portuguese universities and polytechnic



institutes have implemented initiatives that aim to contribute towards the completion of the 2030 Agenda for Sustainable Development. As such, in 2018, a national cooperation network for the sustainability of university campuses was established with the collaboration of different national academic communities of Higher Education institutions. The creation of the Sustainable Campus Network (Rede Campus Sustentável) aims at promoting sustainable management of campuses, in their multiple dimensions, such as efficiency in the use of resources, waste management, mobility, training, research, interaction with the surrounding communities and sustainability management.

Three main principles that rule the action of this network are:

1. Higher Education Institutions (HEIs) must actively contribute to the advancement of knowledge, technology and tools to create a more sustainable society. For that, it is essential to create structures in the HEIs that play an active role:
 - a. in promoting new knowledge regarding sustainability
 - b. in implementing measures and creating new projects to increase sustainability within campuses and in neighbouring communities
 - c. in integrating this theme in teaching, research, organizational management and stakeholder involvement.
2. In addition to helping to train specialists with skills in the field of sustainability, HEIs should set an example of the practical implementation of innovative ideas, adopting the principle "practice what you preach". In reality, sustainability in higher education is a topic that has been explored individually by several Portuguese HEIs, and there are currently different projects in different areas of activity, such as energy efficiency, resource management, waste management, reduction of greenhouse gas emissions. CO₂, among others.
3. In this context, the sharing of experiences and knowledge acquired in the scope of these projects is fundamental in the establishment of new goals for the sustainable development of HEIs.

Still, within the scope of this Network, the Sustainable Campus Conference (first edition was held in 2019) was launched under the theme "Sustainable Development: Higher Education Institutions as Agents of Change" and intended to provide a moment for reflection and exchange of experiences on initiatives and modalities for implementing the Sustainable Development Goals in Higher Education Institutions.

Although HEIs are aware of the challenges of the Sustainable Development Goals and that they aim to contribute to their completion with a holistic approach, according to Aleixo *et al.* (2019), results show that:

- less than 10% of 2556 undergraduate and master's courses directly address at least one SDG;
- universities, when compared to polytechnic institutes, offer more courses that explicitly address at least one SDG;
- there are more master's courses to explicitly address the SDGs than there are bachelors' degrees;
- and most courses that address the SDGs are in the areas of social sciences and humanities, and natural sciences and the environment.



At universities, the SDGs most often considered in their undergraduate courses and master's degrees are:

- SDG 7 - Renewable and Accessible Energy (n: 22; 1.4% of total courses degree and master's degrees at universities);
- SDG 15 - Protect Earth Life (1.4%);
- SDG 6 - Drinking Water and Sanitation (1.1%).

In polytechnic institutes, the most frequently considered in their undergraduate and master's courses are:

- SDG 15 - Protect Earth Life (1.6% of total undergraduate and master's courses in the polytechnics);
- SDG 7 - Renewable and Accessible Energy (1.5%);
- SDG 4 - Quality Education (1.4%).

In undergraduate courses, the SDGs most frequently considered are:

- SDG 7 - Renewable and Accessible Energies (1.4% of total undergraduate education courses Portuguese public superior);
- SDG 15 - Protect Earth Life (1.1%);
- SDG 6 - Drinking Water and Sanitation (0.9%).

In master's courses, the SDGs most frequently considered are:

- SDG 15 - Protect Earth Life (1.6% of the total master's courses);
- SDG 7 - Renewable and Accessible Energy (1.4%);
- SDGs 3 - Quality Health (1.4%).

According to such results, it is possible to infer that much work still has to be done in what concerns the integration of most of the SDGs in HEIs curriculums. Nevertheless, it is still possible to pinpoint some examples of relevant initiatives that many HEIs are endeavouring, such as: Universidade NOVA de Lisboa; UTAD; Universidade Aberta; ISCTE-IUL. As one of the few examples of specific courses that have as a theme Sustainable Development, it is relevant to mention Aveiro University course named "Sociology and Sustainable Development Economy". The curricular unit of Sociology and Sustainable Development Economy has as main objective to approach the concept of sustainable development and explore the challenges that it poses to public policies, from the perspective of sociology and economics. First, the evolution of development paradigms will be addressed, as well as the integration of the environmental component in these same paradigms and in the theoretical currents of economics and sociology. Secondly, the local perspective of the economy-society-environment-governance relationship will be analysed, focusing on the emerging agenda of sustainable cities and on the management instruments and public policies that enable the operationalization of the principles of sustainable development at the local level.



4. Desk Research key findings

- SSH are generally considered to provide skills and competences for society. Employers and public opinion, politicians and policy makers declare the acknowledgement of the potential of SSH in the contemporary labour market, where such flexible / adaptable skills are increasingly required.
- The SSH clearly develop these kinds of skills and competences. Although the list of them varies from country to country and from document to document, they usually mention critical thinking, creativity, coordinating with others, teamwork, emotional intelligence, negotiation skills, communicability, knowledge of foreign languages, etc.
- All the countries of our interest (Croatia, Cyprus, Germany, Greece, Italy, Lithuania, Portugal, Slovenia) are aware of the importance of the sustainable development and the SDGs in particular, all of them have passed, or are preparing, the appropriate legislation.
- However, the implementation of the SDGs, and their application to everyday life remains an unfinished effort. This is particularly visible in the field of the SSH. All the countries we researched acknowledge the importance of higher education in general and the SSH in particular, although there is virtually no legislation concerning the SSH. However, the work of bringing the SDGs and the SSH together is largely still to be done – SSH oriented education is rarely present in the HEIs curricula.
- Our research points to the important correlation – the more attention national legislation and policy points to the SDGs, the more it is present in the HEI system not only in form of sustainability action in campuses, but also in terms of their introduction to curricula and teaching process. We suggest that this comes not from the administrative measures (the governments put the pressure on the HEI concerning the SDGs), but quite the opposite – in these cases there is an increased public awareness of the importance of the SDGs and thus, societies as a whole aim at reaching them. On the other hand, the well-established system of the SSH and the long tradition of interest in studies of the human / culture / society (e.g. in Germany and Italy) correlates with the greater attention paid to the SDGs in legislation and policy too.
- Therefore, bringing the SDGs and SSH together might be mutually beneficial. The involvement of SSH into the realization of the SDG might bring a positive impetus. Despite the challenges and apparent public mistrust, SSH are a popular field of studies – their students outnumber their STEM or Biomedical science colleagues, therefore the turn of SSH teachers and students might increase the public awareness of their importance.
- The SDGs are important for the SSH themselves: SDGs provide the basis to reframe the SSH discourse. The focus on the SDGs offers an alternative to the dominant emphasis on the economic growth and preparation for the labour market. SDGs on their turn emphasize the responsible life, shared not only with other people and cultures, but also with other beings, the importance of dealing with the social and environmental challenges the planet faces. These emphases do not contradict the self-perception of SSH, they correspond not only to the traditional, humanist perspective in SSH, they also correspond to the theoretical turns in contemporary SSH towards environmental issues and the considerations on nonhuman forms of life.



5. Survey Analysis

The following two parts of the report represent the results of the SHOUT project empirical research. The main aim of this research is to find out the importance and level of evaluation of Social Sciences and Humanities (SSH) students' Sustainability Competencies. These competencies are essential to implement Non-Governmental Organisations (NGOs) and Small-Medium Enterprises (SMEs) activities related to Sustainable Development Goals (SDGs). To implement the aim, analysed data was gathered by a survey based on Prof. Rodrigo Lozano's articles discussing Sustainability Competencies which help to achieve SDGs. Furthermore, it was important to find out which pedagogic approaches and teaching methods are used to develop Sustainability Competencies.

5.1 Respondents sociodemographic background

In total, 483 individuals from 9 countries responded to the survey. The research was aimed at four target groups: 34 percent of students, 23 percent higher education teachers, 18 percent NGOs, and 25 percent SMEs. The respondents among students were 67 percent females and 33 percent males. The respondents among higher education teachers (HEI teachers) were 47 percent females, 51 percent males and 2 percent preferred not to identify their gender. Students were mainly from study fields of history, psychology, sociology, economics, linguistics, communication, and politics (Figure 1). While HEI teachers were mainly from study fields of economics, psychology, sociology, politics, management, accounting, and history.

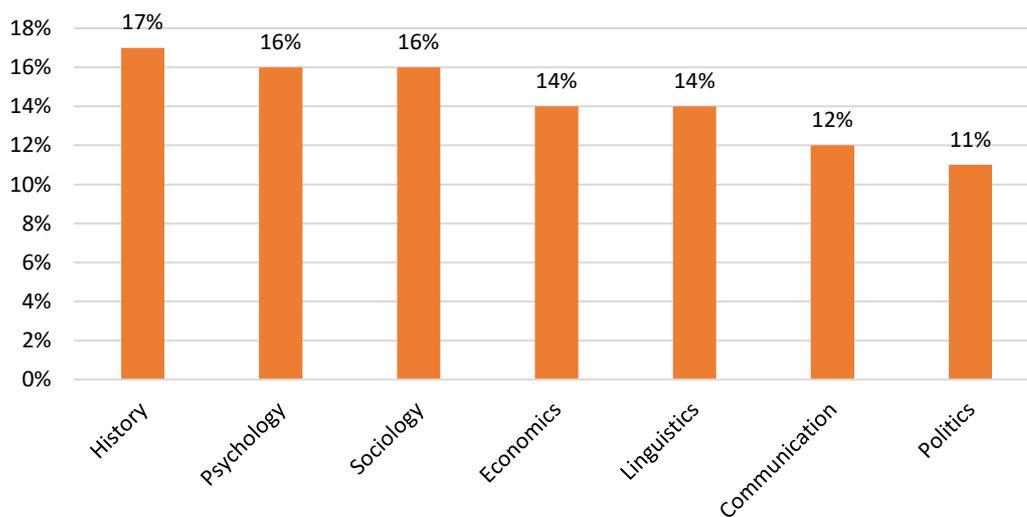


Figure 1. The title of students first degree (N= 165)



