Short Competency Report

Overview of main results from a survey undertaken as part of SEA-EU 2.0 Task 2.2

Fostering inclusive, digital and green interdisciplinary and innovative training pathways

EUROPEAN UNIVERSITY OF THE SEAS

Co-funded by the European Union

Table of contents

Introduction

The European University of the Seas (SEA-EU) is one of several alliances in the European Universities program that aim to work towards achieving the priorities of the European Commission. Four priorities are selected as relevant for the SEA-EU alliance: a European Green Deal, a Europe fit for the digital age, promoting our European way of life and an economy that works for the people. The SEA-EU alliance targets three key levels in the work to contribute to these priorities: partner universities and the Alliance, individuals (including students, staff, and citizens), and European education and research areas, as well as international cooperation.

The SEA-EU aims to create conditions that enhance integration among alliance universities, provide personalized skill-based curricula, facilitate diverse mobility opportunities for students and staff, promote research-based education, prioritize inclusion, support open educational resources and open science, and ensure the long-term sustainability of the alliance. These aspirations should be viewed within the international context provided by the SEA-EU Alliance, which promotes sustainable cooperation at different organizational levels, while also acknowledging and respecting the unique cultural and linguistic identities of each university. Within the SEA-EU 2.0 project, specifically in Work Package 2: Education and Training, Task 2.2 aims to foster inclusive, digital, and green interdisciplinary and innovative training pathways.

Fostering inclusive, digital and green interdisciplinary and innovative training pathways

In this section, we describe task 2.2 with a main focus on its first step, a survey. We present the different parts of the process of development, finalizing and distribution of the survey. We address some of the topics that have been up for discussion during the development of the survey questions, both of an academic, technical and practical nature.

The objective of task 2.2 is to encourage innovative training activities that foster inclusive digital and green interdisciplinary and innovative skills (the Task description is in Appendix 4). The first step (milestone 8) in this task is the following:

"Assessing the various needs and preferences for competence building within the SEA-EU. *A survey will be undertaken to gather information that will aid in designing and organising courses at different levels, ranging from the introductory level to the highly experienced level."*

The task as a whole involves creating training pathways for academic teachers and staff to acquire essential inclusive, digital and green interdisciplinary and innovative skills for the future. This will be achieved by providing diverse courses within the alliance and fostering the exchange of experiences among academic teachers and staff.

The related activities and milestones include developing and organising innovative training for *digital and green challenges*. In addition, a summary event will be arranged - a SEA-EU Seminar of Innovative and Green and Digital Pedagogy Programme. This event will target academic teachers and will be dedicated to novel methodologies, tools and approaches responding to the needs of the changing Higher Education Institution ecosystem. The final achievement of the seminar and the innovative training schemes will be a Digital Sharing of Innovative Tools and Pedagogies as an open-source of good practices ready to implement and replicate within the Alliance. The milestones (MS8, MS9, and

MS10), of which the survey is the first one (MS8), and their connection to deliverables are presented in the table below.

MS8	Completed survey	2	NORD	Courses at different levels require information about people`s competences level and course needs/preferences	M9	Short competency report
MS9	Work shop	2	NORD	Meet to discuss the design and organising of green and digital courses	M15	Agenda and attendance list, publication on website
MS10	SEA-EU Seminar of Innovative and Green and Digital Pedagogy Programme	2	NORD	A summary event addressed to academic teachers and dedicated to novel methodologies,to exchange experiences with course participants regarding digital sharing	M36	Agenda and attendance list; publication on website.

D2.1	Digital sharing of innovative tools and pedagogies	2	NORD	/DEC —Websites, patent filings, videos, etc/	/PU — Public/	M42	Public online information, in English.

Theoretical, philosophical, and practical inspirations

The survey was designed through a process of co-creation in a core academic team and with input from an extended interdisciplinary panel of experts, and other representatives in the alliance. In addition, we took inspiration from research articles, previous surveys and the SEA-EU's own mission statements.

In this section, we highlight some of the theoretical, philosophical and practical inspirations that have influenced this process. The understanding of what digital and green training pathways can entail affects the questions that are asked and what we look for. By opening up to a greater degree of input and co-creation, we achieve a nuanced and horizon-expanding process that includes different perspectives. We also had background material from Nord University about former sustainability projects, and a previous survey from SEA-EU 1.0, where, among other things, knowledge about sustainability among employees was analysed. We took inspiration from SEA-EU's SDGs Declaration stating that:

"The SEA-EU Alliance Universities are the right place to act for a transformation of our world in order to contribute to the survival of humanity; it is our vision and responsibility as we are engaged in the construction of knowledge and its transfer to the younger generation. We need to move away from the trajectory that started with the Neolithic revolution, accelerated with the use of fossil fuels, and today leads to the widespread use and overuse of chemicals in all sectors of the economy. We also need to rethink what a "successful life" is: to have or to be? The technological transition is inevitable but will not be enough. We need to change our ways of being in the world, of housing, of feeding ourselves, of moving around. This will also necessarily involve a revision of our relations with the non-human living world" (from SDG declaration, sea-eu.org).

Some use the word green in a way that includes environmental, economic and social sustainability, discussing the relation and hierarchy between the three parts. Stricter environmental requirements, better economic practices and more efficient technology are necessary, but it is not enough to mitigate the symptoms resulting from being placed in an unsustainable trajectory. The SDGs indirectly illustrate these symptoms by providing goals and solutions for betterment. What is meant by the term green is a matter of great debate, some argue that the green economy has contributed little to solving the major environmental challenges; instead, the green economy has led to the challenges being obscured by environmentally correct words and concepts (Wackernagel and Rees, 1996). Some examples might be sustainable growth, green marketing, green oil industry, sustainable aviation, and the like. Similar discussions exist in terms of the circular economy, which can serve as a framework for radical changes on one side and on the other side as a symptom-reducing activity to remain within the system

(Temesgen et. al, 2019). The question is whether a narrow or wide approach to the concept of green, is appropriate, meeting the diversity of university programs. Could a narrow approach seem less motivating for some? And on the other hand; could a wide approach become too vague?

SEA-EU mission statement advocates that education for sustainable development provides a chance to fundamentally reconsider the educational landscape. This increasingly involves adopting a holistic system approach that positions education as a pivotal driver of transformative change. In this context, it is worth emphasizing Skirbekk (2019) as he summarises a dual challenge: his insights are valuable for understanding how diverse challenges are interwoven into real-world practice and for advancing theoretical understanding across various fields. In practical terms, numerous environmental, social, and economic issues are interlinked and can exacerbate each other's effects. From a theoretical standpoint, there is no singular scientific discipline that can fully grasp the complexities of these problems and offer comprehensive solutions to the array of challenges they present. The complex issues of a sustainable society need an innovative and interdisciplinary approach (Berg et al, 2020) .

This underpins the need for developing interdisciplinary approaches and training pathways, allowing faculty and students to engage across different subjects, and together with the wider society. To foster awareness and understanding of the global challenges, we think that the alliance gives a possibility for developing courses across the partner universities. These courses should also be closely connected to current research and discourse on the SDGs, sustainability, and digital technology, and their incorporation in university level teaching (see for example, Bennich et al. 2020, Moallemi et al. 2021, Pradhan et al. 2017, Chankseliani and McCowan 2021, Leal Filho et al. 2021, and Markauskaite et al. 2023).

We live in an increasingly digitalized world, where the boundaries between the physical and virtual become more fluid. The internet, global communications and digital networks connect us across borders and cultures. The objects surrounding us get digitalized. To understand our situated physical world, we augment it and mediate it through digital technology; we use search engine, artificial intelligence, image recognition, Augmented Reality (AR) to examine and guide us and act more informed. The digital plays a role in multiple dimensions of our daily life; we connect and interact with family, friends, colleagues, society, companies, and state institutions mediated by technology. The digital technology shapes our lifeworld and social relationships. But there are certainly also drawbacks; the digital can take us away from the present, distance us, instil barriers for action due to complexity or inaccessibility.

Digitalization processes are present everywhere, including in the education system and how we teach and learn. The physical auditorium or classroom are no longer prerequisites for higher education, as learning can now occur online. Even in physical settings, virtual spaces complement the learning experience through applications like learning management systems and collaboration tools, enabling education to transcend geographical boundaries. The way we learn is increasingly shaped by the virtual world of the internet, which connects us and provides access to vast stores of information. Digital technology in education can support and help achieving the SDGs as well. It can help in making education more inclusive through accessibility software, it can offer learning opportunities for remotely situated students, and make research available to all through open publishing. However, it's worth noting that technology can also exacerbate global disparities, especially in terms of internet access and computing power between the Global North and South. In this changing educational landscape,

educators require the essential skills and competencies to navigate the digital realm effectively. Educational institutions need academic staff who can not only adapt to this evolving landscape but also design for more flexible education and lifelong learning.

The well-developed virtual learning landscape was a lifesaver when Covid-19 caused an unpreceded disruption to education. The pandemic forced us to reconsider long-held assumptions and traditional ways of doing things. Academic research on the pandemic's impact on higher education began sparking discussions about the post-pandemic future of universities. During the initial phase of the pandemic, educators resorted to "Emergency Remote Teaching," a term coined by Hodges et al. in 2020, to describe hastily implemented online instruction that deviated from well-designed online teaching. The authors were worried that the “hurried moves online … could seal the perception of online learning as a weak option”. The consequence could in the end be more scepticism toward online teaching. Other studies showed that Covid was an accelerator for digitalization of teaching (Skulmowski & Rey, 2020). But it’s less certain whether Covid-19 has *radically reshaped our world* as was the wish of H. E. Ms Sahle-Work Zewde, who chaired the International Commission on the Futures of Education and investigated the fate of education in a post-COVID world (International Commission on the Futures of Education, 2020)

We can leverage the experiences we gained from the rapid transformation that Covid imposed on us to rethink the role of technology in education and the future of the university. It is crucial to align these efforts with the vision and mission of SEA-EU, ensuring that the use and development of technology in teaching and learning prioritize human-driven approaches that foster critical thinking, problem-solving skills, and facilitate change towards a more sustainable future.

The survey has provided an opportunity to assess the current state of digital technology utilization in teaching and learning within the SEA-EU alliance here in the post-pandemic era. This survey examines self-assessed digital competency levels and perceptions of underlying support structures. It also investigates the impact of COVID-19 on practice and whether there is now a heightened demand for professional development. Additionally, the survey explores how the lessons learned during the pandemic can inform future developments.

A pertinent question in this context is defining what it means for an educator to be digitally competent. Is it enough to master digital tools and technical skills, or should the focus be on how these technologies enhance and innovate education and training? The European Framework for the Digital Competence of Educators (Punie, Y, 2017) emphasizes the latter approach, emphasizing the use of technology grounded in pedagogical principles to enhance the learning experience. Thus, the survey incorporates statements that gauge how participants employ digital technology to achieve pedagogical objectives. Furthermore, the survey aims to identify specific training needs, which will inform the development of relevant training pathways in the future.

Training activities should be inclusive, referring to sustainable development goal number 4, ensuring inclusive and equitable quality education for all regardless of gender, age, race, colour, ethnicity, as well as people with disabilities, migrants, etc. (UNESCO, 2016). Inclusive education can be defined as an educational approach proposing schools in which all the students can participate, and all are treated like valuable school members (Moriña, 2017). Within the inclusive philosophy, diversity is appreciated and is seen as a benefit rather than as a problem, where all students, without exception, should benefit from high-quality learning and enjoy full participation in the educational system (ibid). To find new

ways to meet these challenges, the training program needs to introduce innovative approaches and foster an innovative mindset.

Establishing core academic team and extended interdisciplinary panel of experts

Nord University has the lead and University of Gdansk has the co-lead role in this task. It was natural to arrange introductory and collaborative digital meetings both before the task formally started and in the process of co-creating the survey. The co-creation of the survey happened within a restricted amount of time. The survey needed to be rolled out prior to the academic teachers and staff at partner universities taking their summer holiday breaks. This was essential to ensure sufficient time for collecting responses before commencing the analysis in August.

Given the task's concentration on developing inclusive, innovative, and interdisciplinary digital and green training pathways, it was crucial to assemble an interdisciplinary expert panel capable of providing diverse expertise for survey design. In addition to the establishing of the core academic team with complementary expertise regarding the green and digital aspects, the establishment of expert panel that spanned faculties, centres, and disciplines was essential. The core academic team, comprising individuals with proficiency in both digital and green fields, played a central role in shaping the survey design and orchestrating its completion. The extended interdisciplinary panel of experts actively engaged in several meetings and email exchanges during critical phases, contributing valuable feedback and constructive suggestions for enhancements and testing the questionnaire before it was launched. The SEA-EU local manager at Nord, along with the Work Package 2 lead and co-lead, played significant roles in providing valuable input. Furthermore, project leads and members from other universities in the alliance were also involved in the development process.

Core academic team			
Name, title	**Fields of expertise**	**Faculty/Centre**	**Period**
Associate Professor Vivi M. L. Storsletten Task 2.2 lead	Ph.D in Business, Ecological economics, ethics, responsible leadership, philosophy of science, cross-disciplinarity (multi- inter-, trans-)	Nord University Business School, Centre for Ecological Economics and Ethics	April 23-
Associate Professor Amsale K. Temesgen Task 2.2 lead	Ph.D in Business, Ecological economics, quality of life, sustainability, qualitative and quantitative methods, philosophy of science	Nord University Business School, Centre for Ecological Economics and Ethics	April 23-
Advisor Kaspar Rasmussen	Digital pedagogy, projects and development work, UNIPED	Nord University, Centre for Learning and Technology (KOLT)	April 23-
Dr. Joanna Morawska Task 2.2 Co-lead	University social responsibility, engaged university, social innovation, and social impact of science, Society 5.0, regional innovation ecosystems	University of Gdansk, Office for Cooperation and Development	April 23-
Professor Anna CohenMiller	PhD in Interdisciplinary Learning and Teaching. Adult Education, equity and inclusion in higher education, organizational culture. Educational	Nord University, Centre for Learning and Technology (KOLT)	September 23-

	leadership, qualitative methods, inclusive and empowering arts-based research.		

Extended interdisciplinary panel of experts			
Name, title	**Fields of expertise**	**Faculty/Centre**	**Period**
Professor Catrine Torbjørnsen Halås	Ph.D in Science of Professions, Social work, Practical Knowledge	Nord University, Faculty of Social Sciences, Centre for Practical Knowledge	April 23-
Associate Professor Tanja Ellingsen	Ph.D in Political Science, Peace and conflict studies, democracy, social sustainability, co-creation, green campus /sustainability HIgher Education	Nord University, Faculty of Social Sciences	April 23-
Associate Professor Eirik Julius Risberg	Ph.D in Philosophy, Democracy, global citizenship education, and sustainability	Nord University, Faculty of Education and Arts, Centre for Education for Sustainable Development and Global Citizenship (Demos)	April 23-
Associate Professor Alexander Oliver Jüterbock	Ecological and evolutionary responses to environmental change at the base of the food web	Nord University, Faculty of Biosciences and Aquaculture	April 23-
Associate Professor Line Kolås	Design of e-learning systems, pedagogical use of ICT, professional digital competence, qualitative research methodology, IT education / IT didactics and educational research.	Nord University, Faculty of Social Sciences, ExcITed – Centre for Excellent IT Education	September 23-
PhD Research Fellow, and Senior Adivsor Trine Åsheim Bernhardsen	Entrepreneurship, sustainable entrepreneurship, entrepreneurship education, value creation, venture teams.	Nord University Business School, Engage – Centre for Engaged Education through Entrepreneurship	September 23-
Local manager for SEA-EU at Nord University, Tove Holm	Ph.D in Environmental Science, change management, education for sustainable development, quality	Nord University, Department of Academic and Student Affairs	April 23-

	assurance, action research, inter-disciplinarity		
Pro-Rector Education, Professor Levi Gårseth-Nesbakk WP2 Co-lead	Ph.D in Business	Nord University	April 23-
Delphine Muths WP2 Lead	Coordination SEA-EU UBO	UBO	April 23-

Research assistants			
Name, title	**Fields of expertise**	**Faculty/Centre**	**Period**
PhD Research Fellow Lusine Talalyan	(assist in data analysis)	Nord University Business School	September 23-
PhD Research Fellow Filip Lestan	(assist in data analysis)	Nord University Business School	August 23- September 23

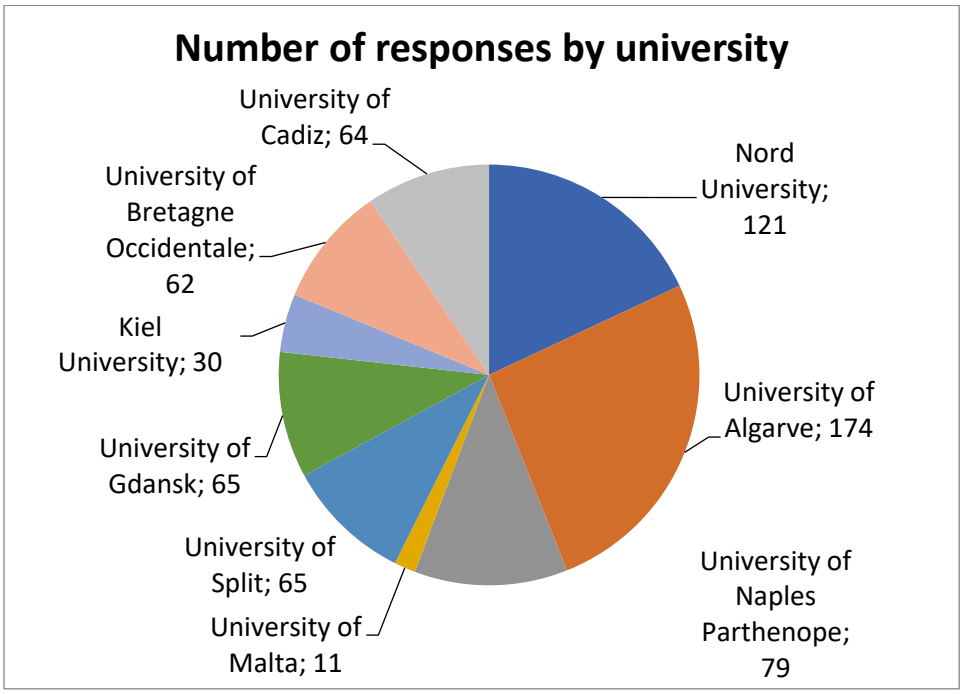
To ensure language inclusion, we asked all partners whether they wanted to distribute the survey in their own language in addition to English. As a result, the survey was translated into Italian, Portuguese, Polish, and Spanish.