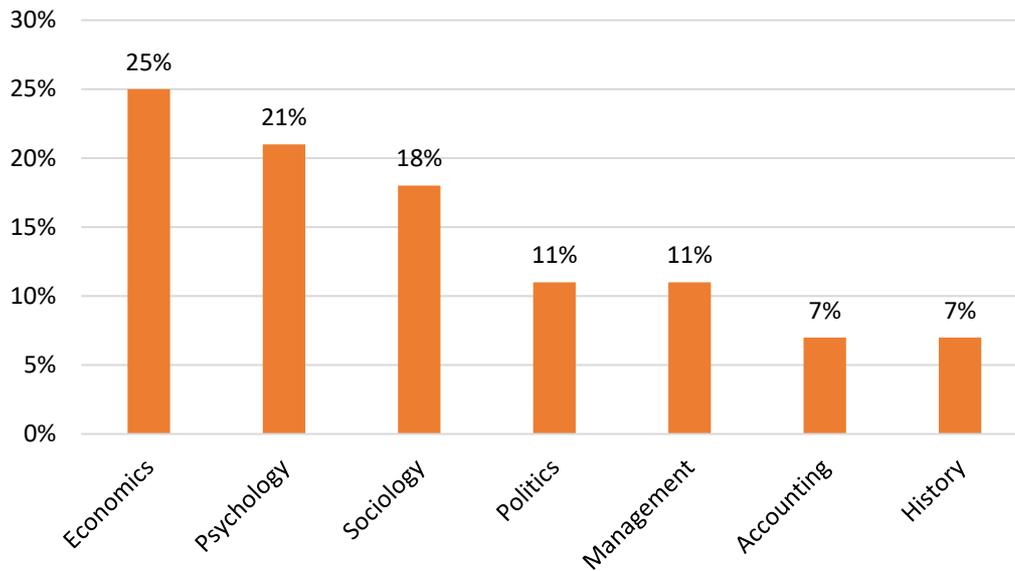


Figure 2. The HEI teachers main teaching field (N= 113)

There were a series of questions about students' education adequacy and employment potential in the range from 1 to 5. According to students average rating of higher education, adequacy is 3.8 and average employment potential is rated at 3.3. These results show that education is rated better than further employment opportunities. Two-thirds of students indicated their position in higher education as studying or finished undergraduate studies (Figure 3).

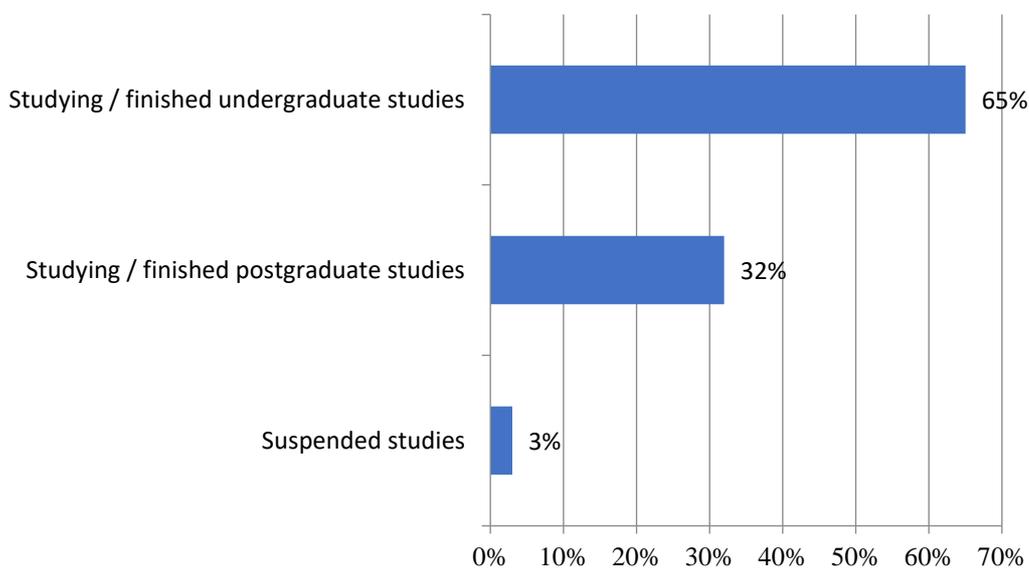


Figure 3. Students' current position in higher education



Furthermore, 26 percent of students addressed that they are working in a position **related** to their degree (Figure 4). To further explore, a similar proportion of students (21 percent) are working in a workplace **not related** to their degree.

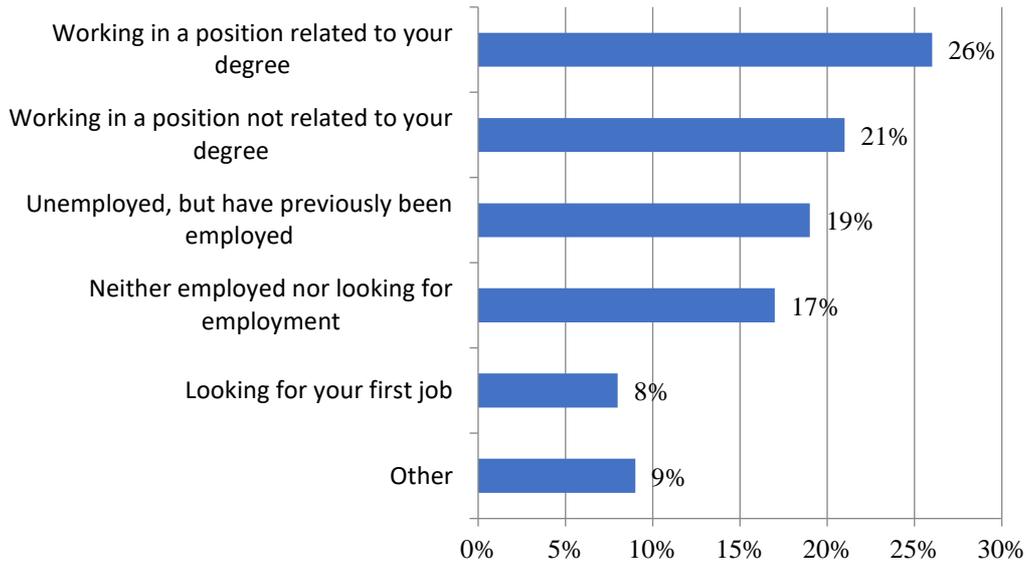


Figure 4. Students' present employment situation

Moving on to the background of NGOs and SMEs the questions were based on the level of operation, experience, and employee number having an SSH background. Mainly, NGOs operate at national authority by 35 percent and local authority 22 percent. Meanwhile, SMEs work at international authority by 32 percent and national authority 28 percent (Figure 5).

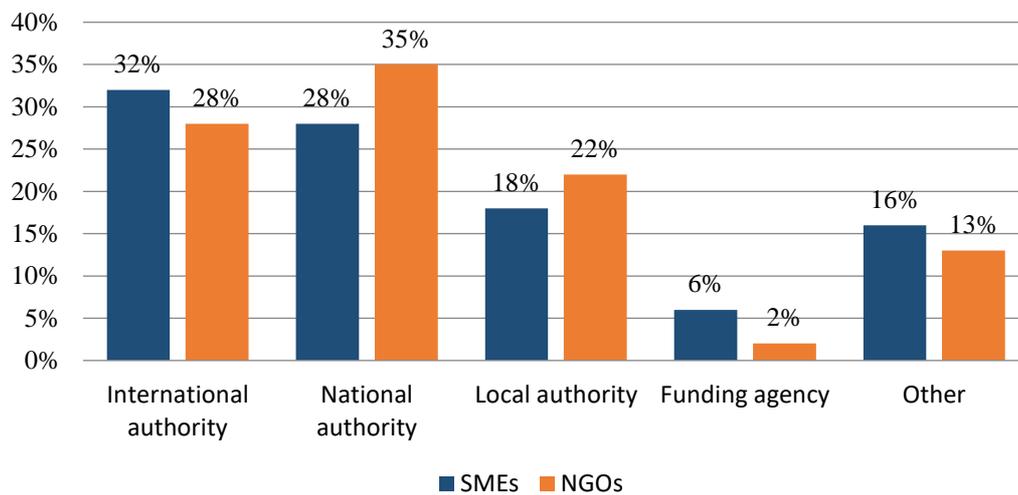


Figure 5. Level of operation in which the organization works (NGOs N= 85; SMEs N=120)



Moreover, NGOs and SMEs addressed the average organization running years (average year at SMEs – 13,6 and NGOs – 20,5) and the average number of employees having SSH background (average number of employees at SMEs – 9,4, NGOs – 9,5).

5.2 Sustainable Development Goals

After analysing each group's sociodemographic background, it was important to find out how Social Development Goals are perceived among the four target groups. NGOs were the most familiar with SDGs (72 percent), while students were least informed about SDGs (40 percent). HEI teachers (55 percent) and SMEs (56 percent) had quite similar results. It is worth noting that HEI teachers are better informed about SDGs than students and a big part of HEI teachers (89 percent) try to discuss issues of SDGs during lectures. To introduce students to SDGs, HEI teachers take real-world examples such as gender inequality, corporate social responsibility, economics, climate change, energy, and other problems related to sustainable development goals. Afore mentioned problems were the ones discussed the most during classes. Furthermore, our research results showed that HEI teachers refer to SDGs mainly in a social context.

Research data showed significant differences between target groups while evaluating SDGs' relevance. HEI teachers, NGOs, and SMEs state that the 4th goal (Quality Education) is the most relevant, while students state that the 5th goal (Gender Equality) is the one most relevant to their studies (Table 1).

GOALS	RATINGS			
	HEI teachers	Students	SMEs	NGOs
GOAL 1: No Poverty	8th	11th	12th	11 th
GOAL 2: Zero Hunger	12th	14th	15th	14 th
GOAL 3: Good Health and Well-being	4th	5th	4th	4 th
GOAL 4: Quality Education	1st	2nd	1st	1 st
GOAL 5: Gender Equality	3rd	1st	2nd	2 nd
GOAL 6: Clean Water and Sanitation	16th	12th	16th	15 th



GOAL 7: Affordable and Clean Energy	17th	16th	13th	16 th
GOAL 8: Decent Work and Economic Growth	5th	4th	3rd	3 rd
GOAL 9: Industry, Innovation and Infrastructure	13th	10th	7th	12 th
GOAL 10: Reduced Inequality	6th	6th	11th	8 th
GOAL 11: Sustainable Cities and Communities	7th	8th	6th	7 th
GOAL 12: Responsible Consumption and Production	10th	13th	10th	10 th
GOAL 13: Climate Action	11th	9th	9th	9 th
GOAL 14: Life Below Water	15th	17th	17th	17 th
GOAL 15: Life on Land	14th	15th	14th	13 th
GOAL 16: Peace and Justice Strong Institutions	2nd	3rd	5th	5 th
GOAL 17: Partnerships to Achieve the Goal	9th	7th	8th	6 th

Table 1. Sustainable Development goals relevance rating according to each respondent group.

The least relevant goal for HEI teachers is 7th (Affordable and Clean Energy), while for students, SMEs, and NGOs the least relevant goal is 14th (Life Below Water) (Table 1). These results show that goals associated with the ecologies sphere were the least relevant to the activities of target groups. In contrast, the most relevant goals were related to the social sphere, for example, education and equality in society.



Despite the preferences of SDGs being different, all target groups are interested in the same five goals which were repeatedly selected: *Quality Education (4th goal)*, *Gender Equality (5th goal)*, *Good Health and Well-being (3rd goal)*, *Decent Work and Economic Growth (8th goal)*, and *Peace and Justice Strong Institutions (16th goal)*.

5.3 Sustainability Competences

The core of this research was to find out how SSH students could contribute to the process of achieving SDGs. Prof. Rodrigo Lozano et al. (2019) in his research introduced sustainability competencies that help to implement NGOs' and SMEs' organization activities related to Sustainable Development Goals. All four groups of respondents were asked questions about the importance and level of development of each sustainability competence: Systems thinking; Interdisciplinary work; Anticipatory thinking; Justice responsibility and ethics; Critical thinking and analysis; Interpersonal relations and collaboration; Empathy and change of perspective; Communication and use of media; Strategic action; Personal involvement; Assessment and evaluation; Tolerance for ambiguity and uncertainty.

Results show that HEI teachers and students have the same opinion about which sustainability competencies are the most important for their study program. Respondents indicated that Critical thinking and analysis and Interdisciplinary work are the most important and at the same time most developed sustainability competencies during the study process (figure 6 and figure 7).

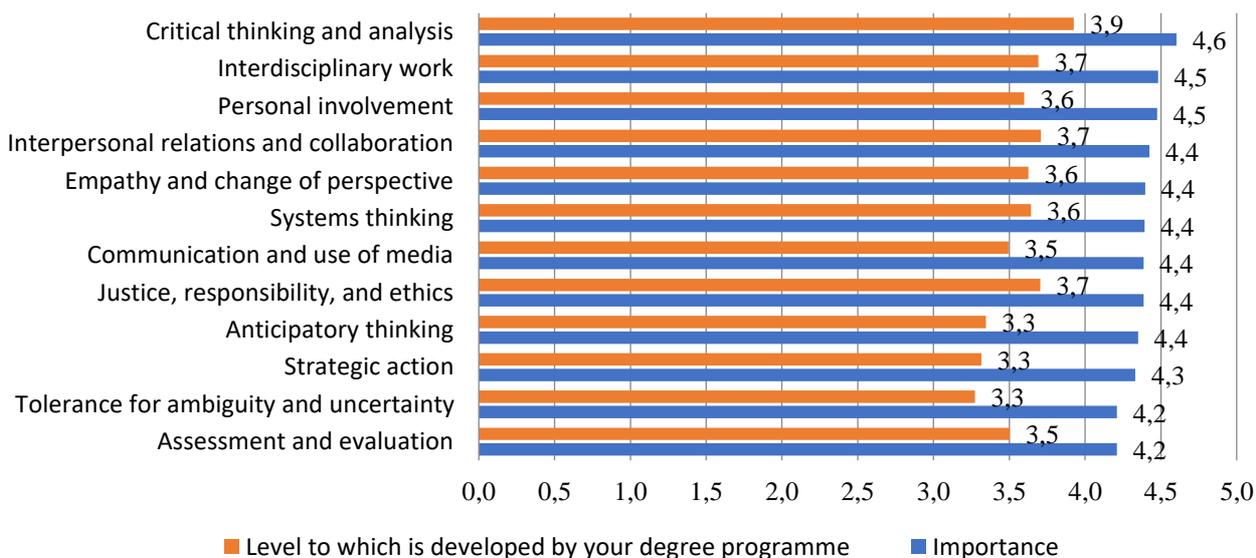


Figure 6. The importance and level of development of sustainability competencies according to students (N=165)



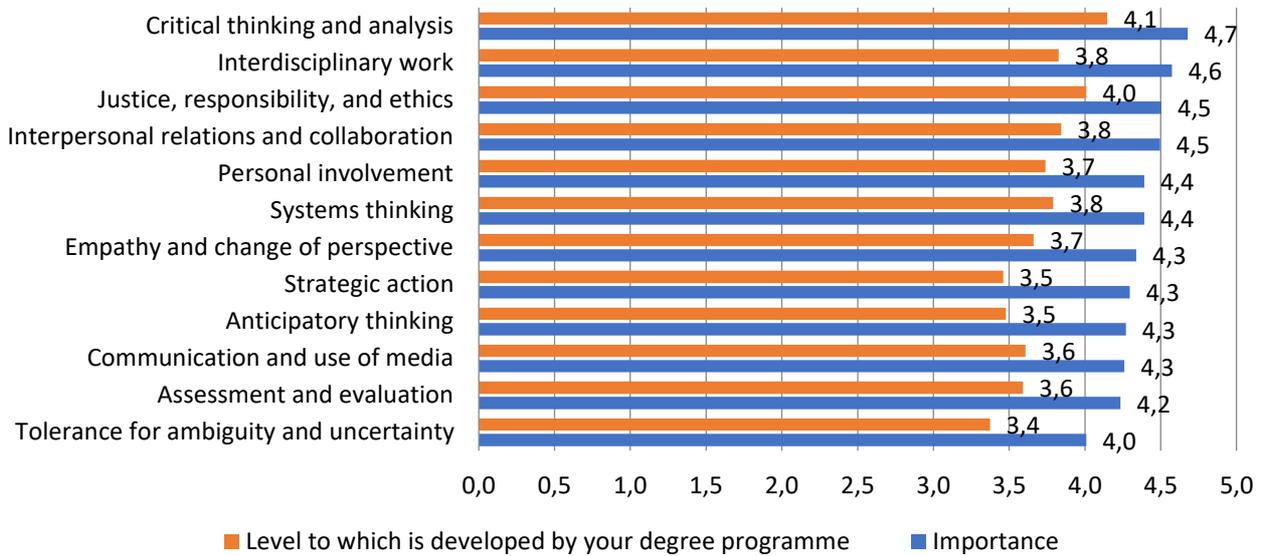


Figure 7. The importance and level of development of sustainability competencies according to HEI teachers (N=113)

Meanwhile, SMEs address that the most important sustainability competencies for SSH employees to have are *Interpersonal relations and collaboration*, *Communication and use of Media* (figure 8).

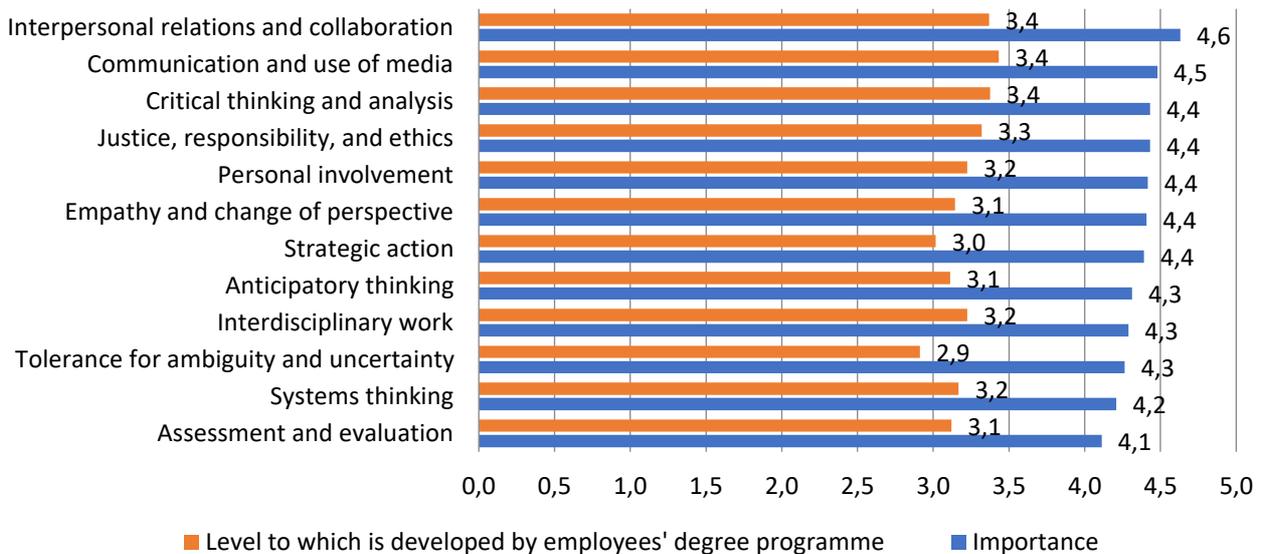


Figure 8. The importance and level of development of sustainability competencies according to SMEs (N=120)

NGOs prefer Justice, responsibility and ethics; Interpersonal relations and collaboration as sustainability competencies for SSH employees to have (figure 9). Even though the mentioned competencies are perceived as the most important, the most developed competencies slightly differ. SMEs' and NGOs' answers show that the most developed sustainability competencies of SSH students are Communication and the use of media; Justice, responsibility and ethics; Critical thinking and analysis.