Distribution of the survey, communication

Upon completion of the survey, the core academic team with valuable contributions from the local SEA-EU manager at Nord, organized a digital meeting with representatives from all partner universities that were responsible for disseminating the survey in their respective universities. The discussion in the meeting was on the content of survey, the draft cover letter, and a proposed timetable. The dialogue also touched upon how each university was aiming to distribute the survey and ways of encouraging a high response rate. The survey was sent out from Nord on Monday 12th June, and distributed further on. The timetable below summarizes the process:

Description of the data

The survey data presents a diverse range of responses from universities involved in the SEA-EU survey. In total, we received 674 responses from the nine universities. Among the universities surveyed, University of Algarve stands out with the highest response count of 174. Nord University comes second with 121 responses. On the other end of the spectrum, University of Malta has the lowest response with a count of 11 responses. The reasons behind this low response number could range from the survey's relevance for the university's curriculum, the timing of the survey, or the method of distribution.



N=674. Please note that there were three respondents that did not register their university and, as a result, there is a discrepancy between the total number of responses and the sum of responses from each university in the figure above.

Response rates

Although we took several steps to improve the number of responses to the survey, the response rate was generally low. Three universities have relatively better response rates. These are University of Naples Parthenope (20%), University of Algarve (22%), and Nord University (17%). Readers of this report are requested to have this low response in mind when reading through the analysis. When we report results by university, we are not stating that these results are representative of the university in question. In order to avoid this confusion, we will minimize discussing in detail results from universities who have exceptionally low response rates. In addition, we focus on analyses that show variation within each university (more than variation across the universities).

Although we have low response rates to the survey, there are several reasons for taking the results seriously. We assume that the 674 respondents that took the time to reply to the survey did so because they are interested in the topics covered by the survey and have insights they want to contribute. This makes it a valuable input towards achieving the objectives of Task 2.2. It is important that we appreciate and use the information that survey respondents took their time to provide to us.

University	**Uni-parthenope**	**UNIST**	**CAU**	**UBO**	**UCA**	**UAlg**	**UG**	**UM**	**Nord**
Response #	79	65	30	62	64	174	65	11	121
Total	400	2000	443	1200	3811	793	1811	1505	730
Response rates	20 %	3 %	7 %	5 %	2 %	22 %	4%	0.7%	17%

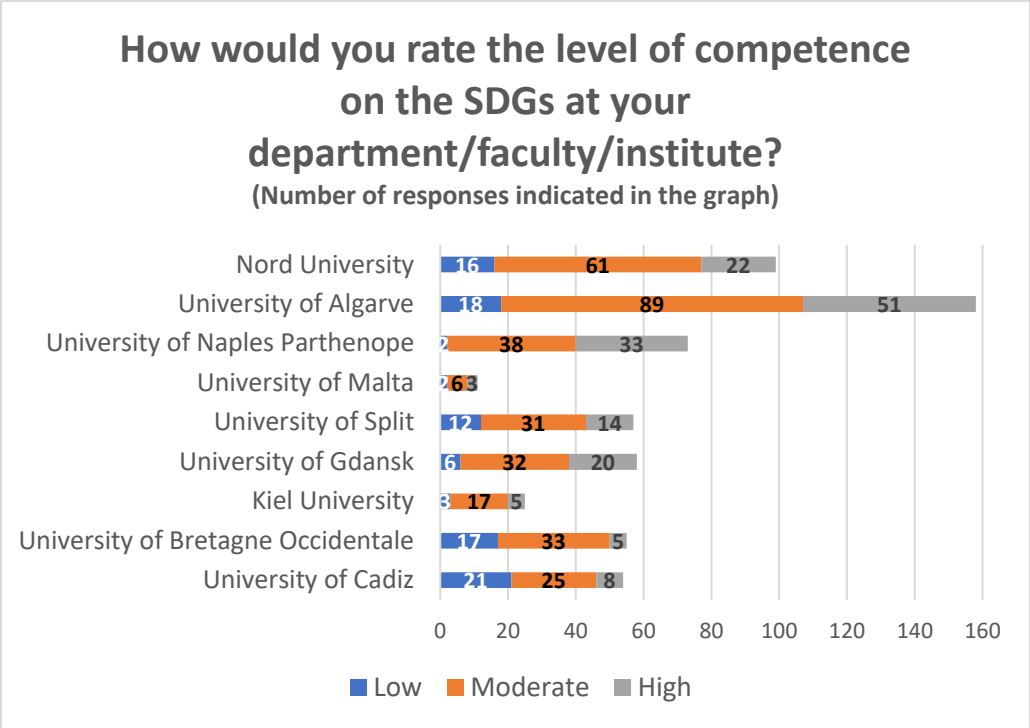
The second reason is that although it would have been great to have representative samples from each university, the goal of the survey was not to achieve representativity, but to gather information for the successful achievement of the objectives of Task 2.2 together with other project activities.

The third reason is that it will provide us insight into how we can plan the remaining activities in Task 2.2 and we can aim to improve the participation of those universities who are not well represented in the survey. With these comments in mind, we proceed to present the findings of the survey.

Assessing needs and preferences for green competence building

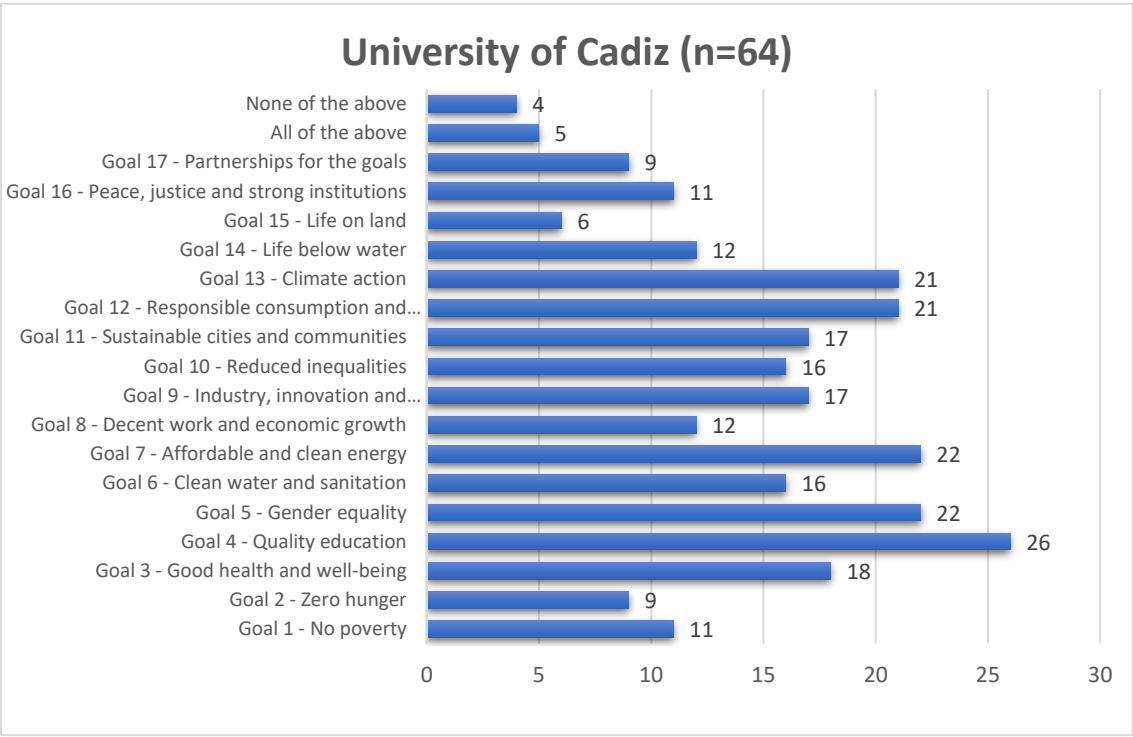
Competence levels on the SDGs

Most survey respondents have a positive view of the level of SDG-competence in their university, that is, they rated their competence levels as either moderate or high. This is particularly high for the respondents from UAlg (with 140 respondents amounting to 80% of all responses from Algarve), Nord (with 83 responses amounting to 69% of all responses from Nord) and Uniparthenope (with 71 responses amounting to 90% of all responses from Uniparthenope).

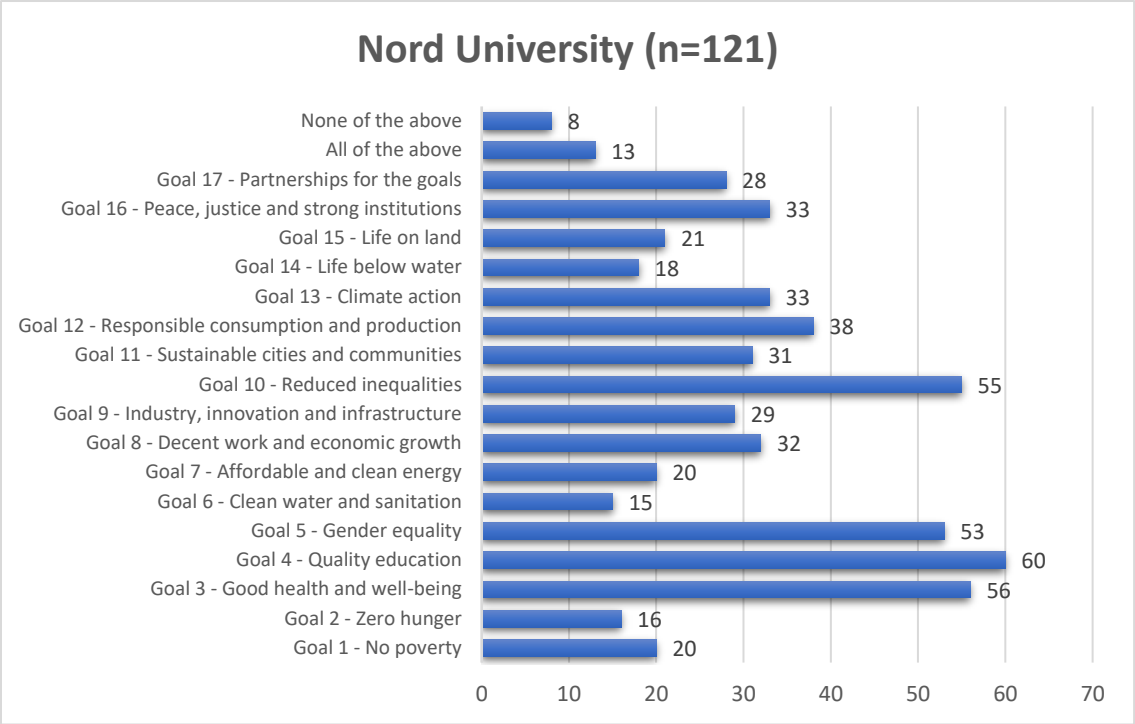


Presence of SDG in teaching and learning activities

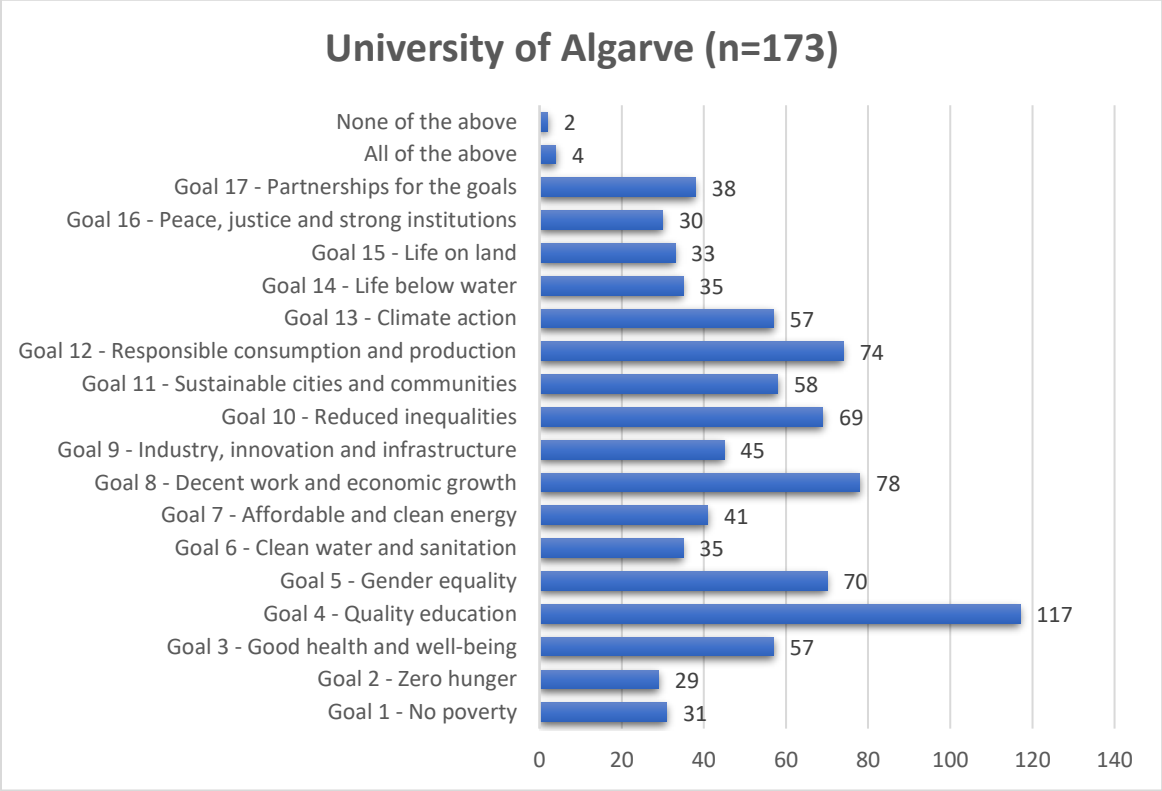
The respondents were asked to what degree they related to (one or several of) the SDGs. As the graphs below show, there are certain goals that the respondents in the different universities relate to most often: these are goals three, four, five, ten, eleven, twelve, thirteen, sixteen, and seventeen. Goals one, two, fourteen, and fifteen have fewer mentions.



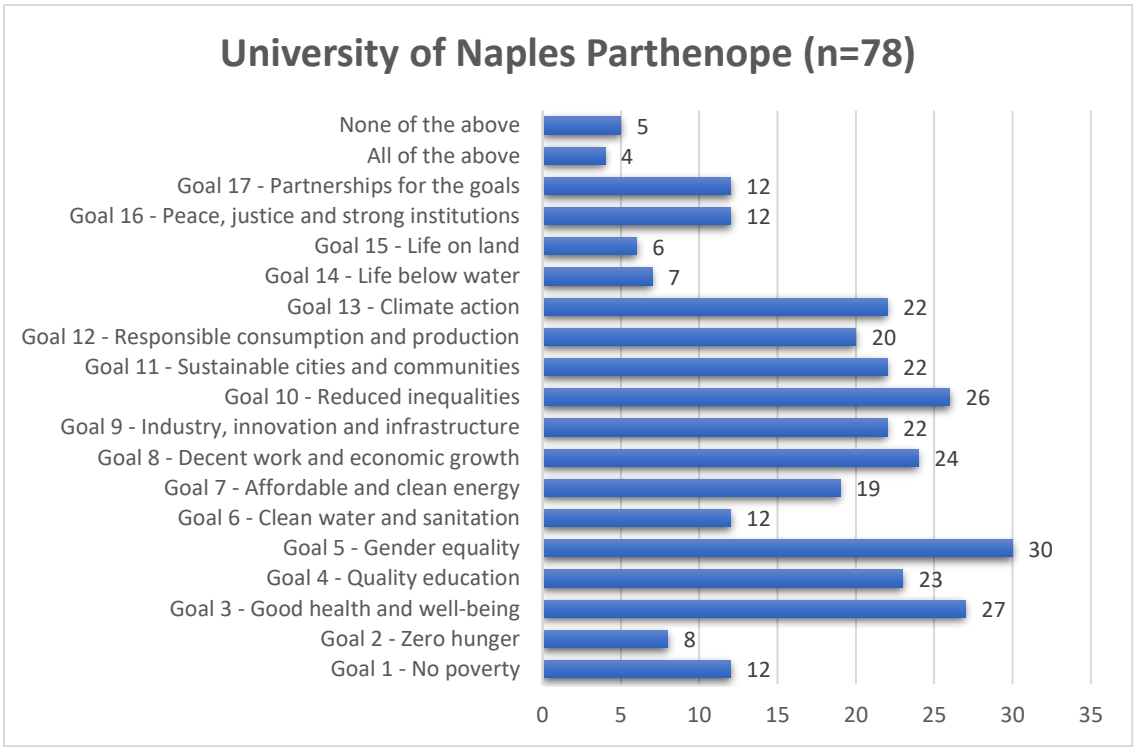
At the University of Cadiz, goals four, five, seven, twelve and thirteen are mentioned most often. Note that the respondents were allowed to choose more than one goal resulting in the total number of answers exceeding the number of respondents. This applies to all figures in this discussion.