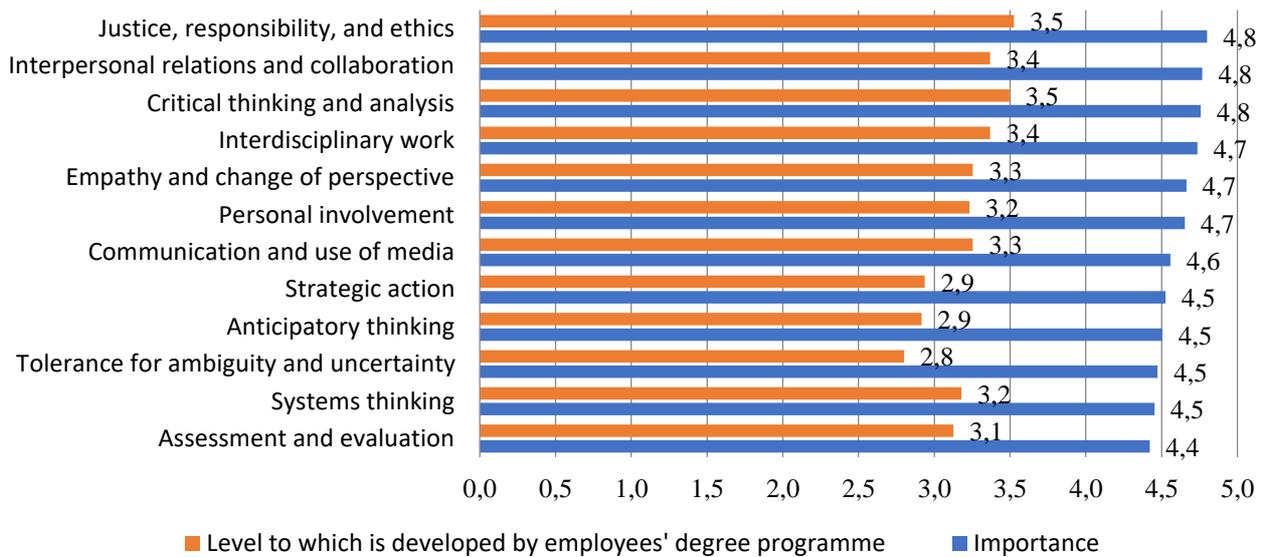


Figure 9. The importance and level of development of sustainability competencies according to NGOs (N=85)

It is important to note that some of the given competencies were perceived as important but barely developed, therefore causing the gap. For example, HEI teachers and students address the biggest gap between importance and level of development in Strategic Action and Anticipatory thinking competence.

According to SMEs' responses, Tolerance for ambiguity and uncertainty and Strategic action has the biggest gap between importance and development level. Finally, NGOs' responses show that Anticipatory thinking and Tolerance for ambiguity and uncertainty have the highest difference in importance and development level.

Finally, SMEs and NGOs were asked to evaluate their employees' preparation adequacy at universities. SMEs were more positive than NGOs in evaluating employees' preparation at universities (figure 10).



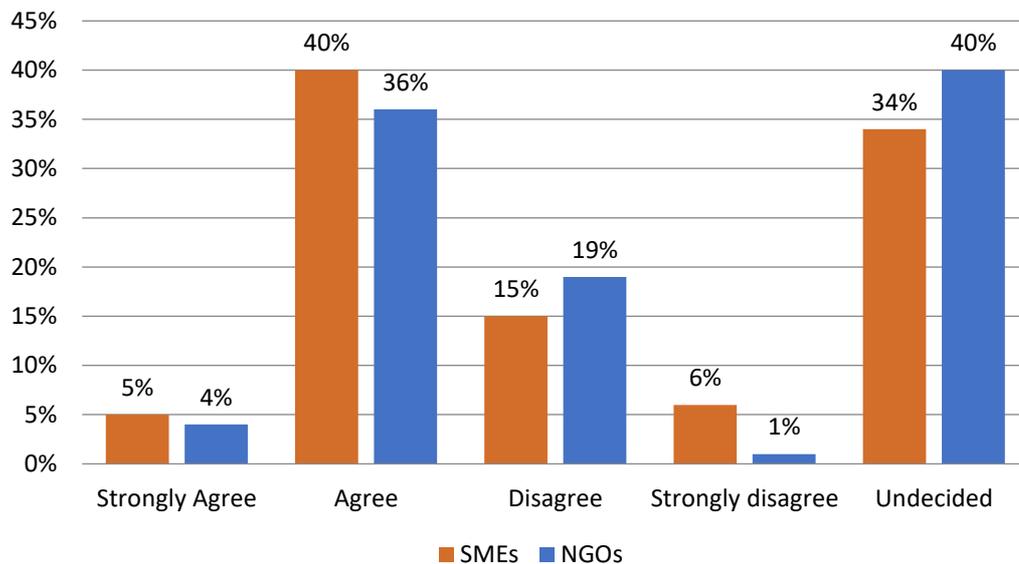


Figure 10. SMEs and NGOs evaluation of their employees' preparation adequacy at universities (NGOs N= 85; SMEs N=120)

SMEs and NGOs expect from SSH students to help with research and methodology during project preparation; have better insights about social, political, economic context and social needs; and be able to solve problems related to sustainable development goals in terms of education, gender equality, environment.

5.4 Teaching methods for achieving sustainability competencies

After deepening knowledge about sustainability competencies' importance and evaluation, it was relevant to see in which ways given competencies are achieved. Prof. Rodrigo Lozano (2019) in his research distinguishes pedagogic approaches which help to develop sustainability competences. This section analyses importance and the level to which each teaching method was applied during the study process. This helped to evaluate which teaching method was perceived as the most important, however, not all of them were sufficiently applied during the study process.

Survey results show that the most important pedagogical approaches, according to HEI teachers are Case studies (average number 4,4), Project or Problem-based learning (4,4), and Interdisciplinary team teaching (4,4). Pedagogical approaches, which were perceived as least important are Supply chain/ Life Cycle Analysis (3,4) and Traditional ecological knowledge (3,5). The most frequently applied methods, according to HEI teachers and students are Lecturing (4,4) and Case studies (3,8). The least applied method according to HEI teachers is Supply chain/ Life Cycle Analysis (by 2,6 average) (figure 11).



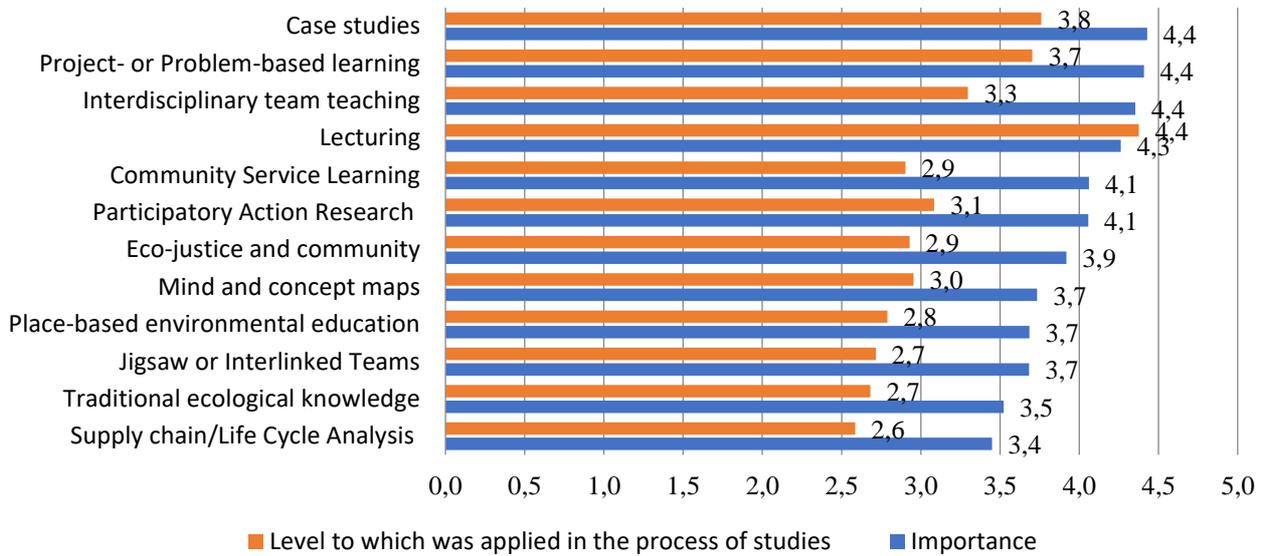


Figure 11. Importance of sustainability competencies and the level to which it was applied in the process of studies according to HEI teachers (N=113)

Students' opinion about the most important teaching methods is quite similar to HEI teachers as well. Respondents address *Case studies* (4,5), and *Project or Problem based learning* (4,4) as the most important teaching methods (Figure 12).

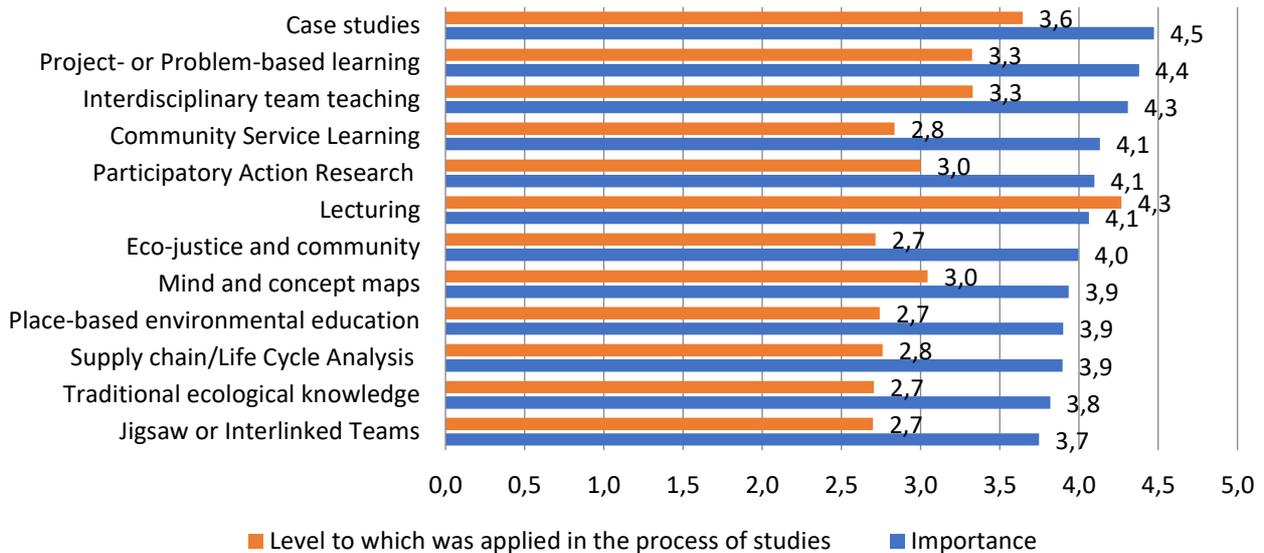


Figure 12. Importance of sustainability competencies and the level to which it was applied in the process of studies according to students (N=165)

The least important teaching methods, according to students are *Jigsaw or interlinked Teams* (3,7) and *Traditional ecological knowledge* (3,8). Students address that the least applied methods during studies are *Eco-justice and community*, *Place-based environmental education*, *Traditional ecological knowledge*, *Jigsaw or interlinked Teams* (2,7).