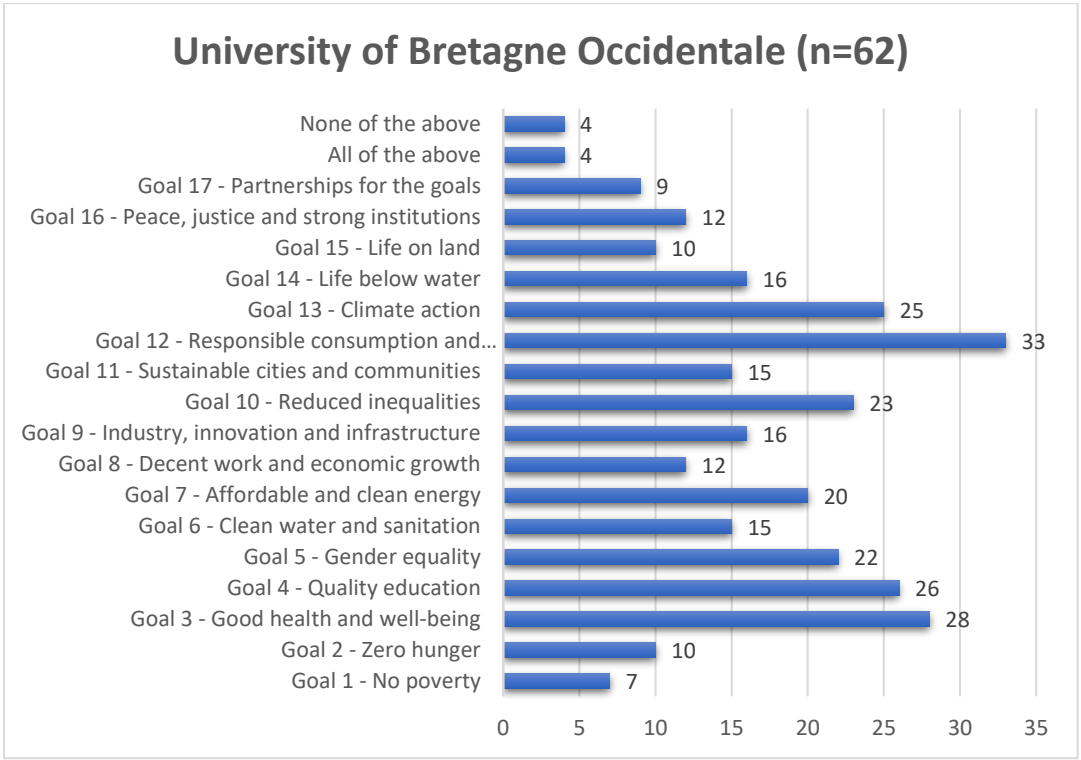
At Nord University, respondents identified goals three, four, five, and ten as goals they relate to most often. Note that these are relative figures. Those universities with higher number of respondents have higher response numbers on most of the goals.



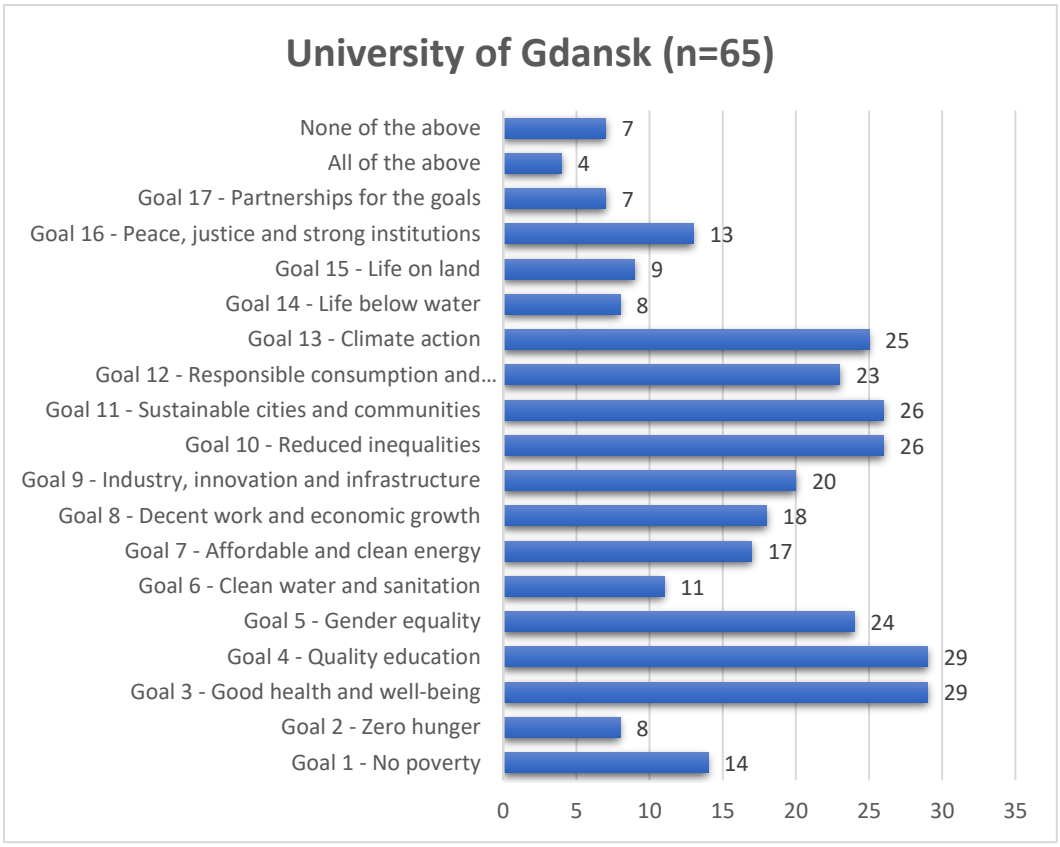
At University of Algarve, goal four is mentioned most often. However, goals five, eight, ten, and twelve also have much larger mentions than in other universities.



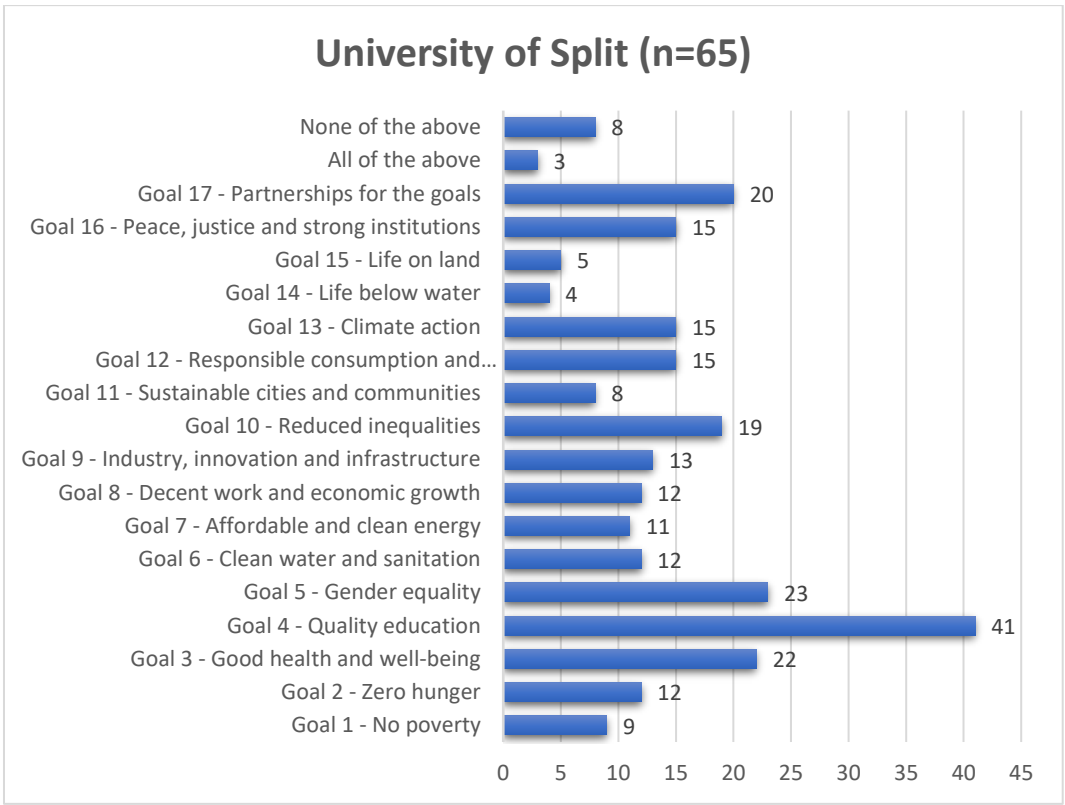
The answers are more evenly distributed at University of Naples Parthenope, where several goals receive similar levels of focus in teaching. See, for example, goals three-five and seven -thirteen.



At University of Bretagne Occidentale, goal 12 has the largest number of mentions, closely followed by goal three and four. Goals five, seven, ten, and thirteen are also prominent.



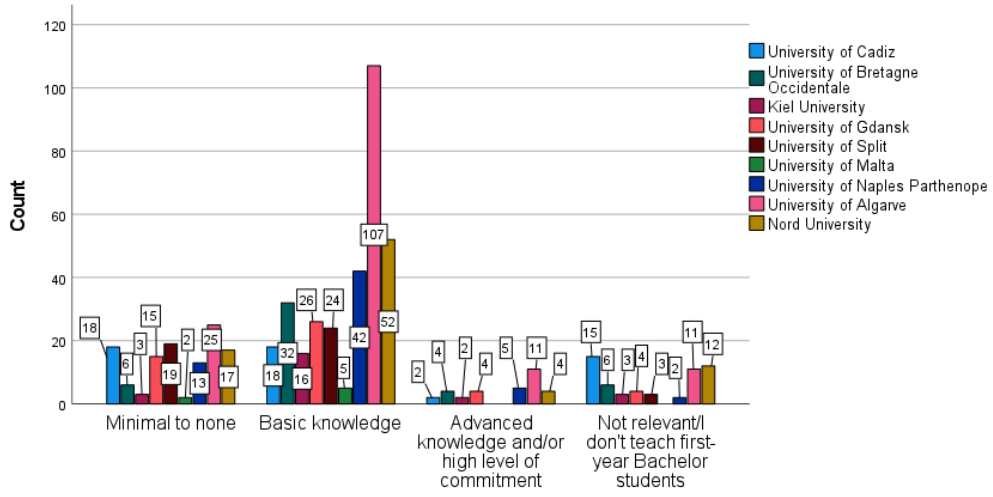
At University of Gdansk, respondents stated that they relate to goals three, four, five, ten, eleven, twelve and thirteen most frequently.



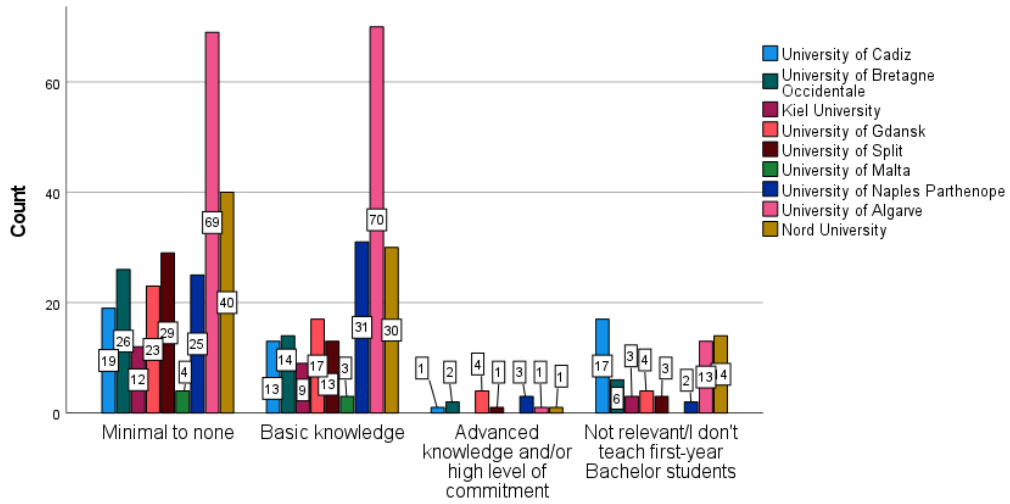
At the University of Split, there is a clear emphasis on goal four from the respondents. Goal four was mentioned twice as many times as those goals that come in second place: goals three, five, ten, and seventeen.

First year Bachelor students' knowledge on sustainability and the SDGs

We asked respondents their assessment of first year Bachelor students' knowledge on sustainability and the SDGs. Most respondents assessed the students' knowledge levels as either basic knowledge or minimal to none. There seems to be more awareness of sustainability than the SDGs. More respondents stated that students have minimal to no knowledge of the SDGs than on the topic of sustainability.



S.12. In your opinion, how would you rate the knowledge of first year Bachelor students on the topics of sustainability? (n=528)

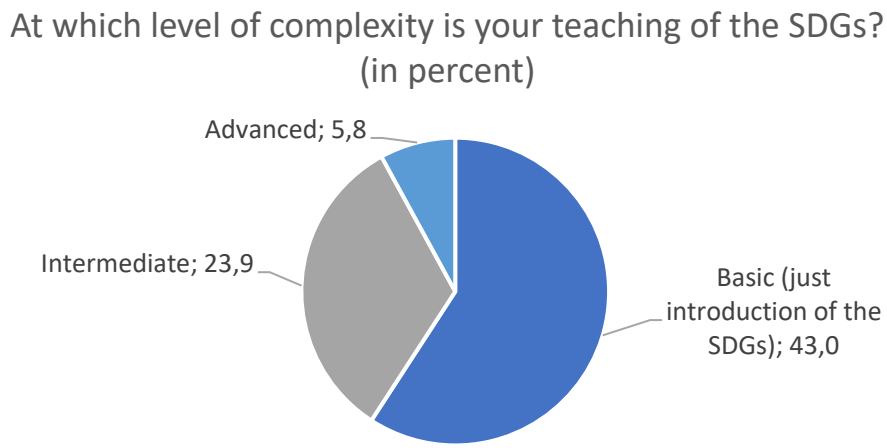


S.13. In your opinion, how would you rate the knowledge of first year Bachelor students on the SDGs? (n=522)

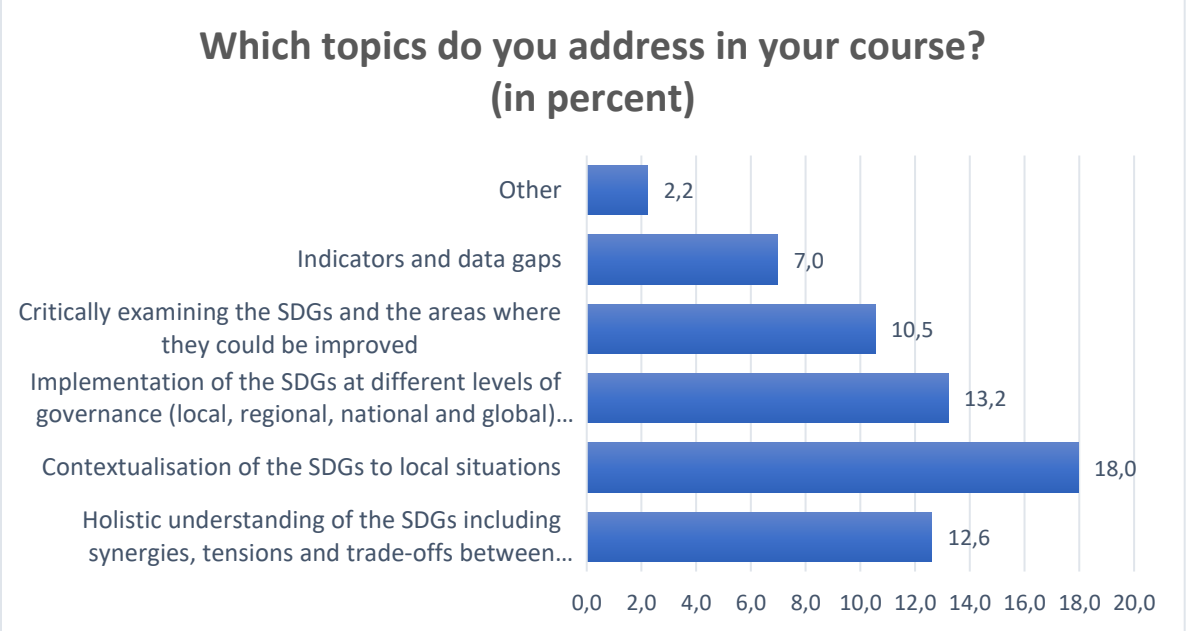
Level of complexity of the teaching on the SDGs

The respondents were also asked about the complexity of their teaching of the SDGs. Slightly less than half of the respondents (43%) stated that their teaching was basic, mainly aiming at an introduction of the SDGs. On the other hand, 24% rated their teaching as intermediate and six percent as advanced.

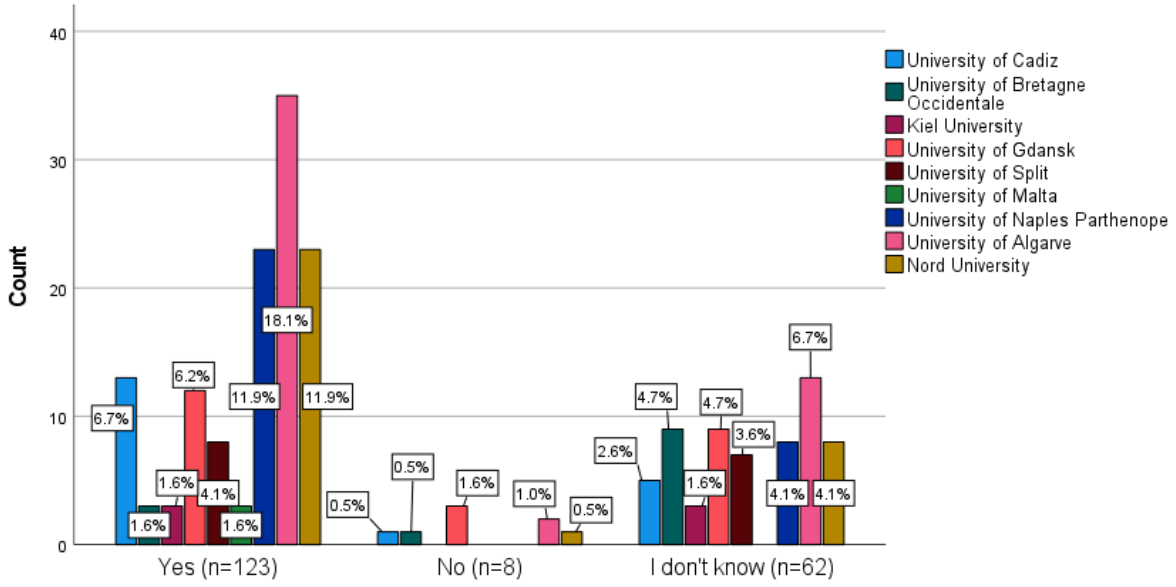
Those that rated their teaching as intermediate or advanced were further asked about the specific topics they addressed in their courses.



The topics for advanced level teaching on the SDGs were drawn from current research on the topic and can help us to identify teaching practice that could be built into advanced level courses. Among those that incorporated intermediate and advanced level teaching into their courses, 18% dealt with contextualization of the SDGs to local situations, 13% covered implementation of the SDGs at different levels of governance, 13% incorporated a holistic understanding of the SDGs including synergies, tensions and trade-offs between goals, and 11% critically examined the SDGs and the areas where they could be improved.



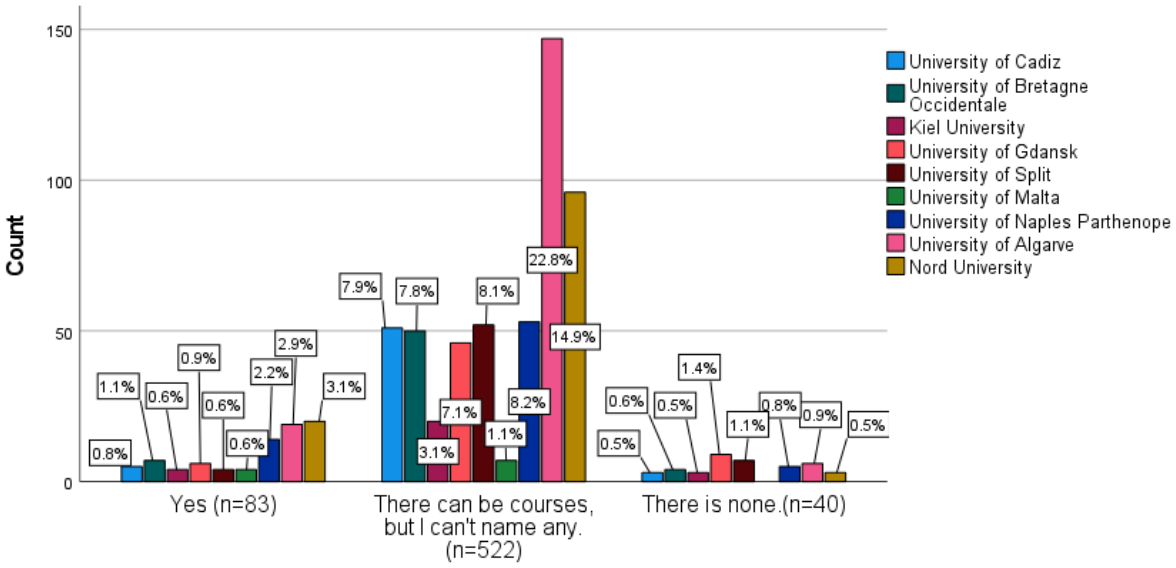
We asked the respondents that answered these questions on the SDGs whether they and their colleagues would be willing to transfer knowledge and skills to other universities. The majority (64%) responded positively, while a small number (eight respondents) responded in the negative. About 62 respondents did not know if that was possible.



S.18. Would you and your colleagues be willing to transfer knowledge and skills to other universities in these areas?

Courses at the forefront of knowledge on the SDGs

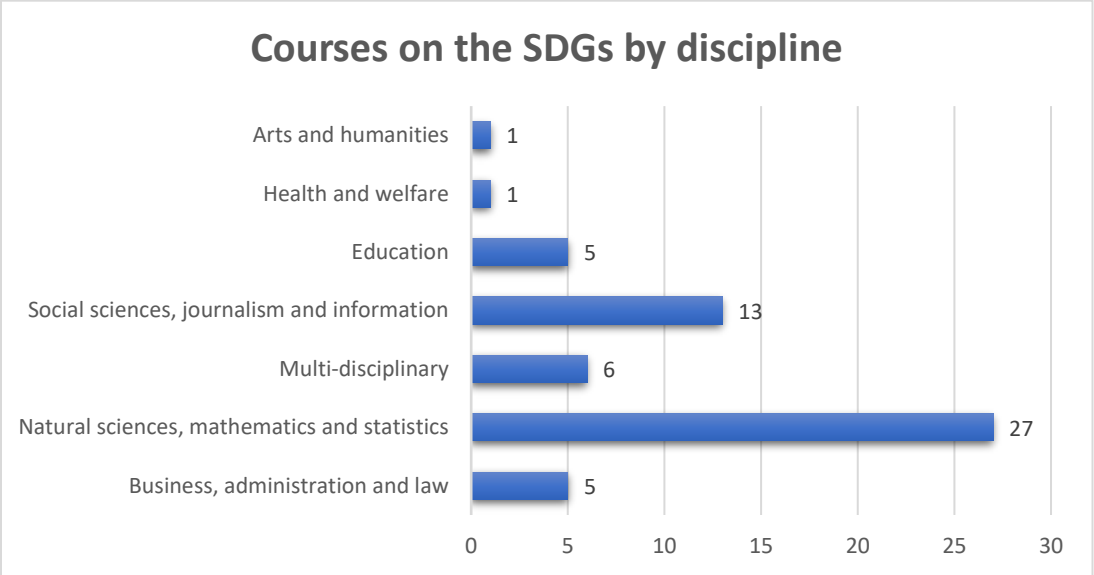
We also asked respondents whether they can identify courses they see as dealing with topics at the forefront of knowledge on the SDGs. A small group 83 respondents) answered in the affirmative, while a significant majority (522 respondents) could not name any. About 40 respondents stated that there were no courses that dealt with this topic.



S.19. Could you name one or more courses at your university that you see as at the forefront of knowledge of SDGs that other universities could benefit from?

Those that could identify such courses, gave us the names of 59 courses (see in Appendix 1 a full overview of the courses by university). The discipline that dominated among the suggested courses was the natural sciences, mathematics, and statistics with 27 courses. This was followed up by the

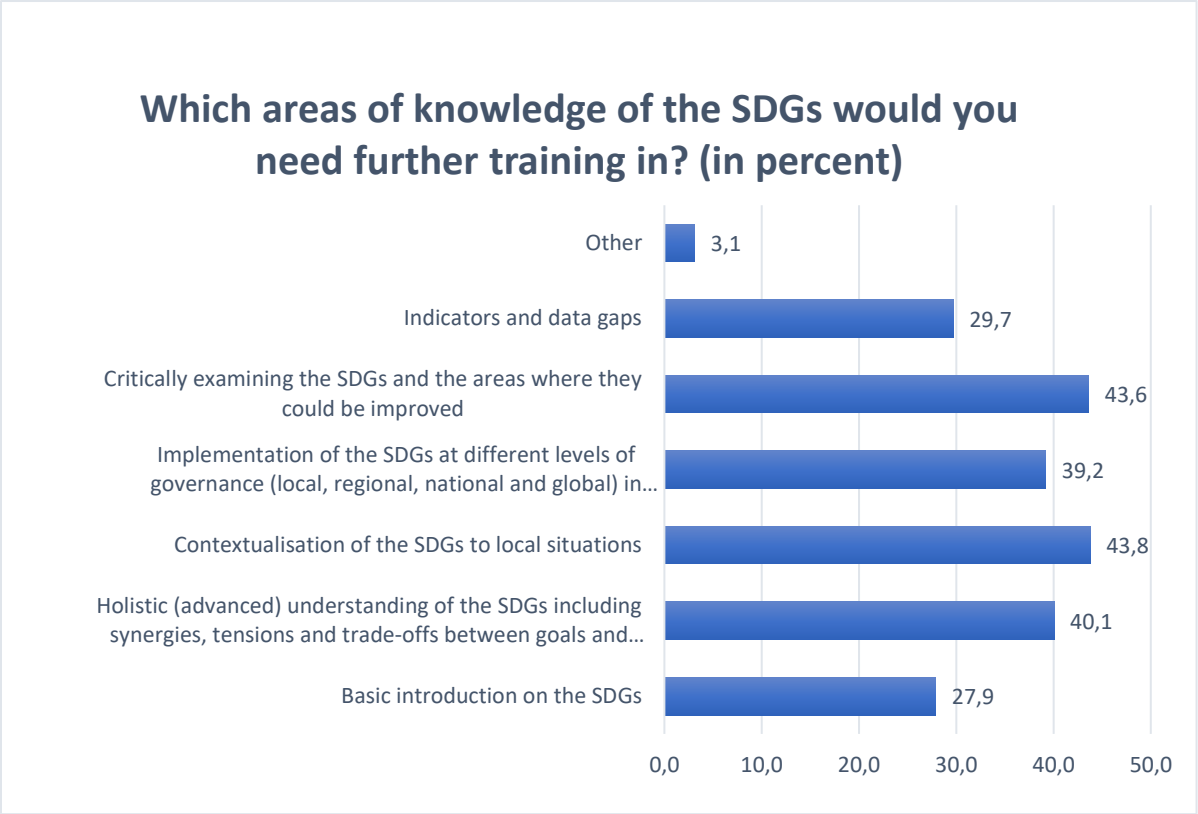
social sciences, journalism, and information with 13 courses. Education and business, administration and law had five courses each, while arts and humanities and health and welfare had one course each.



Need for further training on the SDGs

About 345 respondents answered the question that maps training needs on the SDGs. The answers can be clustered around three topics: “critically examining the SDGs and the areas where they could be improved” and “contextualization of the SDGs to local situations” received the largest mentions at approximately 44% responses each; “implementation of the SDGs at different governance levels” and “holistic understanding of the SDGs” received about 39% and 40% responses respectively, and “indicators and data gaps” and “basic introduction of the SDGs” received about 30% and 28% responses each.

Comparing the answers to this question with the advanced expertise on the SDGs we mapped earlier, we see a promising potential for exchange of knowledge among the participants and therefore, in the wider alliance on this topic.



Sustainability beyond the SDGs

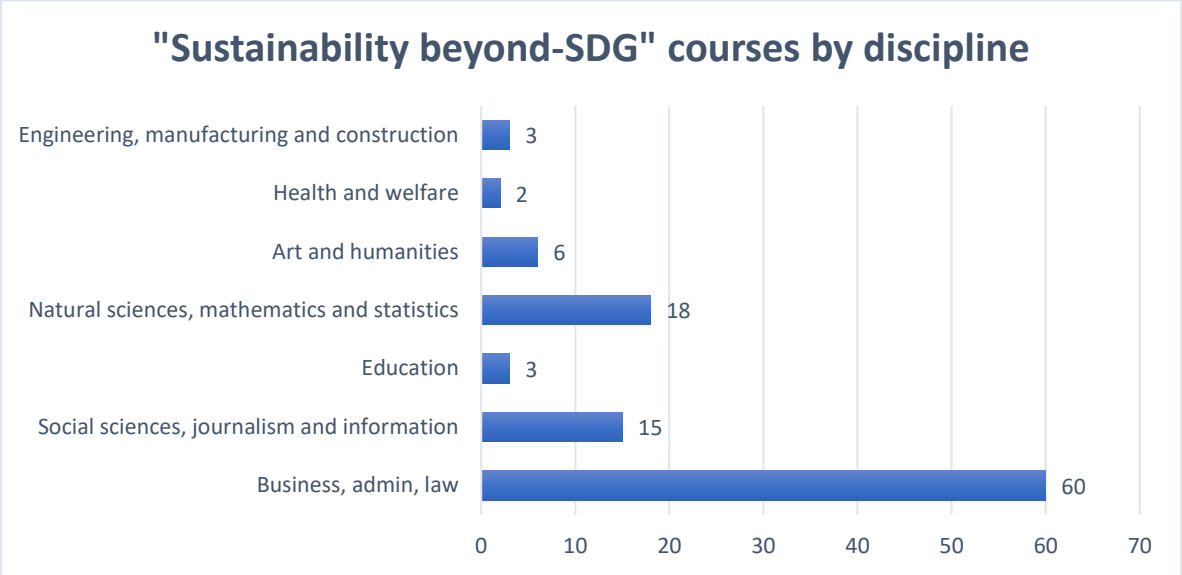
To capture broader aspects of the discourse around sustainability beyond the SDGs, we asked the respondents if they agreed with the statement "I see the green transition as a topic that goes beyond the SDGs and imagines post-growth futures". This question was included as a result of discussions in the expert panel and other contributors that aimed to expand the conceptualization of sustainability beyond the SDGs. The majority of the respondents (62%) agreed with this statement, while 18% stated that they were neutral. We interpret this answer as the respondents not able to take a clear stand on whether they agreed or disagreed with the statement. A small minority (seven percent) disagreed with the statement.

To what extent do you agree with the following statement: I see the green transition as a topic that goes beyond the SDGs and imagines post-growth futures. (See below for definitions of green transition and post-growth futures.)

Antall svar: **368**

Svar	Antall	% av svar	
Strongly Disagree	10	2.7%	2.7%
Disagree	15	4.1%	4.1%
Neutral	67	18.2%	18.2%
Agree	147	39.9%	39.9%
Strongly Agree	81	22%	22%
I don't know	48	13%	13%

To those respondents that agreed with this statement, we asked whether they have courses that addressed sustainability beyond the SDGs, and received information on 107 different courses. The largest number of courses falls under the disciplines “business, administration, and law” (60 courses). We also received the names of 18 courses falling under the disciplines “engineering, manufacturing and construction” and 15 courses under the disciplines “social sciences, journalism and information” (see Appendix 2 for a full overview of the suggested courses).



How to integrate sustainability & SDGs in curricula?

We asked the respondents their opinion on how best to integrate SDGs in university teaching (respondents could choose several answers to this question). Two approaches were the most popular: addressing aspects of the SDGs in existing courses of all disciplines and developing a cross-disciplinary common introductory lecture series on the SDGs, open for students of all programs and disciplines. Notably, these two approaches can be seen as complementary to each other.

Alternatively, a smaller group of respondents chose developing new courses in existing study programs (28%) or developing new courses in a “sustainability centre of excellence” that are open to students from different study programs and disciplines. Cross-disciplinary collaborations to develop a study program based on the SDGs was also chosen by 28% of respondents. An even smaller group identified setting up a specific study program based on the SDGs within one faculty.

S.21. In your opinion, what is a good approach to integrate the SDGs in university teaching?

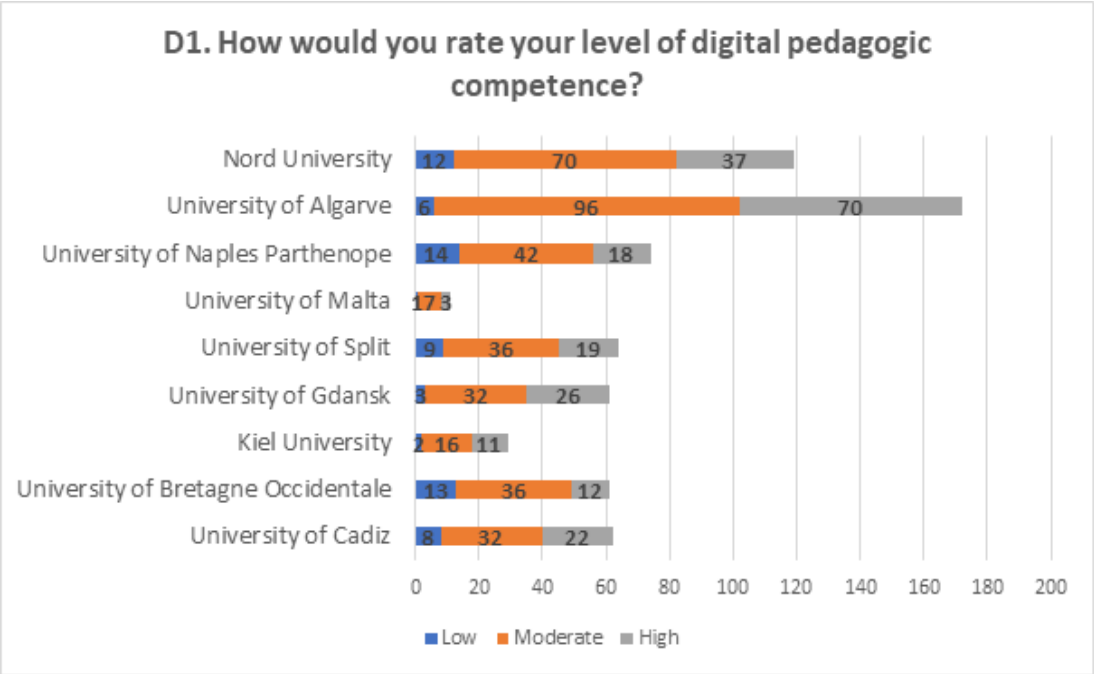
Antall svar: **358**

Svar	Antall	% av svar	
Address aspects of the SDGs in existing courses of all disciplines	205	57.3%	57.3%
Develop a cross-disciplinary common introductory lecture series on the SDGs, open for students of all programs and disciplines	195	54.5%	54.5%
Develop new courses based on the SDGs (content & methods) in existing study programs	101	28.2%	28.2%
Develop new courses in a "sustainability centre of excellence" on the SDGs (content & methods) that are open to students from different study programs and disciplines	98	27.4%	27.4%
Set-up a specific study program based on the SDGs within one faculty	42	11.7%	11.7%
Co-develop, among several disciplines, a specific study program based on the SDGs	100	27.9%	27.9%
Other suggestions	17	4.7%	4.7%

Assessing competences, needs, and preferences for digital competence building

Digital competence level

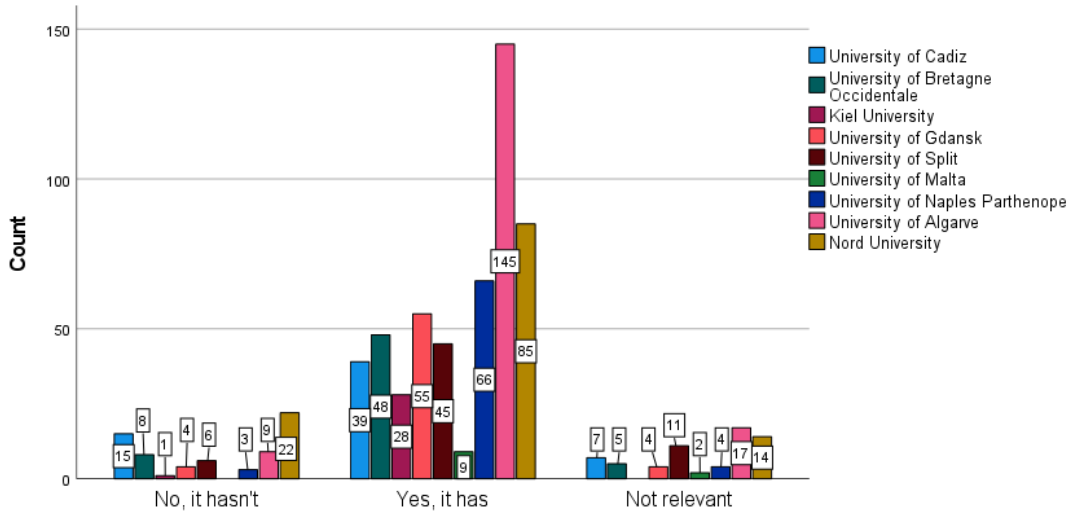
The survey findings reveal a predominantly positive self-assessment of digital pedagogic competence among respondents. The majority of participants rate their competence as moderate, with 52% to 64% reporting such competence levels across universities. Additionally, a significant proportion of respondents express high levels of competence, ranging from 20% in Bretagne to 43% in Gdansk. Conversely, a relatively small percentage of respondents, varying from 3.5% in Algarve to 21% in Bretagne, perceive their competence as low.