5.5 Teaching Methods

During the research, we divided the study process into three teaching methods: Traditional education, Virtual learning environment, and Real-world learning. It was relevant to analyse which of these teaching methods were used the most and least. Before giving the results, it is important to note that HEI teachers and students gave their answers by dividing 100 percent to all three teaching methods. Percentages were used to understand which part of each teaching method should take in the final learning process according to HEI teachers and students.

HEI teachers address that there is too much Traditional learning (52 percent) and it should be less (41 percent) (Figure 13). Students also stated that there is too much of Traditional learning (63 percent) in classes, it should be practiced less (46 percent). In general, HEI teachers and students stated that Traditional learning should take around 40 percent of the learning process

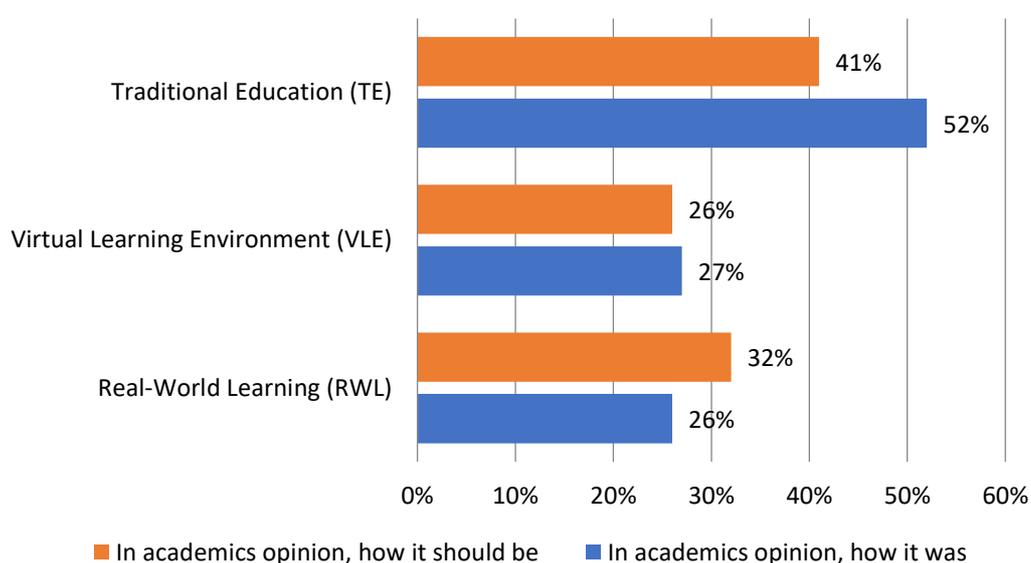


Figure 13. HEI teachers experience and expectations on teaching methods

Moving on to *Virtual learning*, it is important to note that COVID-19 may have affected survey results because there was an increase in virtual learning usage. HEI teachers stated that Virtual learning takes 27 percent and should be 28 percent. While students held the position that it was about 32 percent of *Virtual learning* during the study process and it should be a little bit less - 30 percent (Figure 14). To sum up, according to HEI teachers and students, *Virtual learning* is supposed to occupy around 30 percent of the study process.



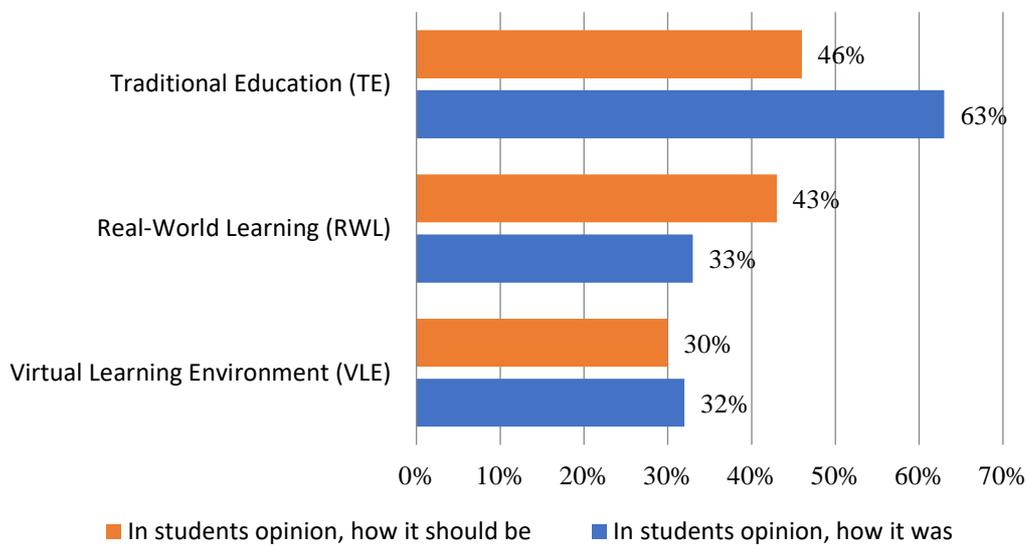


Figure 14. Students experience and expectations on teaching methods

Finally, *Real-World learning* was perceived as an underdeveloped teaching method in the study process. HEI teachers address that *Real-World learning* takes 26 percent and it should take more - 32 percent. Students indicated a greater need for *Real-World learning* than HEI teachers and stated that it should take 43 percent of the study process because now it takes 33 percent. In general, *Real-World learning* was given approximately 30-40 percent part to the whole learning period.

According to our study findings, HEI teachers and students had quite similar opinions. However, there is a need for more of *Real-World learning*, less of *Traditional learning* and *Virtual learning* was evaluated controversially.



6. Survey Key Findings

- In summary, results showed that the most relevant SDG for HEI teachers', NGOs', and SMEs' activities is Quality Education, while for students it is Gender Equality. That shows that most relevant goals for these target groups are associated with social issues.
- Students and HEI teachers address that Critical thinking and analysis and Interdisciplinary work are perceived as the most important and at the same time most developed during the study process. SMEs hold the position that the most important sustainability competencies for SSH employees are Communication and use of Media. NGOs prefer Justice, responsibility and ethics. However, both groups agree that Interpersonal relations and collaboration are also one of the most important sustainability competences.
- Problem or project-based learning and Case studies are perceived by HEI teachers and students as the most important pedagogical approaches developing sustainability competencies. While the most frequently used pedagogical approaches at university are Lecturing and Case studies. According to R. Lozano et al. (2019:13), Lecturing and Case studies are least likely to improve given sustainability competences. The author does not assume that these pedagogic approaches should not be practiced, on the contrary, it could be adjusted to other teaching methods, for example, Eco justice and community. Also, Eco justice and community is perceived as one of the most important methods to develop sustainability competences, however, our research results showed that this teaching method is not applied enough.
- Finally, results show that Traditional learning takes half of the study process at universities, even though there is less need for it. On the contrary, there is a higher need for Real world learning. These results address that universities are still applying traditional didactic approaches.



7. Interview Analysis

We will further proceed to the analysis of the semi-structured interviews. The interviews were conducted to deepen the insights received from surveys and desk research, better grasp the current position of SSH students in the labour market, and define the varying opinions on how SSH graduates' capabilities might intersect with developing sustainable innovation. Semi-structured interviews were conducted in 8 European countries with 48 representatives of 4 stakeholder groups of the SHOUT project -15 SMEs, 10 NGOs, 8 HEI teachers, and 15 students (Annex 1). Most interviews took between 20 and 40 minutes to complete and were conducted online.

Due to the nature of the semi-structured interview methodology, some questions were adapted to more accurately reflect the particular situation and context of the interviewee. However, 4 main themes could be identified that ultimately informed all interviews - identification of key sustainability competencies, their application in the labour market, treatment of Sustainable Development Goals, and teaching methods in higher education.

In the following sections, the results will be presented in the listed themes. The data is presented by comparing the responses of all countries to the interviews. Although countries differ in their experiences, many similarities have been found. Findings will be illustrated by the most detailed examples.

7.1 Sustainable Development Goals

For students and HEI teachers, the interview sought to confirm the interviewees' awareness of the SDGs and to better understand how they see their potential contribution to solving issues related to the SDGs. In terms of awareness, while all students admitted to having been aware of the SDGs, the extent to which they are treating the topic varies. Also, the situation in which they first familiarize themselves with the topic differs in each case. For one student (Stud_1), her first introduction to the SDGs came during the academic exchange abroad in a lecture setting. Meanwhile, no approach concerning SDGs was noted through her studies while in Lithuania. On the other hand, an Italian student (Stud_15) claimed that she became acquainted with SDGs in her management course through sustainable business cases.

These findings confirm the insights gathered through survey analyses, particularly that students are the least informed group when it comes to SDGs (40% of students in the survey said they were familiar with the topic).

Similarly, in line with the survey results, HEI teachers interviewed across all countries confirmed their proximity to the topic of the SDGs either through academic research or through practical work experience.

The interviews confirm survey results, namely, that disparity exists between the two groups in terms of knowledge of the SDGs. However, it is not clear as to why the topic has still not been introduced at the lowest levels of higher education. On the other hand, HEI teachers from Slovenia, Lithuania, and Croatia suggested that while students are not introduced to the SDGs by directly identifying them by name, the underlying themes relating to the SDGs are commonplace in the classroom.

While none of the interviewees were able to provide concrete reasons behind said disparity, a few key suggestions in how this introduction should be facilitated have been identified:



- SDGs should be introduced not only as a strategic framework but also as an ethical standard with practical ramifications.
- SDGs lack an emotional component; a more effective introduction to SDGs should seek to establish an emotional connection to the subject.

Both HEI teachers and students see their field of study as beneficial for implementing SDGs. The interviewees have identified the following potential (and actual) involvement in contributing to the main themes of the SDGs:

- Ensuring diversity of opinion in debates around SDG issues.
- Problem identification, processes development, and “tracing”.
- Comparing and evaluating international practices.

On the other hand, all interviewees struggled to identify their contribution more concretely, citing the vast variety of SDG topics as the main reason.

For NGOs and SMEs, the goal of SDG questions was to identify how their specific professional activities relate to the UN Agenda 2030 and to understand their approach to social responsibility in regards to their activities.

All interviewees are convinced their activities relate to the themes of the SDGs and had no difficulty identifying key themes. However, the *degree* to which their activities are related to the SDGs differs. Some cited activities that are outside of the scope of their main business model, others identified only a few activities that are related to SDGs, while only one of the interviewees (NGO_2) claimed SDGs play a key role in the self-evaluation of their activities and significantly determine the strategic direction of their establishment. Furthermore, clear distinctions between NGOs and SMEs appear difficult to draw, since both groups relate their activities to the SDGs to a varying degree.

In terms of social responsibility, most NGO and SME representatives did not have an official CSR policy except for a few cases in Croatia and Italy. Representatives which do not have a CSR policy, have developed unofficial practices and internal agreements in the shape of “intuitive” and “unwritten” rules, aimed at ensuring CSR. Despite the obvious variability in the informants’ official focus on CSR, all participants appear to have a genuine commitment to being socially-conscious.

7.2 Sustainability Competences

Interviewees were presented with a descriptive list of sustainability competences, identified in the articles written by Prof. Rodrigo Lozano¹⁴. The goal was to better understand the extent to which such competencies are developed during SSH students’ courses, and whether they (graduates) satisfy expectations set by employers (SMEs and NGOs).

The bundle of the most important sustainability competences varied *between* and *within* the groups. The major informing factor behind each decision is each participant’s background. For instance, SME representatives from Slovenia, Italy, and Lithuania give importance to the *Justice responsibility and ethics* competence and show their focus on fair production (SME_2). While representatives from the NGO sector (Greece, Lithuania, Slovenia) chose *Interpersonal relations and collaboration* and *Empathy and change of perspective* as it is

¹⁴ Lozano, R.; Merrill, M.Y.; Sammalisto, K.; Ceulemans, K.; Lozano, F.J. Connecting Competences and Pedagogical Approaches for Sustainable Development in Higher Education: A Literature Review and Framework Proposal. *Sustainability* 2017, 9, 1889; <https://doi.org/10.3390/su9101889>



important to ensure inclusivity through the ability to work with diverse groups of people or socially vulnerable groups.

Meanwhile, students' answers from Croatia, Italy, Slovenia, and Lithuania, highlight the importance of *Interdisciplinary work, Critical Thinking and Analysis, Empathy and Change of Perspective, and Tolerance for Ambiguity*. These competencies were selected because of the need to know how to deal with the unprogrammed decision and how to solve them in the best way. Also, the need to work with different disciplines to use all the possible knowledge to solve cases was expressed. HEI teachers from Slovenia, Italy, Croatia, and Lithuania mostly agreed on *Interdisciplinary work, Anticipatory thinking, Critical thinking and analysis, Strategic action* competencies development. The development of given competencies depends on the class the HEI teachers teach. It is important to note that both HEI teachers and students agreed on *Interdisciplinary work* and *Critical thinking and analysis* as most developed competencies during class.

The interviewees from academia agreed that there is not one most suitable teaching method for teaching sustainability competences. Instead, they underlined the importance of balance between theory and practice as providing the optimal way in achieving sufficient learning outcomes. However, when talking about the specific ways they taught sustainability competencies, the interviewees distinguished chiefly practical approaches - case studies, discussion-based learning, practical research, real-life team projects. Also, HEI teacher representative from Italy noted that the transfer of some of these competencies depends on the personal attitudes of the professor (for example empathy and ethics).

On the other hand, while SSH students from Lithuania claimed that practical application and experience is the ultimate way to develop sustainability competences, they admitted that their studies lacked a practical component. One student interviewee (Stud_1) compared her academic experience to learning through a "glass partition" - looking at things in a detached manner, far away from reality and practical application. One informant claimed that " $\downarrow \dots \uparrow$ many students are complaining that there is almost no practical application in their studies, even when the subject of their studies is very practice-oriented" (Stud_1). Another student (Stud_3) mentioned that the only way he gained sustainability competencies like critical thinking was through individual motivation and initiative - specifically by writing academic papers and conducting research.

Also, one Lithuanian student identified a lack of empathy from the faculty as an important hurdle to learning beyond the classroom. The student informant (Stud_3) described the relationship between students and the faculty as being too formal and based on a hierarchical structure. He claimed that the "authoritarian atmosphere" at the university stood in the way of fostering teamwork and cooperation. He claims, " $\downarrow \dots \uparrow$ there is a lot of alienation, strictly formal relationships. I think the situation is slowly improving, but I am missing that community feeling, teamwork, everything is too individualistic." Another student added (Stud_1) that the debate and discussion between students were not encouraged in the classroom, which further reduced her learning experience.

When SSH students were asked to name specific competencies that they looked forward to learning in their studies, students focused on the following:

- Critical thinking and analysis
- Communication and use of media
- Interdisciplinary work
- Tolerance for ambiguity and uncertainty
- Interpersonal relations and collaboration
- Empathy and change of perspective



Students and HEI teachers alike agreed that the acquisition of sustainability competencies improves chances of employment after graduation by making the student stand out from the competition. Both groups equally agreed that the level of acquisition of these sustainability competences depended on the individual motivation of each student. In other words, students and HEI teachers alike could not ensure that all graduates from a particular program would come out with the same competences.

Additionally, SSH students described “feeling lost” after graduation. One student (Stud_2) claimed she gained a wide range of competences through her studies, but lacked direction in how she could use them in practice. The interviewee also agreed that a big part of the problem is the general attitude towards SSH practitioners in the labour market - specifically, that SSH graduates cannot bring any added value. *“With historians, and humanities students more generally, the thing is - you get the competences, a wide set of knowledge, but you need to figure out how to use it in the social sphere, in the private sector or elsewhere. Because people are not used to thinking that humanities students can bring value to them,”* informant (Stud_2) claimed.

NGO and SME representatives believe that a student is unable to acquire sustainability competences in the classroom. In the view of the interviewees, the only way to gain said competences is through practice and “getting your hands dirty” at work. Some representatives also mentioned that capabilities like interdisciplinary work, and critical thinking and analysis, are innate abilities, unique to each person.

Representatives from these two groups were also clear to distinguish that students acquire *theoretical* knowledge through their studies, but the skills and competencies that are valued in *practice* are often different and under-developed. *“University teaches you the theory, which is not particularly useful in the day-to-day tasks in practice,”* said one informant (SME_1).

Consequently, NGO and SME representatives unanimously agree that sustainability competencies are not unique to SSH students. According to one NGO representative, many STEM students that she has come in contact with have demonstrated many of the same sustainability competencies distinguished by Prof. Rodrigo Lozano. The view of the informants is that to say that all SSH students possess unique sustainability competencies would be an unfair generalization.

In contrast, one NGO interviewee (NGO_1) hypothesized that perhaps SSH programs attract specific types of people who have already developed some of the sustainability competencies, like effective communication. *“I think that if a person chooses to study in an SSH program, she already has that moment of teamwork, communication, she is already capable of doing these things, because, in the end, that will be their work in one way or another. Of course, they continue to develop these things in their studies, but it comes more naturally to such people,”* said the informant (NGO_1). Similarly, in some cases, SSH programs may provide a theoretical basis for some of these competencies, like communication and the use of media, that are lacking in STEM programs.

Interestingly, one SME interviewee (SME_1) stated that while she is unable to single out SSH students as particularly equipped in sustainability competences, she claimed that students coming from the ISM University (a private management university in Vilnius, Lithuania) are somewhat exceptional in their contemporary outlook towards responsibility, dedication, and initiative-taking.

NGO and SME interviewees identified the following gaps in SSH graduates’ skills:



- Quantitative ability and financial literacy
- Process management and technical know-how
- Practical application and moving from idea to action.

7.3 Teaching Methods

A set of questions were dedicated to both students and HEI teachers in order to deepen the knowledge of how sustainability competencies are developed during higher education studies. The two groups were introduced with three teaching methods: (1) Traditional education refers to direct instruction and lectures, learning through listening and observation, and may also include active learning; (2) Virtual learning environment refers to an online system that allows teachers and trainers to share educational materials and communicate with their learners via the web; and (3) Real-world learning, based on practice and experiences that link professional knowledge to action. Based on the views of students and HEI teachers, the following sections describe the role of each teaching method and its advantages and disadvantages.

7.3.1 Traditional Education

Both students and HEI teachers agree that traditional education is the most applied teaching method in their respective study programs. According to students, it can take up between 60% and 70% of the whole study process. However, it may account for a smaller part in higher stages of education (masters or doctoral). According to HEI teachers, traditional education takes up approximately 30% of the whole study process. Lithuanian and Italian HEI teachers agree that traditional education is valuable and practiced because it allows for live communication and interactions during lectures, but it should re-orient itself to allow for more active learning - specifically, it should include more discussions, problem-based thinking, and examine practical issues. Discussed improvements of Traditional education could contribute to better quality in the study process.