Digital competence in the post-pandemic era

We asked the respondents whether the COVID pandemic changed the use of digital technology in their teaching and learning activities in the post-pandemic era. As the graph below shows the impact has been substantial, where a big majority answered “Yes, it has”.

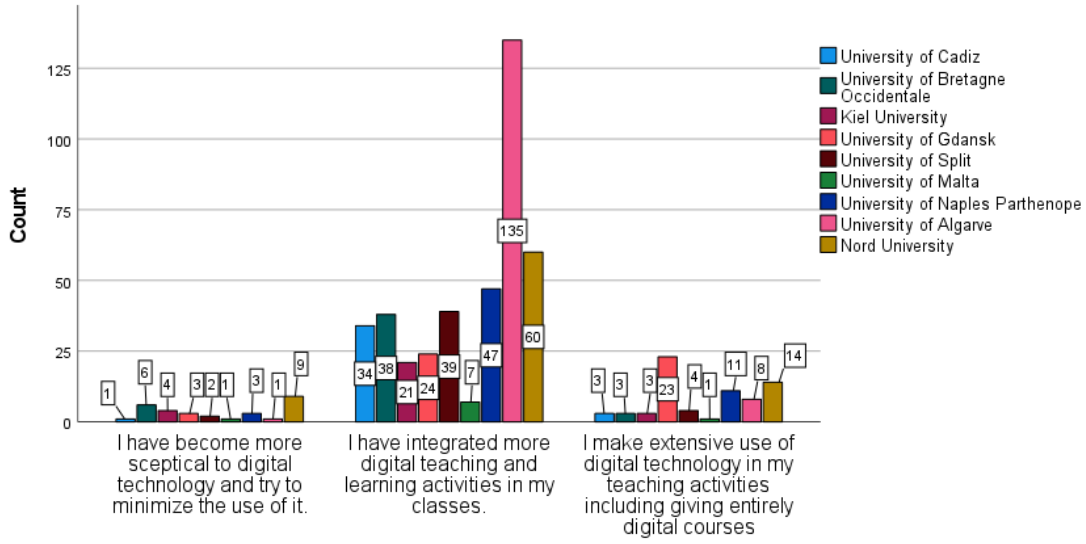
However, a notable portion of respondents at Cadiz and Nord with 25% and 18% , respectively answered “no, it hasn´t”. It is important to stress that the reasons behind answering “no it hasn´t” and 'Not relevant' can be multifaceted. Some respondents may have already possessed extensive digital teaching expertise, having engaged in online teaching before the pandemic and not changed much. In contrast, others might not have been actively involved in teaching during the lockdown period, rendering the question less applicable to their experiences.



D.2. In your opinion, has the COVID pandemic changed the use of digital technology in your teaching and learning activities in the post-pandemic era?

We followed up with a question on how the pandemic changed the use of digital technology in teaching and learning activities (to those that answered “yes, it has”). A significant majority responded that they integrated more digital teaching and learning activities in their classes.

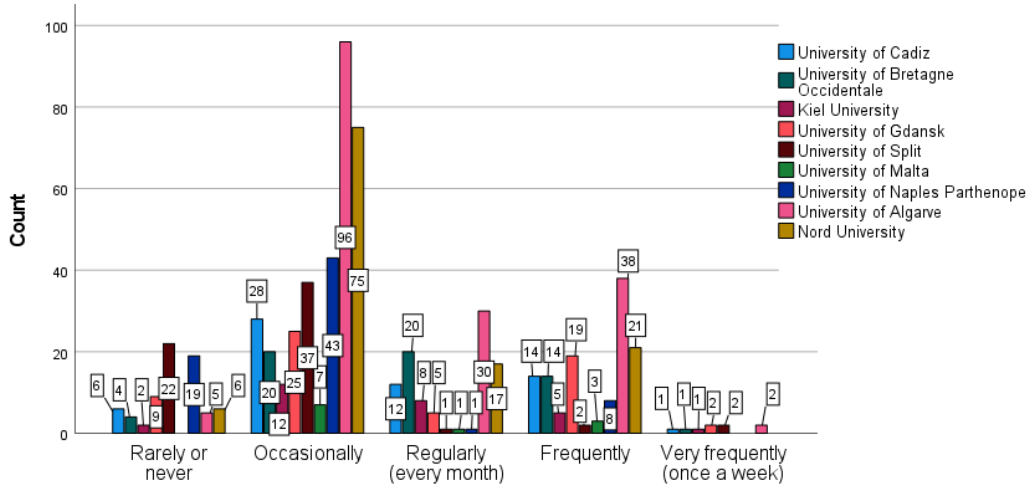
One exception was Gdansk, where a substantial proportion (23 out of 50) of respondents indicated an extensive use of digital technology in their teaching, including giving entirely digital courses. This trend aligns with the findings in D1, where a relatively higher number of individuals from Gdansk reported possessing high digital competence. Few respondents expressed a heightened scepticism towards digital technology, with an intent to minimize its use in their teaching practices.



D.3. How has the pandemic changed your use of digital technology in teaching and learning activities?

Needs for further training on digital competence

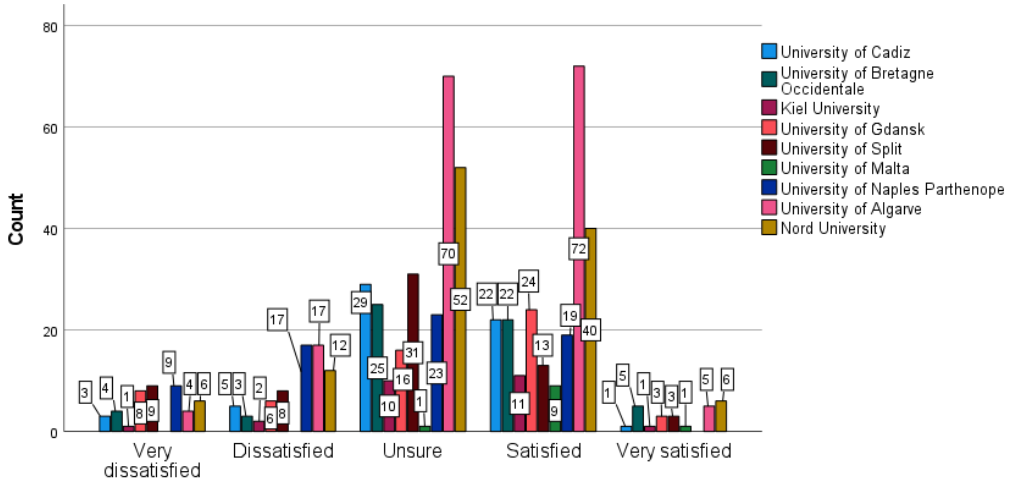
The survey included a question regarding the frequency of training and professional development opportunities provided by respondents' universities to enhance the digital skills of academic staff in teaching and learning activities. The majority of respondents responded that they receive training occasionally. However, two universities stood out in this regard. In Bretagne, the respondents indicated that they receive more frequent professional development opportunities compared to other universities. Similarly, in Gdansk, a relatively high number of respondents also indicated a greater frequency of offers.



D.4. How frequently does your university provide training and professional development opportunities for academic staff to enhance their digital skills in teaching and learning activities?

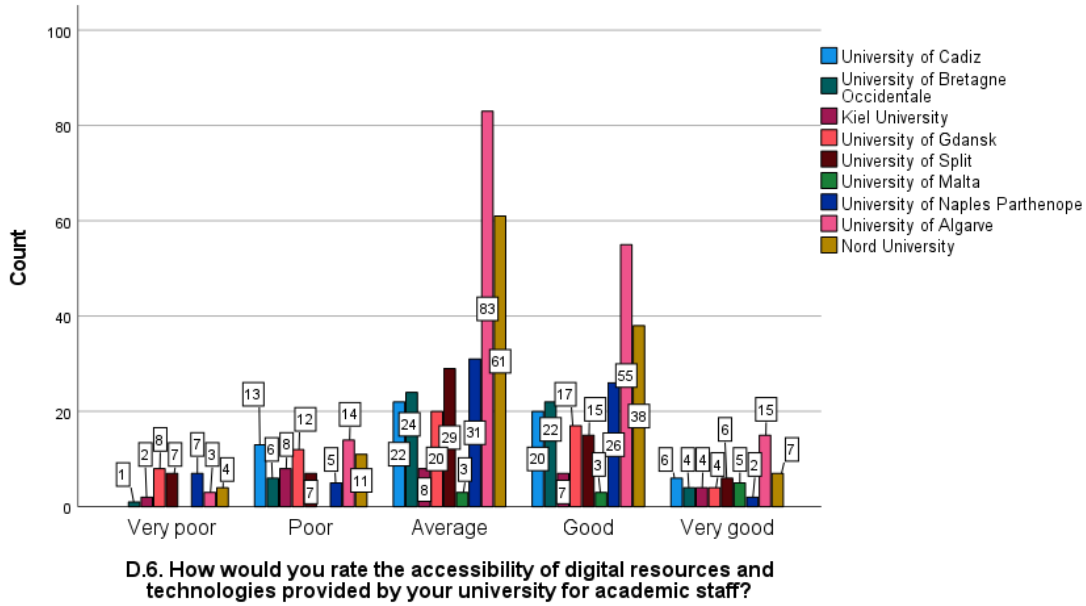
We also inquired about respondents' satisfaction with training and professional development programs designed to enhance their digital pedagogic competences. The most common response was 'unsure,' closely followed by 'satisfied.' This distribution of responses suggests that a significant portion of respondents may not have participated in such programs, while those who have generally express satisfaction. Despite many expressing satisfactions, there may also be some room for improvement in the quality of these offerings, as evidenced by fewer respondents selecting 'very satisfied'.

There are some notable variations between the different universities. Gdansk and Bretagne have received positive feedback regarding the quality of their training and professional development programs. This suggests that these universities have been successful in meeting the needs and expectations of their academic staff in this regard.



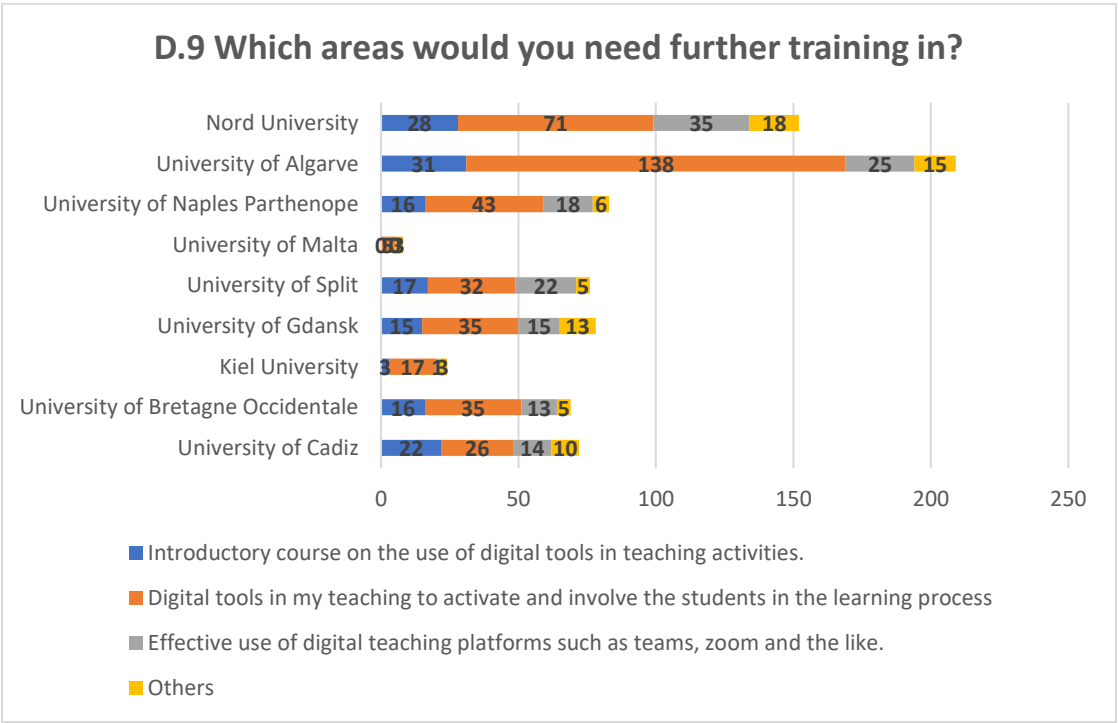
D.5. How satisfied are you with the quality of training and professional development programs to enhance your digital pedagogic competences?

We also inquired about respondents' ratings for the accessibility of digital resources and technologies provided by their university. The most common response was 'average', a close second was 'good'. Notably, in Cadiz, Bretagn, Gdansk, and Naples, almost as many respondents chose 'good' as ´average´. The same was the case for Kiel but here, there were as many selecting ´poor´ and ´very poor´. In the limited responses from Malta, 5 out of 11 opted for 'very good.'



D.6. How would you rate the accessibility of digital resources and technologies provided by your university for academic staff?

Respondents were asked to select areas in which they felt they needed further training. The question presented multiple choices, allowing participants to indicate more than one option.

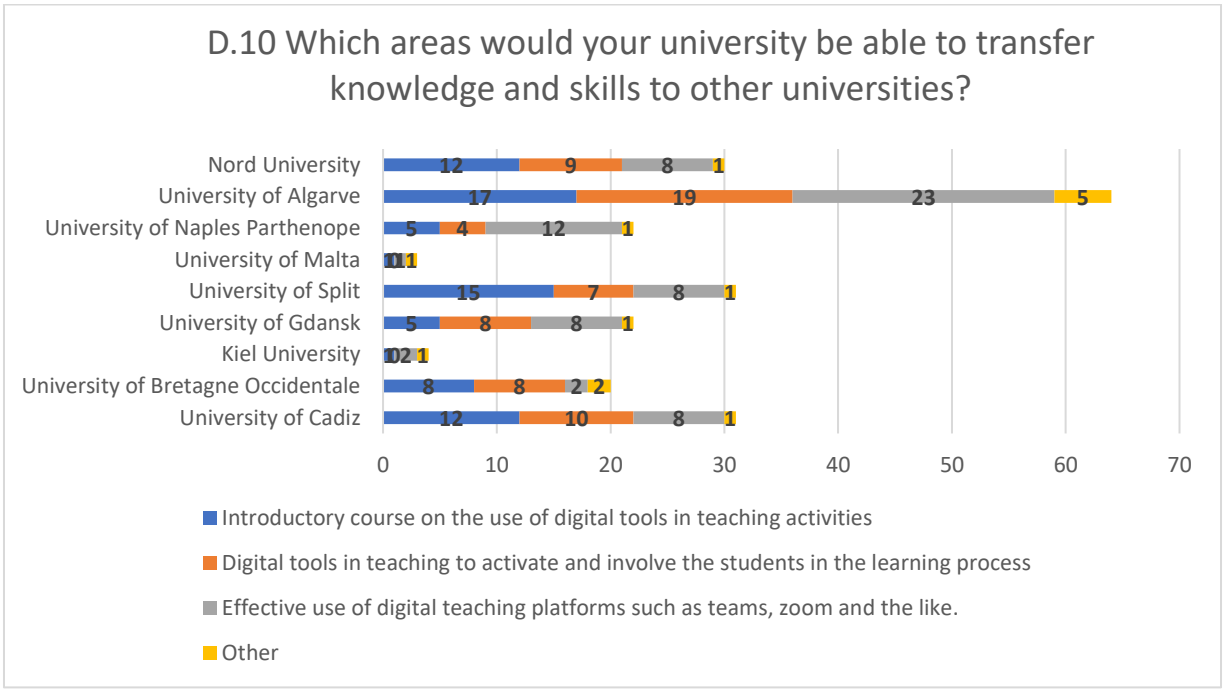


- 22% of respondents expressed an interest in an 'Introductory course on the use of digital tools in teaching activities.'

- A majority of 60% of respondents indicated a preference for 'Digital tools in my teaching to activate and involve the students in the learning process.'
- 21% of respondents selected 'Effective use of digital teaching platforms such as Teams, Zoom, and similar tools.'
- Lastly, 12% of respondents chose the 'Other' category, allowing them to provide their own suggestions.

It's noteworthy that there was sufficient interest in all of the provided suggestions, indicating a diverse range of training needs among the respondents. When examining the specific suggestions provided in the 'Other' category, it becomes evident that many respondents expressed a stronger focus on enhancing the learning experience rather than mere tool-use. Some of the suggestions included 'Community building,' 'Machine learning (AI) and text production,' 'Pedagogical courses of high quality focusing on the combination of in-person activities and digital activities for the best results,' 'Technology to enhance opportunities for student collaboration, discussion, and community building,' 'embedding virtual environments, simulations' (which was mentioned several times), 'Tweaking and adapting OLAT for more aligned teaching and collaborative learning and peer-peer assessment,' (OLAT is the LMS at Kiel university), 'Use of embedded technologies on smartphones for creative and innovative processes,' 'Data visualization and scientific animation,' 'Help to make more professional teaching videos,' and 'Advance programs and teaching methods, along with clarification of GDPR issues concerning new programs.' These suggestions underscore the desire for courses that prioritize effective pedagogy and the enhancement of the learning environment over a narrow focus on tool proficiency.

To assess the potential for knowledge and skill transfer within the university alliance, 88 respondents in managerial roles were asked if their universities already had courses within the domain of digital teaching that could be shared or used to develop new courses for the alliance. The response options mirrored the previous question, enabling us to establish connections between the responses.

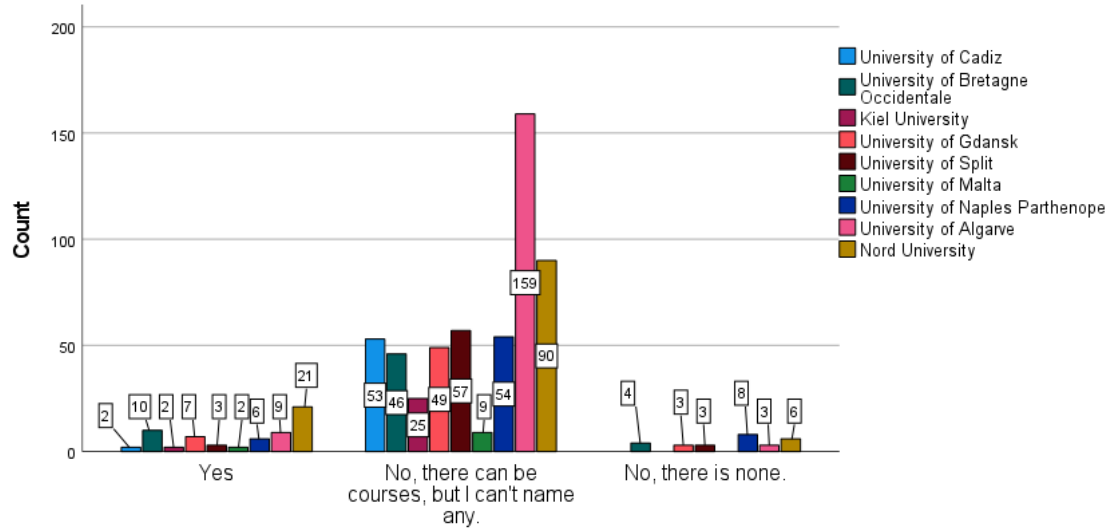


The key findings from managers regarding their universities' potential for knowledge transfer are as follows:

- 88% of managers indicated their universities could contribute knowledge to 'Introductory courses on the use of digital tools in teaching activities.'
- 76% of managers expressed their universities' capability to share knowledge related to 'Digital tools in my teaching to activate and involve students in the learning process.' Notably, this option received a high request rate in the previous question, revealing a strong potential to enable an exchange of digital expertise within the alliance.
- 84% of managers confirmed their universities had expertise to offer in the 'Effective use of digital teaching platforms such as Teams, Zoom, and similar tools.'

Courses at the forefront of digital knowledge and competence

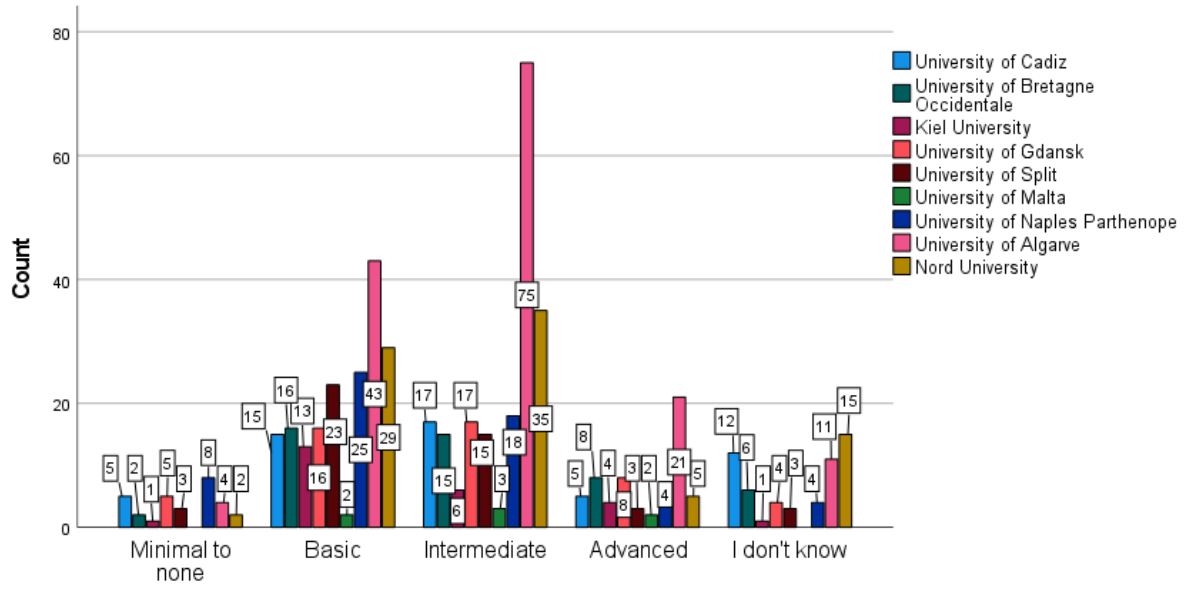
We also asked respondents whether they can identify courses they see as dealing with topics at the forefront of digital knowledge. A small group (62 respondents) answered in the affirmative, while a significant majority (544 respondents) could not name any and 27 respondents stated that there were no courses that dealt with this topic. Those that could identify such courses gave us the names of 38 courses (see in Appendix 3 a full overview of the courses by university).



D.11. Could you name one or more courses at your university that you see as at the forefront of "digital knowledge" that other universities could benefit from?

Digital literacy among students

We asked respondents to assess the level of digital literacy among first-year Bachelor students for academic work. The assessments predominantly fall within the lower categories, particularly 'Basic' and 'Intermediate.' While this may align with the expectations for first-year students, it underscores the importance of systematically addressing and improving the digital literacy of students.



D.7. How do you rate the level of digital literacy of first year Bachelor students for using digital technology for academic work?

Use of digital technology in teaching

We sought to gain a comprehensive understanding of the practical application of digital technology in teaching and learning activities across the universities. To achieve this, participants were asked to rate their level of agreement with a series of statements regarding their utilization of digital tools and its impact on students' learning outcomes. These responses provide valuable insights into the diverse ways digital technology is integrated into educational practices, ranging from enhancing engagement and collaboration to promoting personalized learning and skill development. At the same time, we recognize that assessing the impact of digital tools on education is not a simple endeavor. What works best can vary greatly depending on the specific learning context, the objectives of the educational experience, and the unique needs of students.

There is no one-size-fits-all approach when it comes to the integration of digital technology in education. A higher percentage of respondents indicating agreement with a statement does not necessarily imply a superior approach. It all depends on the intricacies of the learning design. For instance, one may wonder whether employing video presentations and podcasts as alternatives to traditional lectures is always the ideal choice. If the goal is to create an interactive session where students are engaging in learning activities in real time, face-to-face lectures may be the most appropriate pedagogical choice.

The questions on the use of digital technology in teaching activities aim to address several aspects:

1. **Understanding Competency**: We aimed to uncover the differences between self-reported competency levels and actual practice. For example, a participant might report a high competency level in producing educational videos but possess a lower competency level in utilizing digital technology for collaborative learning. This broader perspective helps to define what competency truly entails.

2. **Reflection**: These questions encouraged respondents to reflect on their practices and to consider where they might need to bolster their competency. They invited educators to

contemplate untapped possibilities with digital technology in teaching, identifying areas where acquiring new skills and competencies could be beneficial.

3. **Emphasizing Learning Outcomes**: The questions highlighted the importance of technology as a tool to enhance teaching and learning. We underscored that technology should be used as a means to achieve specific learning outcomes rather than simply adopting digital tools for the sake of technology itself.
4. **Exploring Possibilities**: Lastly, we explored various dimensions of digital technology in learning, acknowledging the vast potential it holds for positive transformation.

The table below presents the aggregated results of these questions.

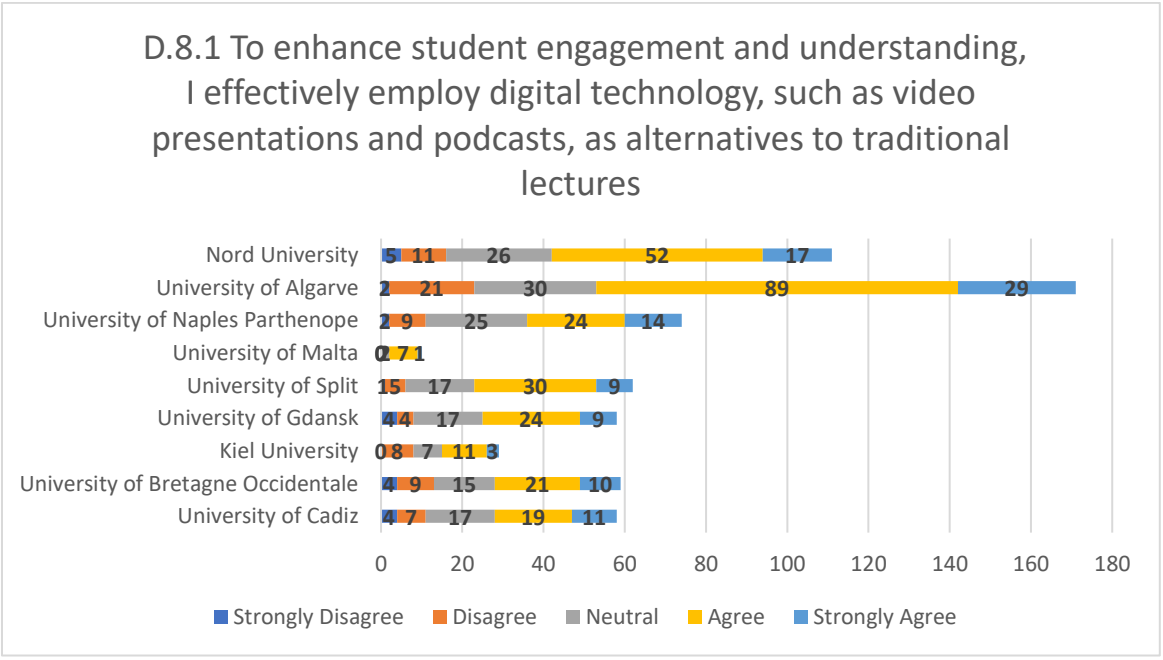
Statements	**Positive (strongly agree+ agree)**	**Neutral**	**Negative (Strongly Disagree + Disagree)**
To enhance student engagement and understanding, I effectively employ digital technology, such as video presentations and podcasts, as alternatives to traditional lectures.	60.1%.	24.7%	15.2%
I promote active participation, communication, and knowledge sharing among students by utilizing digital tools for collaboration, such as online platforms and virtual classrooms.	62.0%	23.8%	14.2%
I provide new and innovative possibilities for interactive learning experiences through the use of digital technology, allowing students to explore content using multimedia, simulations, and virtual environments.	40.5%	34.4%	25.4%
I incorporate digital tools into assessment methods, such as online quizzes and interactive assignments, to provide more accurate and timely feedback, thereby enhancing students' learning and performance.	52.8%	25.0%	22.2%
I leverage digital technology to facilitate personalized learning experiences, enabling students to progress at their own pace and access resources tailored to their individual needs and interests.	40.0%	32.0%	29.1%
I utilize digital technology in teaching and/or assessments to foster the development of critical thinking, problem-solving, and digital literacy skills, which are essential for students' success in the digital age.	44.9%	34.5%	20.5%
I utilize digital technology to provide seamless access to a wide range of educational resources, including	63.0%	25.8%	11.4%

online libraries, research databases, and educational platforms, expanding students' learning opportunities.			
I employ digital simulations and virtual experiments to enhance students' understanding of complex concepts.	27.9%	33.4%	39.1%
I use digital technology to enhance the socialization process among students, providing opportunities for collaboration, discussion, and community building.	33.7%	36.4%	29.9%

In the following we will go into a more detailed analysis of each statement. It will still be in form of aggregated results but looking at the differences across universities.

Digital mediated lectures

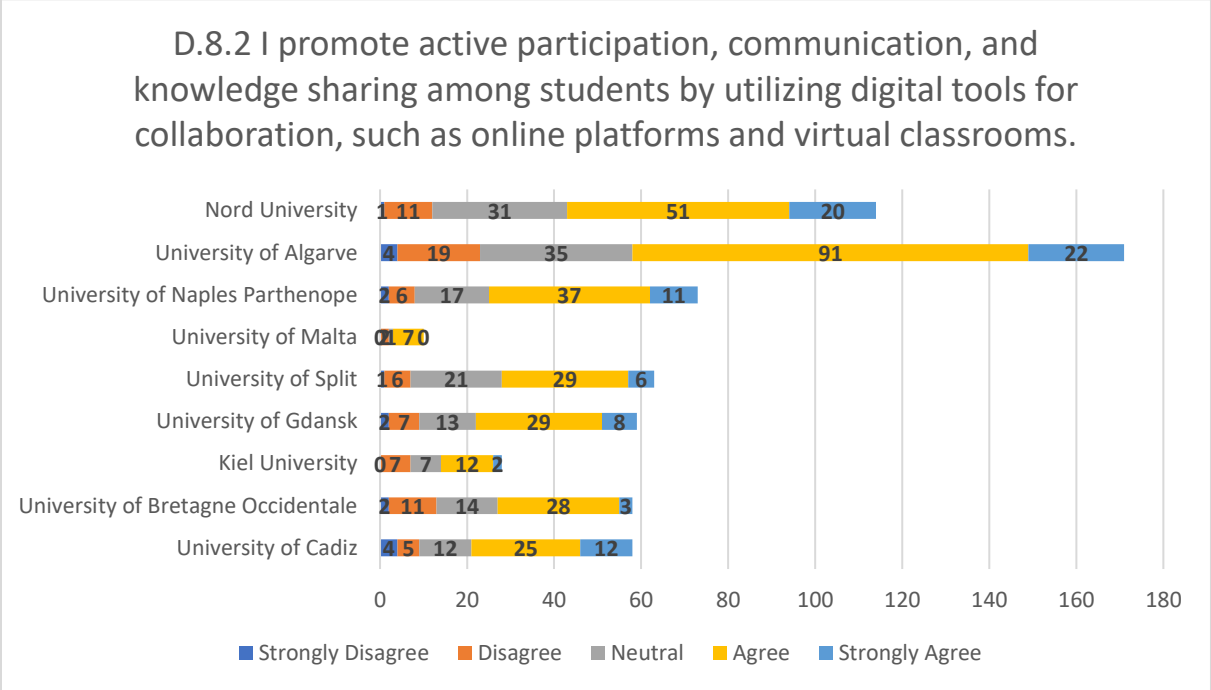
The data reveals varying levels of agreement among respondents across different universities regarding the effectiveness of employing digital technology, such as video presentations and podcasts, as alternatives to traditional lectures. In most universities, a substantial percentage of participants affirm their practice of using digital technology for this purpose. This affirmation ranges from 48.3% in Kiel University to 69% in University of Algarve. The neutral responses range from 17.5% in University of Algarve to 33.8% in University of Naples Parthenope, indicating a level of uncertainty or neutrality. While the negative responses (strongly disagree + disagree) are generally lower, Kiel University stands out with a relatively higher proportion (27.6%) of respondents expressing disagreement regarding the use of video presentations and podcasts to enhancing student engagement and understanding.



Digital collaboration

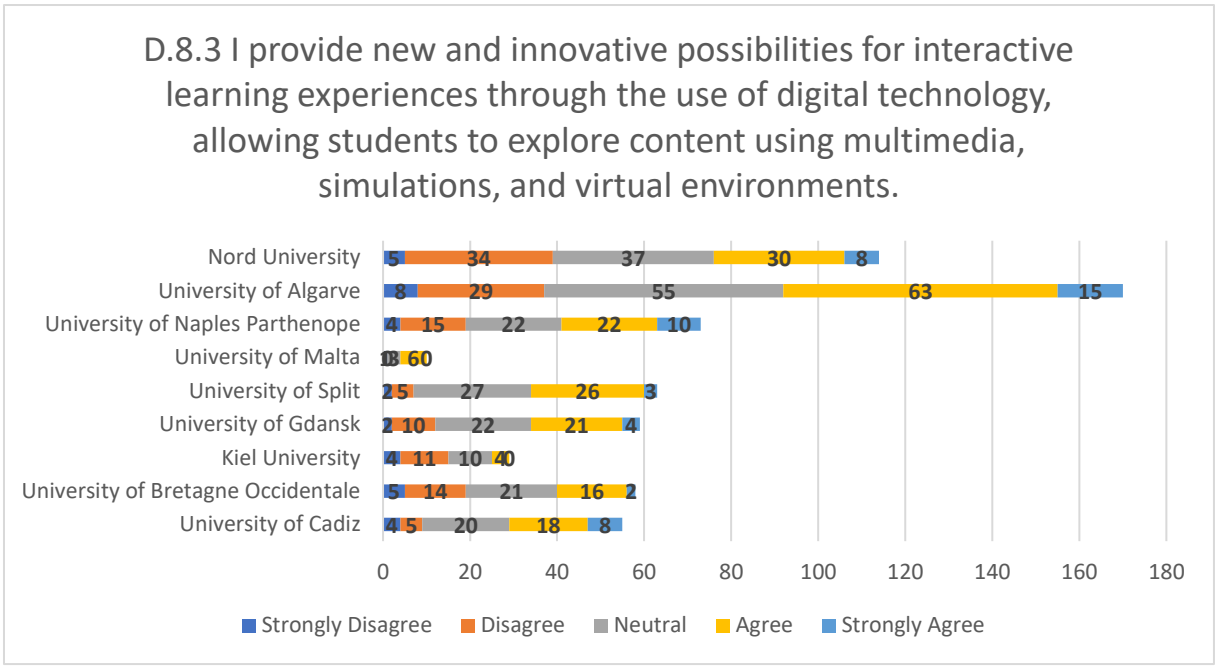
The data provides insights into the promotion of active participation, communication, and knowledge sharing among students through the utilization of digital tools for collaboration, such as online platforms and virtual classrooms, across different universities.