When students and HEI teachers were asked to distinguish the advantages and disadvantages of traditional education, they emphasized different aspects. Lithuanian students noted that traditional learning methods help to focus better, learn self-discipline, and how to talk and articulate in front of large audiences. Also, Lithuanian and Italian students claim that traditional education provides structured information, encourages discussion, and allows them to form direct relationships with professors and classmates. Meanwhile, HEI teachers from Italy, Croatia, and Lithuania believe traditional education is the most useful tool to relay theoretical information, and it is pivotal in order to shape a firm backbone of overall knowledge: "I believe in synergy. ↓...↑ Theory allows better application of knowledge in practice. We strive to provide theoretical knowledge that is easy to apply." (LT_Teach_2). HEI teachers reflected that traditional teaching helps to develop theoretical knowledge which is needed to learn more about the practical world. When discussing disadvantages, students and HEI teachers of Slovenia, Lithuania, and Italy had similar opinions, stating that traditional education, and one-sided lecturing, in particular, tend to suppress critical thinking and do not favour independent work nor give opportunities for students to express themselves. Also, an Italian HEI teacher stated that traditional education lacks practice, it cannot give a perfect "know-how".



7.3.2 Virtual Learning Environment

Generally, students claim that virtual learning typically takes a small part (approximately 20%) of the overall study process. Likewise, HEI teachers stated that virtual learning was rarely practiced for organizing lectures. However, due to the Covid-19 pandemic and subsequent confinement measures, the distribution of teaching methods was significantly altered and virtual learning now accounts for 70% of the learning process. Due to greater use of this method, HEI teachers revealed an untapped potential of virtual learning as an alternate means to gain practical skills: “When we did not have the opportunity to go outside because of the pandemic, studying through practice was transferred to the virtual environment, where students were practicing in creative virtual workshops” (Teach_1).

What is more, both students and HEI teachers from Slovenia and Lithuania considered the virtual learning environment as, first and foremost, a convenient place to store and share educational materials related to lectures: “Learning in a virtual environment is a form of traditional teaching, I usually upload texts and ask students to analyse them, which develops their analytical skills. The virtual environment is used to transmit information. It is part of traditional teaching,” claimed one HEI teacher (Teach_1). Interviewees believe that virtual learning has a huge potential for embracing different teaching practices, for example, organizing real-world and traditional learning procedures on online platforms.

When asked about the advantages of virtual learning, students claimed that this particular learning method provides them with the most freedom - students can access information any time and in any place: “It is very practical, you can be physically independent.” (Stud_3). Also, students cited as an advantage the opportunity to listen to foreign lecturers, the ability to access a great amount of visual and audio resources, as well as other globally dispersed information in various formats. At the same time, according to Italian students, virtual learning was perceived as disadvantageous for its lack of community and emotional connection. Students from Lithuania also claimed it is difficult to choose among a vast array of global information. While an Italian HEI teacher highlighted that some students do not have good devices and the internet connection to use this environment.

7.3.3 Real-World Learning

Students claimed that real-world learning also takes up a minor part (20%) of the study process. Notably, the proportion of real-world learning incrementally increases in the final year of university, when students are asked to conduct research and/or have internships. Meanwhile, HEI teachers claimed that the real-world learning part depends on the course, it can vary from 10% to up to 70%. A Lithuanian HEI teacher expressed an opinion that practical learning is essential: „It is not enough to sit in the classroom, they (students) want to go outside to try stuff, they want certainty, they need to grasp real things, they want real tasks” (Teach_1). Generally, HEI teachers associate real-world learning with case analysis, field research, and conducting creative work. Additionally, the Lithuanian HEI teacher held the opinion that practice is present in different teaching methods: traditional teaching and virtual learning environment.

In terms of advantages of real-world learning, students praised practical experience as the most valuable outcome. Practical knowledge is seen as an asset in professional life, it helps students to become more independent: “It helps to become self-reliant, to learn how to do things. It is one thing to listen to lectures and another to create and do by yourself. As a professional, you only become self-sufficient and independent



through practice.” (Stud_3). HEI teacher in Slovenia stated that real-world learning is one of the sources to strengthen sustainability competences. It is assumed that first-hand experience develops professional practical skills and competencies. On the other hand, while students expressed a need for more real-world learning, they also warned about a lack of mentorship: “It would be a shame if you were left alone in that practice, this is the most common drawback of practice.” (Stud_2). Students emphasized that there is a demand for someone to give advice and coordinate real-world learning in order to reap full benefits.

7.4 Higher education institutions and the labour market

Survey results showed that SSH students’ competencies are important to implement SDG-related activities of SMEs and NGOs. However, in what ways are SSH graduates valued in the labour market with given competences? To deepen insight in this part, the role of university before the labour market and labour market relations with graduates are analysed.

7.4.1 The role of university before the labour market

Students and HEI teachers were asked if universities should take any responsibility for students entering the labour market after graduation. This question encouraged informants to reveal issues faced during and after university studies.

From the beginning of studies, Lithuanian HEI teachers observe students’ struggle to study and at the same time to earn income, especially in bigger cities with higher living costs. HEI teachers from Lithuania claim that this problem is crucial, because many great students cannot afford to study, and as a consequence, their productivity and the quality of the learning process decrease: “I can only observe as a teacher and it is very sad when students who have good intellectual abilities and motivation eventually have to leave just because they do not have enough funds to live in Vilnius.” (Teach_1). As a consequence, according to the interviewee, plenty of students with great motivation cannot acquire a degree. There were suggested solutions to provide students with an opportunity to work on campus or in an administrative role. The struggle of balancing work and studies is mostly visible among undergraduates. In the meantime, postgraduate students are seen as more confident and having clearer expectations from higher education. In this case, the role of a university is to provide particular competences and knowledge for students, who are certain about their goals.

In terms of the role of universities in graduate employment, Lithuanian students indicated that the university should stay neutral because it is not its task to find employment for a student. Students do not expect universities to help them find a job but believe universities should better educate students about existing opportunities after graduation. On the other hand, Italian and Slovenian students stated that the university has the responsibility to mediate between businesses and students. Universities should aim to build a network of partnerships between companies and universities.

In contrast, according to Slovenian and Lithuanian HEI teachers, the university indeed offers help in building students’ careers through well-established career centres, alumni database, and helping in finding internships. Mentioned alumni centres are perceived as resources or gateways that help to enter the labour market. The alumni database, according to students, helps to see a wide spectrum of employment possibilities after graduation. Students also appreciate receiving informational letters from the university about possible



career perspectives. Also, career days are seen as a great practice for connecting with future employers. For example, HEI teachers from Croatia are aiming to give students a wider perspective that involves students' future role in society as experts in the field of their study. Finally, one HEI teacher from Lithuania noted that the name of a university itself might be useful in finding a job because it is associated with perceived prestige in the labour market.

7.4.2 The position of SSH students with sustainability competences in the labour market

Are sustainability competences more important than professional competences in the labour market? What is the difference between having STEM competencies and SSH competences? We have asked these questions of our informants in order to understand how SSH graduates are perceived in the labour market. This section is oriented towards the labour market and the role of SSH graduates.

The majority of Italian and Lithuanian HEI teachers disagree with the statement that SSH graduates are not valued in the labour market. They assume that SSH students are widely seen as having ambiguous skills. Tasks and activities of STEM students are more comprehensible to society, meanwhile, activities of SSH graduates tend to be abstract and vague. However, HEI teachers assume that there is a high demand for SSH students, especially in fields of management and business, particularly because of their communication and management skills, and the ability to understand consumer needs. In contrast, students from Italy and Slovenia expressed the belief that SSH students are underrated and should be taken into consideration more by the labour market.

HEI teachers from Lithuania believe that SSH graduates with sustainability competencies seek independence, mobility, and freedom in the labour market through entrepreneurship. Additionally, one HEI teacher (Teach_1) claims that SSH graduates often create work opportunities not only for themselves but also for future students. This type of phenomenon is perceived as a testament to the university's contribution to providing sustainability and professional competences. Also, sustainability competences might contribute to the "brain drain" phenomenon, because graduates with sustainability competencies are more flexible, mobile, and looking for better opportunities: *"With such competences, as more independence and freedom emerge, one does not want to be dependent on one place ↓...↑. They will look for cities where there is the greatest concentration of creative people and where those creative people create their activities and experiment."* (Teach_1).

7.5 Evaluation of SSH students by SMEs and NGOs

In order to gain insight into how SMEs and NGOs evaluate students with a background in social sciences and humanities, the interviewees were asked about the type of professional profile they look for in their employees and for what skills and tasks they hire SSH graduates.

SMEs and NGOs from Greece and Lithuania agreed on the importance of specific personal qualities when evaluating potential employees. As a reason, one Lithuanian interviewee (SME_3) stated that personal qualities are perceived as more significant in a new employee because young graduates are not prepared to



enter the labour market right after university due to insufficient knowledge. Similarly, NGOs claim that values, perceptions, and soft skills are more important when making hiring decisions about young graduates.

In addition, one Lithuanian SME (SME_1) suggested that the level of a specific job position determines what profile is sought after - education might mean less when looking to fill an entry-level position, but in the higher levels of the corporate ladder, education and acquired experience seem more important: “↓...↑ arranging documentation, communicating with customers, communicating with partners, these are positions where you don't need to have any theoretical knowledge to work with. ↓...↑ But if this is a position where we need theoretical knowledge (to know what is a debit and what is a credit), then you need a person with the appropriate education.” (SME_1). Moreover, SMEs claimed that the type of education matters. College graduates are more seen in technical roles and craftsmanship, while university graduates are perceived to be better equipped to address unique situations.

When talking about the uniqueness of SSH graduates, NGOs, and SMEs from different countries had quite different opinions. Some representatives from Lithuania and Germany could not identify SSH students' uniqueness as compared to graduates of other disciplines. In contrast, Slovenian, German, and Lithuanian representatives were able to more clearly identify key characteristics that are common for most SSH students: “I expect flexibility and versatility. Graduates of these specializations do not have that common state of mind of ‘I can't do this, I am only good at this and that’ that many STEM graduates possess, they are open to constant learning and develop” (NGO_1).

Furthermore, SME and NGO informants were asked about the skills and tasks for which they (would) hire SSH graduates. A Lithuanian SME informant (SME_2) reflected upon the value of SSH graduates and said that their unique perspective is valuable during social changes and transformation. In this particular context, SSH graduates are seen as professionals who can comprehend social trends and effectively interpret them, which are key skills that can have a direct effect on how management strategy is organized. Other informants suggested that SSH capabilities are important in projects and/or activities associated with innovation. Furthermore, an Italian SME representative stated that they would hire SSH students with strong communication skills to add value to the company. A Greek NGO representative added that SSH graduates are valuable when working with socially vulnerable groups and projects aimed at social inclusion. Also, according to Croatian SMEs and NGO interviewees, SSH employees perform various tasks in their companies; from the management and administration of the company to different jobs in economics, law, and translation.