In every surveyed university, a substantial majority of respondents strongly agree or agree with the promotion of active participation and knowledge sharing through the use of digital tools, with affirmation levels consistently surpassing 50% (see for example responses from University of Cadiz (63.8%), University of Gdansk (62.7%), University of Algarve (66.1%), University of Naples Parthenope (65.8%), and Nord University (62.3%)). In University of Split, a relatively higher percentage (33.3%) were in the neutral category, suggesting uncertainty or neutrality. Kiel University and University of Bretagne Occidentale have 25.0% and 22.4% of respondents expressing negative views (strongly disagree or disagree), respectively, toward the promotion of active participation and knowledge sharing through digital tools.



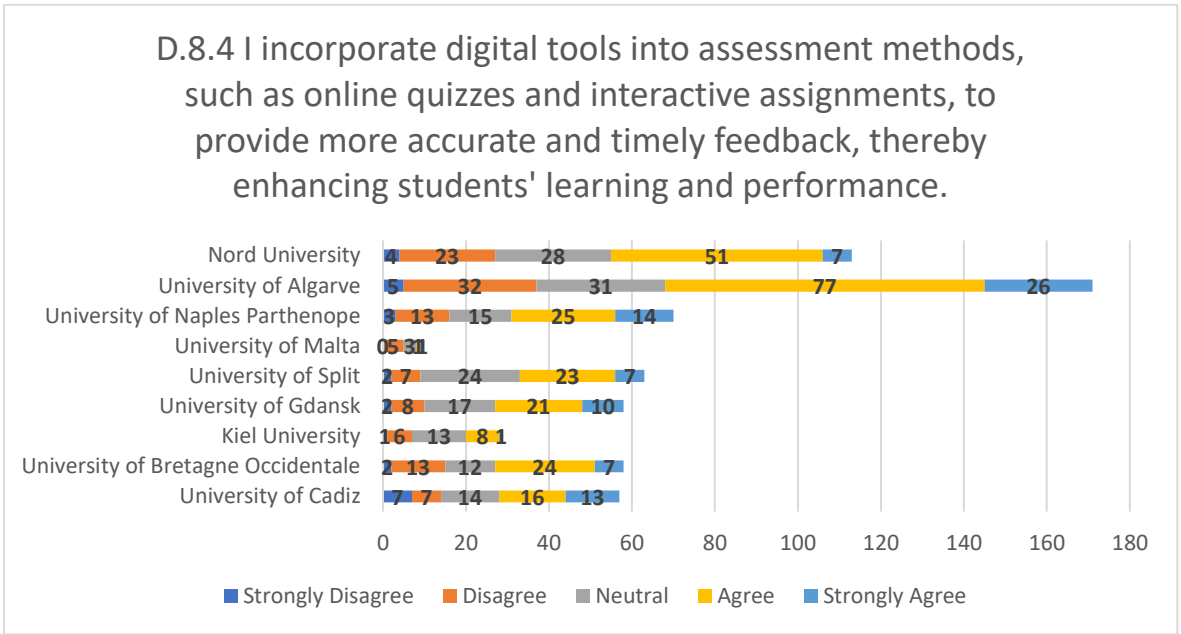
Interactive learning experiences

The data provides insights into the extent to which educators are leveraging digital technology to offer new and innovative opportunities for interactive learning experiences, allowing students to explore content through multimedia, simulations, and virtual environments. Across the universities, there is considerable variation in the level of agreement with this approach. For example, we find substantial positive attitudes towards innovative interactive learning experiences using digital technology in universities such as University of Algarve (46%) and University of Split (46%), while in University of Bretagne Occidentale (36.2%), a third of the respondents express negative views (strongly disagree + disagree). Several universities, such as University of Cadiz, University of Gdansk, and University of Naples Parthenope exhibit a more balanced distribution of responses across positive, neutral, and negative categories.



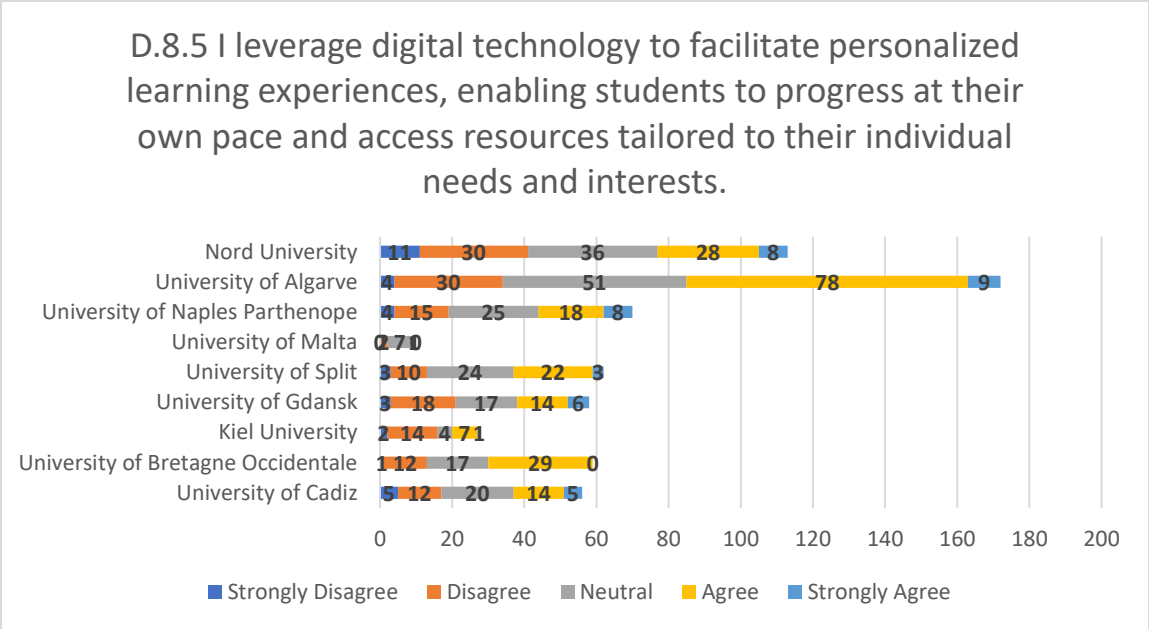
Interactive assessment

This question evaluates the adoption of digital tools in assessment methods to enhance learning experiences and offer students more accurate and timely feedback. The majority of the respondents in most universities agree or strongly agree with utilizing digital tools in assessments. The highest levels of agreement are observed in University of Algarve (60%) and University of Naples Parthenope (56%). A notable portion in Kiel University (44.8%) and University of Split (38.1%) chose neutral, suggesting potential uncertainty or a need for further guidance in these universities when it comes to incorporating digital tools into assessments.



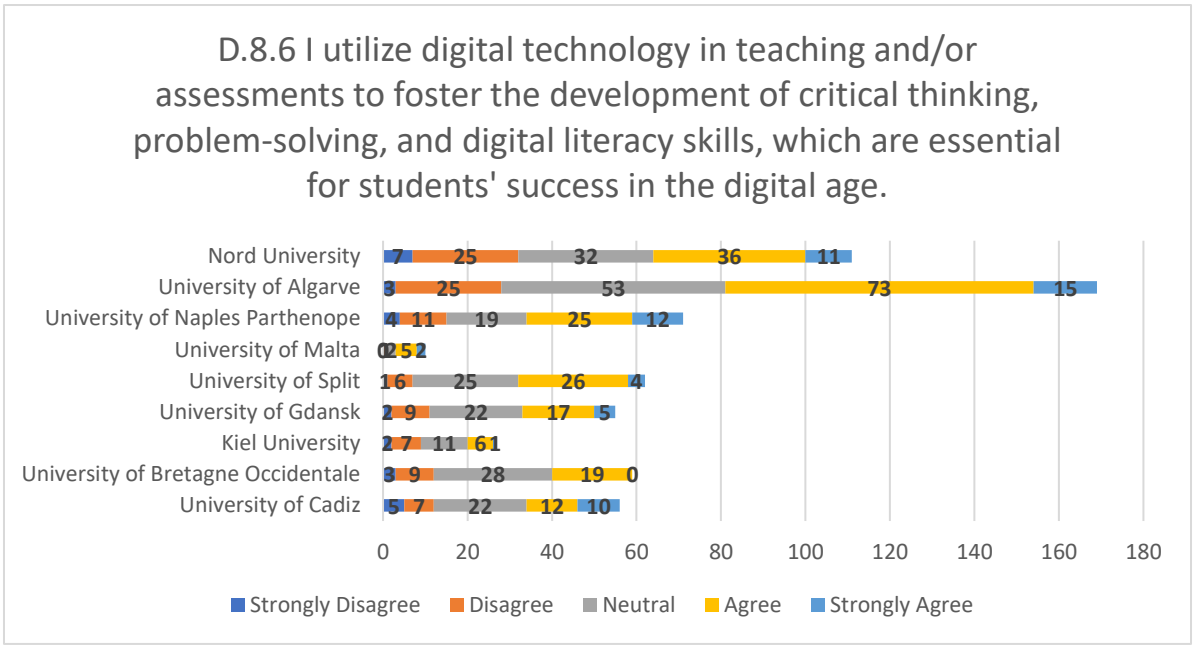
Personalized Learning Experiences

This question evaluates the extent to which digital technology is leveraged to facilitate personalized learning experiences, enabling students to progress at their own pace and access resources tailored to their individual needs and interests. In University of Algarve (50.6%) and at the University of Bretagne Occidentale (49.2%), the majority of respondents express positive agreement (agree + strongly agree) with the statement. Conversely, Kiel University stands out with a notable proportion of respondents (57.1%) expressing disagreement (strongly disagree + disagree) regarding the use of digital technology for personalized learning experiences. The responses from the other universities, including Cadiz, Gdansk, Split, University of Malta, University of Naples Parthenope, and Nord University, indicate a more balanced distribution of responses across positive, neutral, and negative categories, with varying degrees of agreement or disagreement on this approach to personalized learning.



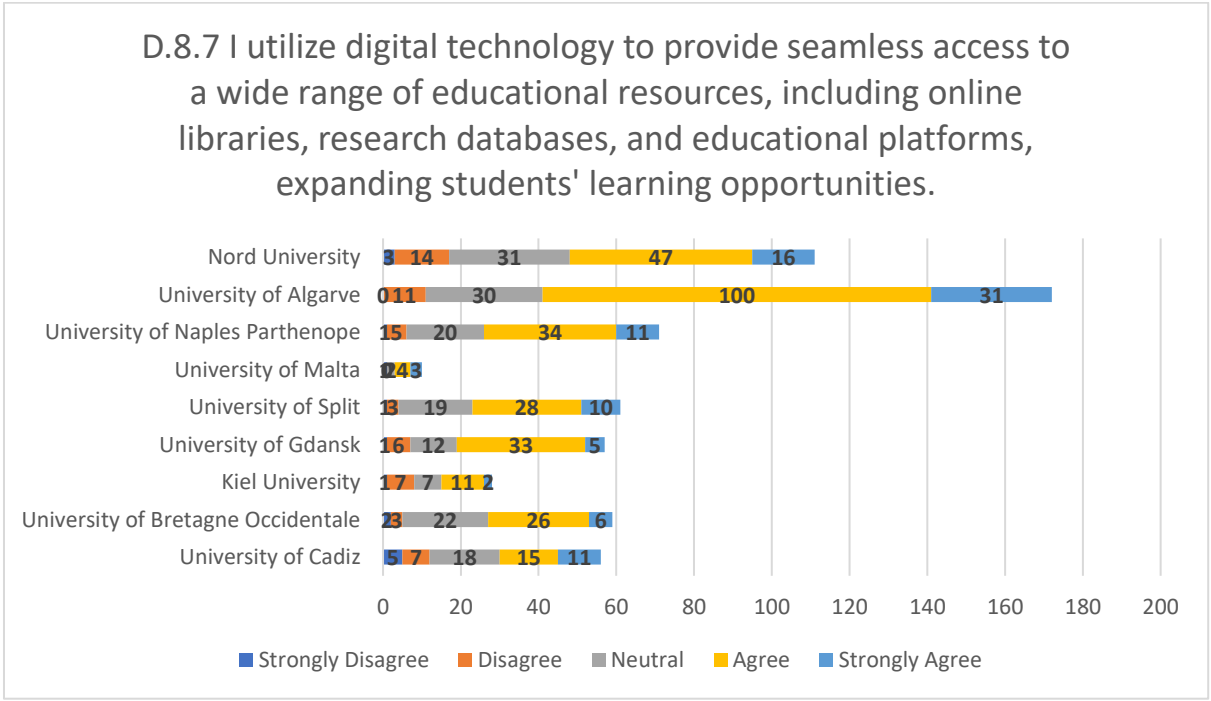
Academic Skills Fostered by Digital Technology

This question assesses the use of digital technology in teaching and/or assessments to promote the development of critical thinking, problem-solving, and digital literacy skills, which are crucial for students' success in the digital age. Responses from the University of Algarve (52.1%) and the University of Naples Parthenope (52.1%) show substantial agreement. Other universities, including Cadiz, Bretagne Occidentale, Gdansk, and Nord University, exhibit varying degrees of agreement or disagreement, with neutral responses suggesting a range of perspectives on the use of digital tools for critical thinking, problem-solving and digital literacy.



Access to Educational Resources

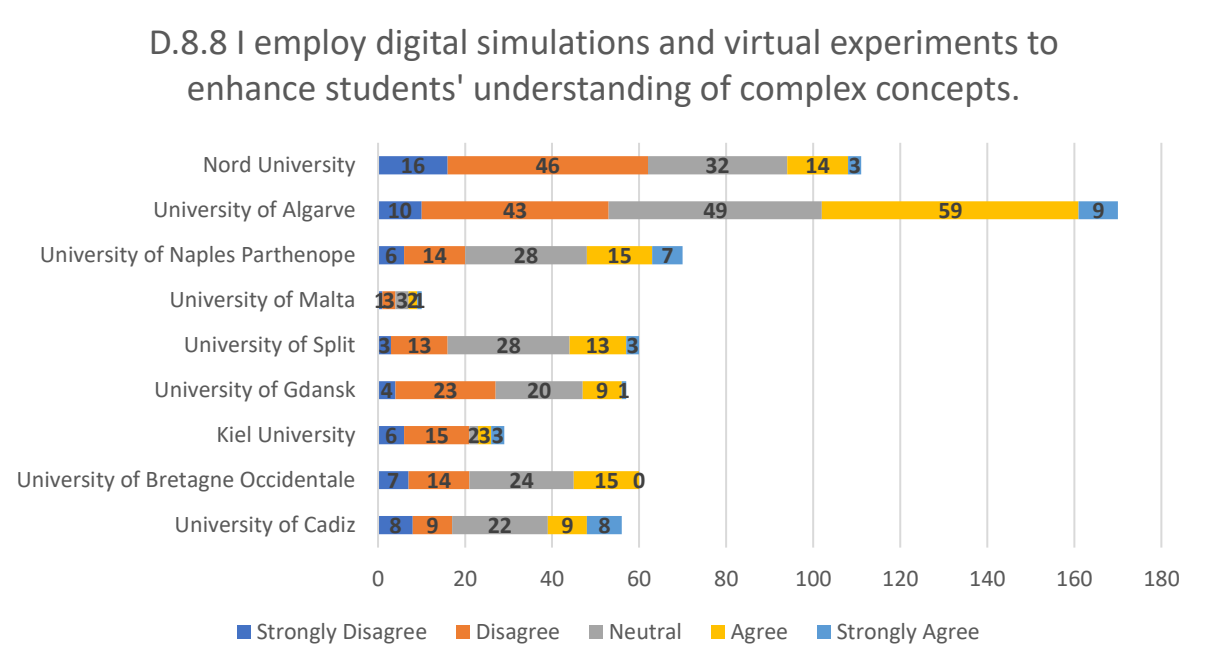
This question evaluates the use of digital technology to provide seamless access to a wide range of educational resources, including online libraries, research databases, and educational platforms, with the aim of expanding students' learning opportunities. The University of Algarve (76.2%) stands out with the highest proportion of respondents strongly agreeing or agreeing with this approach, followed closely by the University of Naples Parthenope (70.0%) and the University of Gdansk (66.7%). Conversely, Kiel University (28.6%) has a third of the respondents expressing disagreement (strongly disagree + disagree) with the use of digital technology to provide seamless access to educational resources. Other universities, including Cadiz, Bretagne Occidentale, Split, and Nord University, exhibit varying degrees of agreement or disagreement.



Simulations and Virtual Experiments

This question assesses the use of digital simulations and virtual experiments to enhance students' understanding of complex concepts. University of Algarve (40%) has the highest proportion of respondents expressing positive agreement with this approach, while Nord University (15.3%) exhibited the lowest level of agreement. Kiel University (72.4%) stands out with the highest proportion of respondents expressing disagreement (strongly disagree + disagree) regarding the use of digital simulations and virtual experiments.