Finally, Lithuanian NGO and Greek SME informants indicated that the SSH perspective is extremely valuable in community management because SSH graduates are typically able to work with diverse groups of people, particularly vulnerable social groups. According to the same informants, SSH graduates boast a high level of empathy, which allows them to work hand-in-hand with people of all walks of life: “↓...↑ a person with an SSH background could even be a mediator, resolving issues between different target groups” (NGO_1).



8. Interview Key Findings

Sustainable Development Goals:

- Following the survey results, the interviews reveal that students are the group least familiar with the SDGs. The disparity is even more pronounced when compared to HEI teachers, who demonstrate proximity to the subject
- HEI teachers suggest that the underlying themes relating to sustainable development are introduced to students in the classroom, but not under the name of the SDGs
- SMEs and NGOs are aware of the SDGs but differ in their commitment to the SDGs
- Most of the SMEs and NGOs did not have official CSR policies. However, both have developed informal procedures that pertain to CSR

Sustainable Competences:

- No clear patterns between the different choices of the most important sustainability competencies could be distinguished
- While most SSH students claimed that practical application and experience is the ultimate way to develop sustainability competences, they admitted that their studies lacked a practical component
- Students and HEI teachers agree that the level of acquisition of sustainability competencies depends on the individual motivation of each student and is not dependent on a particular program
- NGO and SME representatives believe that a student is unable to acquire sustainability competences in the classroom. According to both, theoretical knowledge learned at a university does not match the competencies valued in practice
- NGO and SME representatives unanimously agree that sustainability competencies are not unique to SSH students

Teaching methods:

- Interviews with students reveal a significant demand for *Real-world learning* as it could be related to the possibility to provide sustainability and professional competences
- *A virtual learning environment* is perceived by both students and HEI teachers as a potential place to incorporate other teaching methods and store learning material. It is seen as a flexible learning place
- Students perceive *Traditional learning* as lacking active teaching methods. Active learning should be included in traditional learning to encourage student engagement in the study process
- HEI teachers suggest that all teaching methods overlap and complement each other. They claim that the synergy and balance between different teaching methods is the best way to teach sustainability competences, and it helps to implement innovative problem-solving approaches

Higher education institutions and the labour market:

- The major role of a university is to provide the required competencies that allow students to be flexible in the fast-changing world. Students expect universities to aid them in finding employment by creating alumni databases, founding career centres and organizing career days



- HEI teachers do not agree with the statement that SSH graduates are not valued in the labour market. While students claimed that SSH graduates should be more appreciated in the labour market
- HEI teachers claim that SSH graduates with sustainability competencies bring major changes to the labour market by working independently or creating new jobs

Evaluation of SSH students by SMEs and NGOs:

- NGO and SME representatives had an ambiguous position towards SSH graduates. Not all of them could identify their professional skills. However, representatives could identify SSH graduates' empathy, flexibility, innovation
- SMEs put little importance on professional education and instead focus on the personal qualities of their (potential) employees
- SSH graduates' sustainability competencies are not well-established within the SME and NGO sectors, and graduates with this background could benefit from clearer indicators as to *why* they are valuable and in *what areas*.



9. Conclusions

SHOUT is aiming to strengthen the innovation capacity and transformational role of Higher Education institutions (HEI), SME and NGOs when dealing with complex problems presented in SDGs and developing innovative sustainable solutions. The project utilises an inter-sectoral cooperation model and enhanced sharing of knowledge between different stakeholders in eight European countries participating in the project consortium – Croatia, Cyprus, Germany, Greece, Italy, Lithuania, Portugal, Slovenia.

To reach its ambitious objective, the partnership carried out national desk research and collected interviews and questionnaires that supported with the writing of this paper. The initial research was based on the analysis of the relevant legislation, policy, and practices across the eight European countries. This helped providing an overview of statistical data concerning the SSH in the HEI's. Ultimately, the project has identified the needs of students and professors, job market trends and offered a description of the state of art: SSH Skills Ecosystem in relation to SDGs related jobs.

From a legislation and policy standpoint, all of the governments of the participating countries are aware of the importance of sustainable development and SDGs. This awareness shows in the legislators' current work on introducing appropriate laws to regulate these areas. However, there is still much room for improvement in the application of SDGs in everyday life. Politicians acknowledge the role of academia when dealing with SDGs, but the research has showed that the collaboration between the governments and the HEIs is still inadequate and that SSH-oriented education is rarely present in the HEIs curricula. This study demonstrated how in countries, such as Italy and Germany, with a well-established system of the SSH and a long tradition in the study of humanities, a greater attention is paid to SDGs.

This paper has highlighted the importance of the correlation between SDGs and academia not only in terms of sustainable actions conducted within universities but also in the context of curricula and teaching processes. In the field of SSH, despite the eight countries acknowledge the importance of higher education in general, the work of bringing the SDGs and the SSH together is still largely incomplete. This inadequacy has also emerged in the results of SHOUT questionnaires and interviews where students ended up being the respondents least familiar with the SDGs compared to teachers, NGOs and SMEs interviewees. SSH students who participated to the interviews and questionnaires also admitted that their studies lacked a practical component to develop sustainable competencies.

Regarding the teaching methods useful to acquire such competencies, the research has showed a discrepancy in the approaches. While SSH students demanded a Real-world learning approach that could help them gain competencies also relevant for their professional careers, HEI teachers claimed that the synergy and balance between different teaching methods is the best way to teach sustainability competencies, and it helps implement innovative problem-solving approaches. A different view is offered by NGO and SME representatives who took part to SHOUT interviews and questionnaires. Both groups believe that students are unable to acquire sustainability competencies in the classroom and that theoretical knowledge does not match the competencies valued in practice.

The research has revealed a positive perception of SSH students in all countries: these students are generally believed to possess useful competencies (critical thinking, creativity, coordinating with others, teamwork, emotional intelligence, negotiation skills, communicability, knowledge of foreign languages) and their flexible/adaptable skills are increasingly required in the workplace. Therefore, the research suggests the involvement of the SSH into the realization of the SDG might bring a positive push.



An ambiguous view towards SSH graduates is offered by NGO and SME representatives interviewed for the project. Not all of them could identify SSH professional skills, however, some of them acknowledged SSH graduates' empathy, flexibility and innovation. Personal qualities have been valued by SME representatives who admitted to put little importance on the professional education of their potential employees. Finally, SSH graduates' sustainability competencies are not well-established within the SME and NGO sectors, and graduates with this background could benefit from clearer indicators as to why they are valuable and in what areas.

The research conducted by the SHOUT Consortium and the surveys and interviews collected by the partners involved in the project, has highlighted the crucial role of SSH in the achievement of the Sustainable Development Goals. In particular, SSH students, graduates and researchers hone the skills to bring the much-needed sustainable changes in their own societies. What is currently missing is the inter-sectoral cooperation between the main actors: HEIs, NGOs and SMEs. SHOUT consortium is aiming to bring all the parties together and bridge the gap between research and practice. The collaboration among different sectors can then lead to the development of innovative sustainable solutions to the complex issues presented in the SDGs.

SHOUT Project is aiming at creating innovative educational programmes and traineeship programmes for SSH students, graduates and academics, in order to improve their knowledge, skills and competencies in communication and responsiveness to Sustainable Development Goals challenges, entrepreneurship and research-oriented mind-set. Lastly, the Consortium plans to create a Social Sciences and Humanities research and innovation HUB, a space where HEIs, SMEs and NGOs will be able to exchange knowledge, facilitate further cooperation and strengthen joint sustainable innovation solutions at the European level.



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Annexes

Annex 1- The table of informants

Nr.	Informant Code	Target Group	Country	
1.	Teach_1	HEI Teacher	Lithuania	n/a
2.	Teach_2	HEI Teacher	Lithuania	n/a
3.	Stud_1	Student	Lithuania	Undergraduate
4.	Stud_2	Student	Lithuania	Postgraduate
5.	Stud_3	Student	Lithuania	Postgraduate
6.	Stud_4	Student	Lithuania	Postgraduate
7.	NGO_1	NGO	Lithuania	n/a
8.	NGO_2	NGO	Lithuania	n/a
9.	SME_1	SME	Lithuania	n/a
10.	SME_2	SME	Lithuania	n/a
11.	SME_3	SME	Lithuania	n/a
12.	NGO_3	NGO	Cyprus	
13.	SME_4	SME	Cyprus	



14.	NGO_4	NGO	Greece	
15.	SME_5	SME	Greece	
16.	SME_6	SME	Greece	
17.	Stud_5	Student	Croatia	
18.	Stud_6	Student	Croatia	
19.	Stud_7	Student	Croatia	
20.	Teach_3	HEI Teacher	Croatia	
21.	NGO_5	NGO	Croatia	
22.	SME_7	SME	Croatia	
23.	SME_8	SME	Croatia	
24.	SME_9	SME	Croatia	
25.	SME_10	SME	Croatia	
26.	Stud_8	Student	Portugal	
27.	NGO_6	NGO	Portugal	
28.	NGO_7	NGO	Portugal	
29.	SME_11	SME	Portugal	



30.	Stud_9	Student	Slovenia	
31.	Stud_10	Student	Slovenia	
32.	Stud_11	Student	Slovenia	
33.	Teach_4	HEI Teacher	Slovenia	
34.	Teach_5	HEI Teacher	Slovenia	
35.	Teach_6	HEI Teacher	Slovenia	
36.	Teach_7	HEI Teacher	Slovenia	
37.	NGO_8	NGO	Slovenia	
38.	SME_12	SME	Slovenia	
39.	Stud_12	Student	Italy	
40.	Stud_13	Student	Italy	
41.	Stud_14	Student	Italy	
42.	Stud_15	Student	Italy	
43.	Teach_8	HEI Teacher	Italy	
44.	NGO_9	NGO	Italy	
45.	SME_13	SME	Italy	



46.	SME_14	SME	Italy	
47.	NGO_10	NGO	Germany	
48.	SME_15	SME	Germany	





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