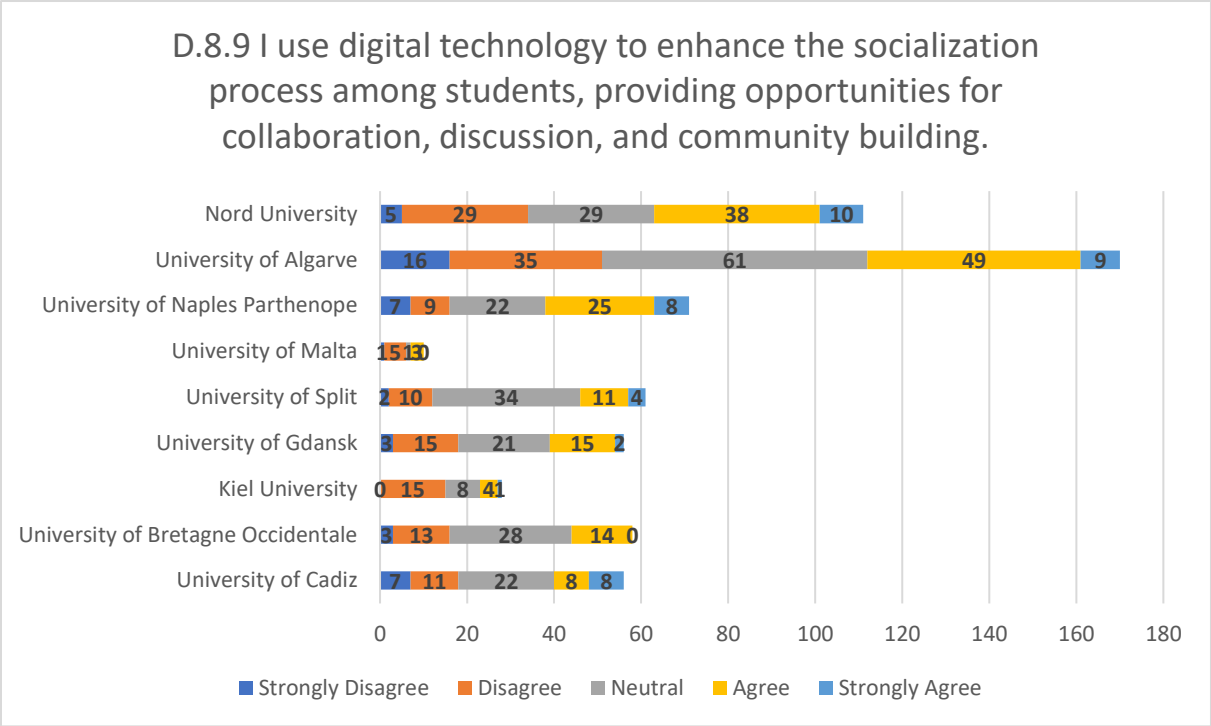
One possible explanation for the stronger disagreement in some cases could be the more complex nature of simulations. The use of simulations can be a costly exercise, either due to licensing fees or the significant time required for both development and implementation, which may contribute to the lower levels of agreement.



Enhancing Student Socialization

This question evaluates the use of digital technology to enhance the socialization process among students, providing opportunities for collaboration, discussion, and community building. University of Naples Parthenope (46.5%) has the highest proportion of respondents expressing positive agreement with this approach, indicating a stronger inclination toward using digital technology for fostering student socialization. Conversely, Kiel University (53.6%) stands out with the highest proportion of respondents expressing disagreement (strongly disagree + disagree).

Overall, the responses for this question show varying levels of agreement across the surveyed universities. While some universities, like Nord and Gdansk, have a relatively balanced distribution of responses across positive, neutral, and negative categories, others, like Kiel University, exhibit a more polarized range of responses. These variations may reflect differing perspectives on the role of digital technology in facilitating socialization and collaboration among students.



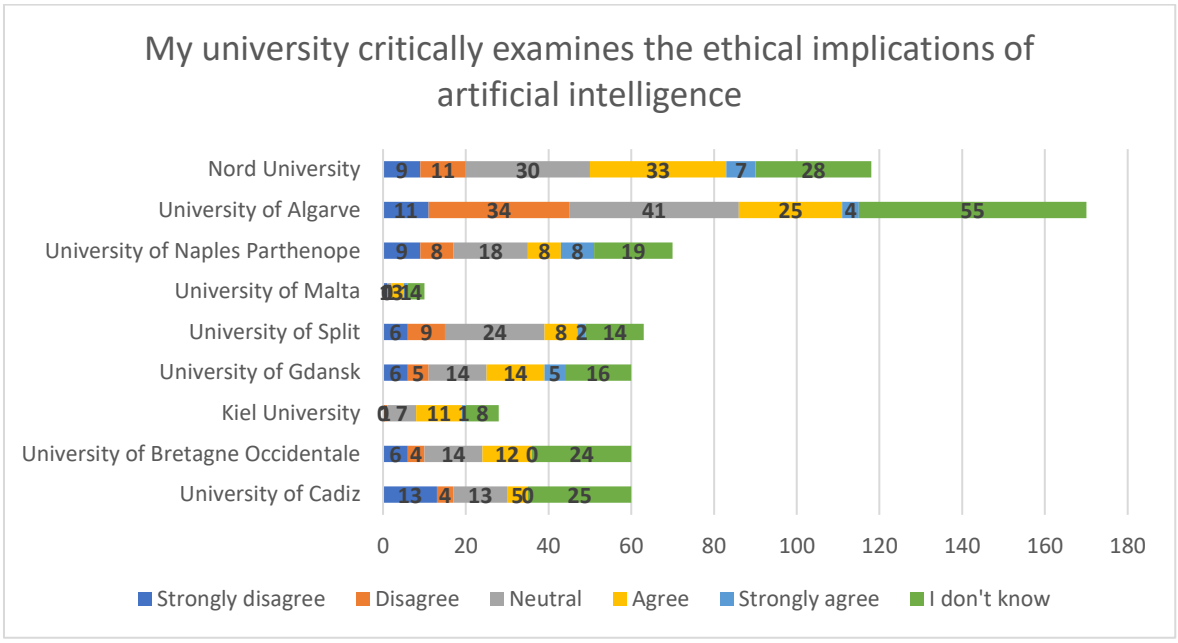
Artificial Intelligence In higher education

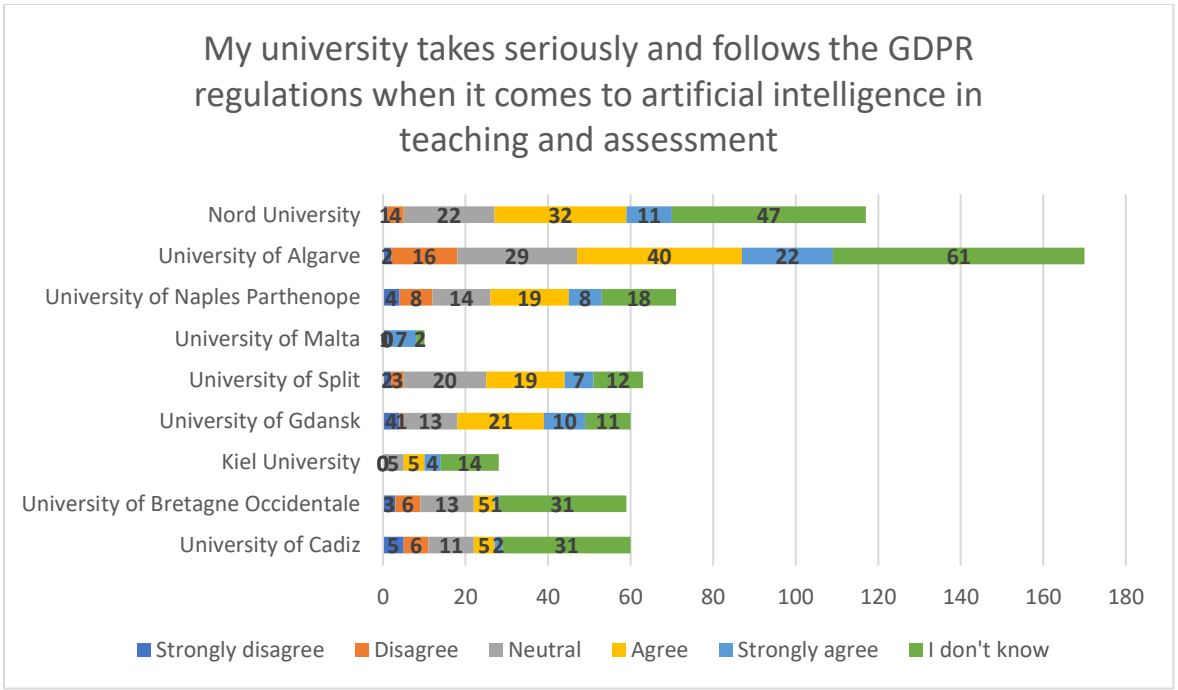
In assessing universities' perceptions and preparedness regarding artificial intelligence (AI) in higher education, respondents rated six statements on a scale from 'Strongly disagree/Disagree' to 'Strongly agree/Agree.' Here, we provide an overview of the aggregated results:

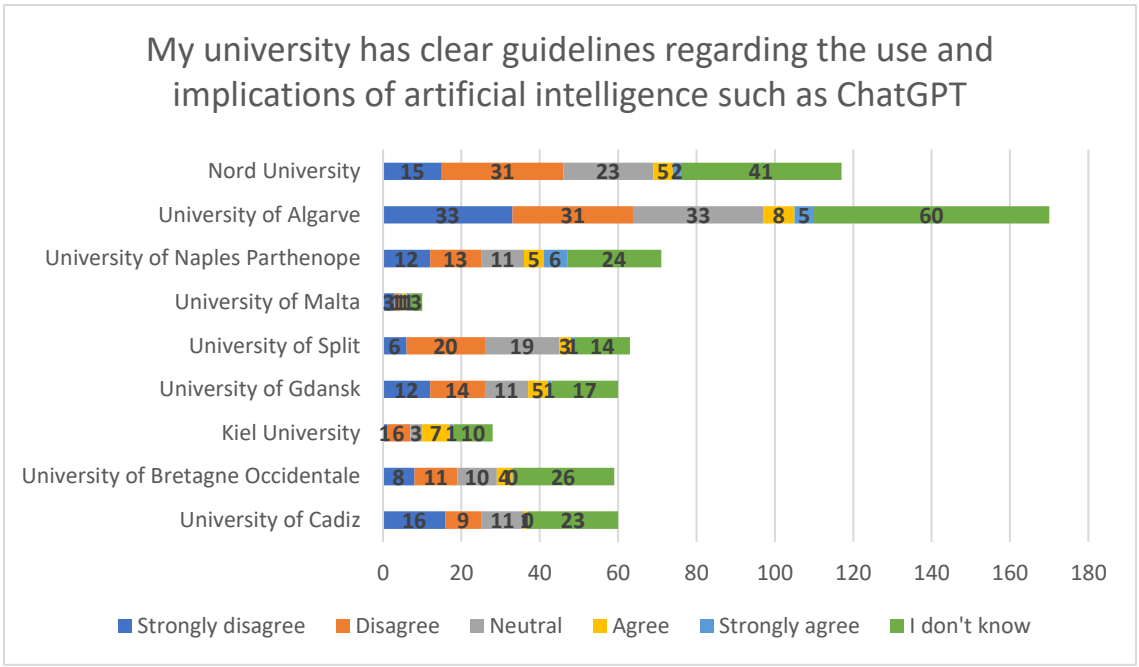
Statements about artificial intelligence	**Positive (strongly agree+agree)**	**Neutral**	**Negative (Strongly Disagree+ Disagree)**
*My university critically **examines the ethical implications** of artificial intelligence*	23%	55.6%	21.4%
*My university takes seriously and **follows the GDPR regulations** when it comes to artificial intelligence in teaching and assessment*	34.2%	55.5%	10.3%
*My university has **clear guidelines** regarding the use and implications of artificial intelligence such as ChatGPT*	8.8%	53.3%	37.9%
*The **students** at my university get **regular training** in how to critically engage with artificial intelligence*	5.1%	48.6%	46.3%
*The **academic staff** at my university get **regular training** in how to critically engage with artificial intelligence*	5.6%	36.3%	58.1%
*Artificial Intelligence (AI) has the **potential to significantly enhance the teaching and learning experience** in higher education*	42.8%	42.5%	14.7%

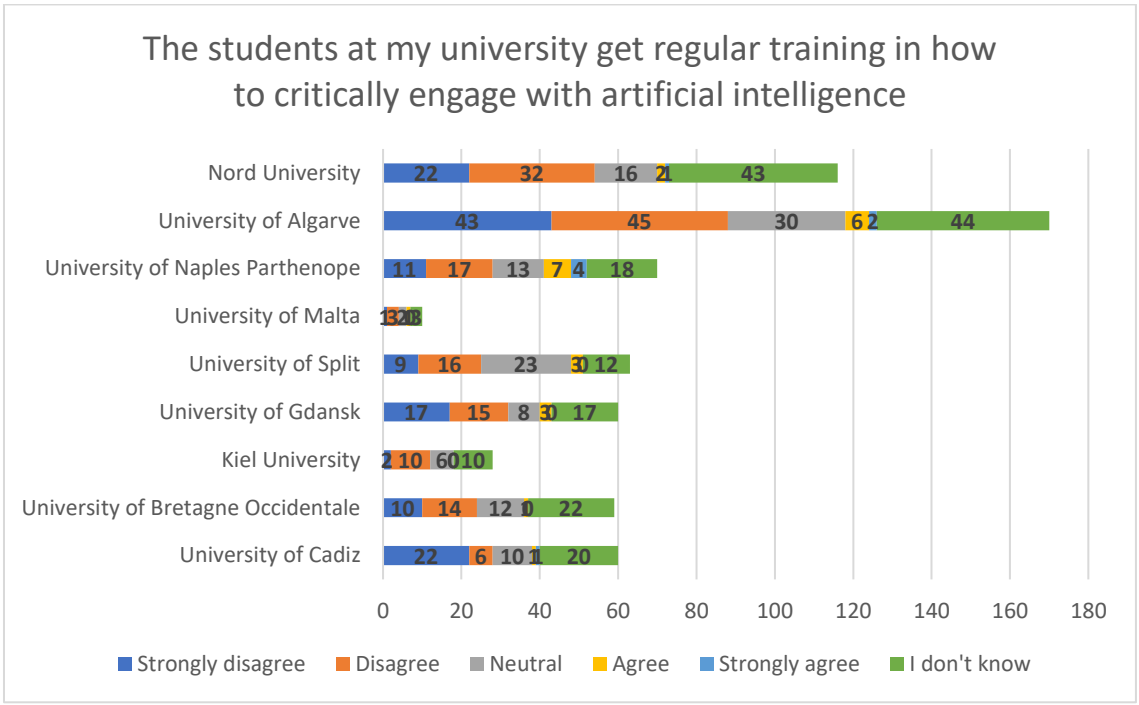
These aggregated responses highlight a significant need for AI-related training among both university staff and students. The low response rate for 'Agree/Strongly agree' when it comes to guidelines and training for both students and academic staff emphasizes this. However, it's worth mentioning that the statements for training used the phrase 'regular training,' which may conceal training that may exist, but is not held *regularly*.

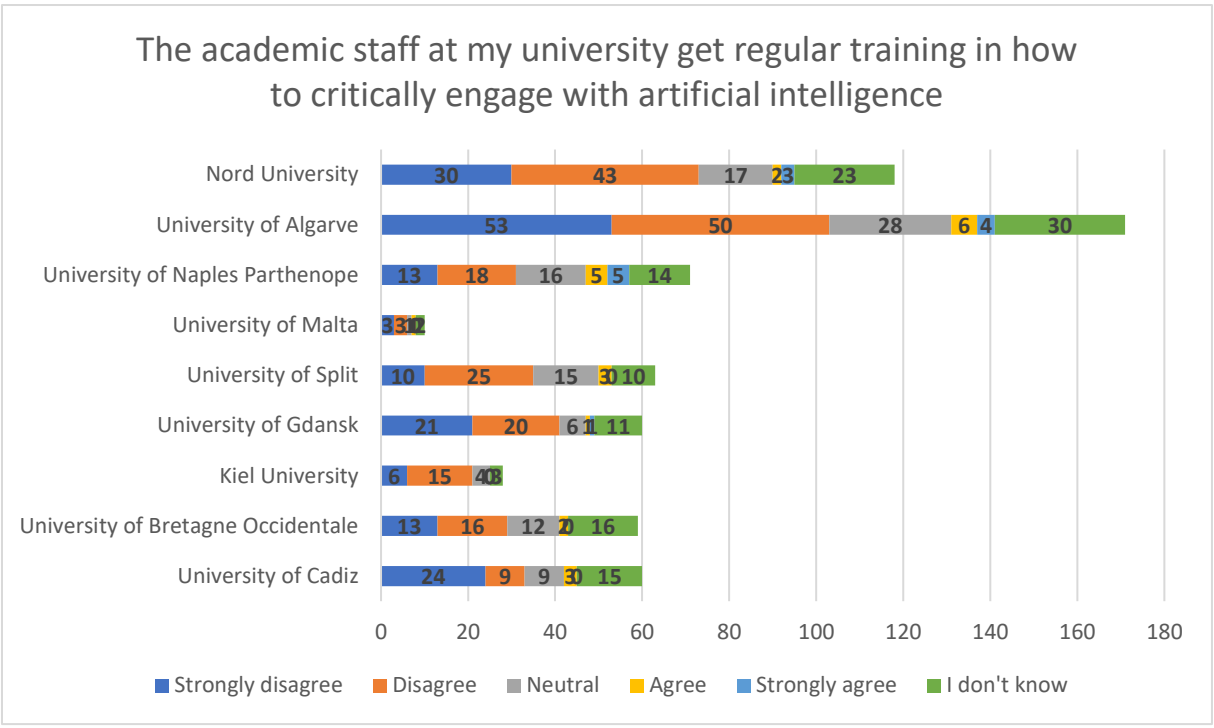
The prevalence of 'Neutral/I don't know' responses indicates a potential knowledge gap in navigating and leveraging AI effectively among the SEA-EU universities. Despite the longstanding existence of AI as a concept, the universities have not been fully prepared for the widespread adoption of advanced language models like ChatGPT. The novelty of this technology poses new challenges for higher education in addressing the evolving interplay between human beings and AI, and the co-production of knowledge by these entities. The graphs illustrating the questions on AI and their responses by university are provided below.

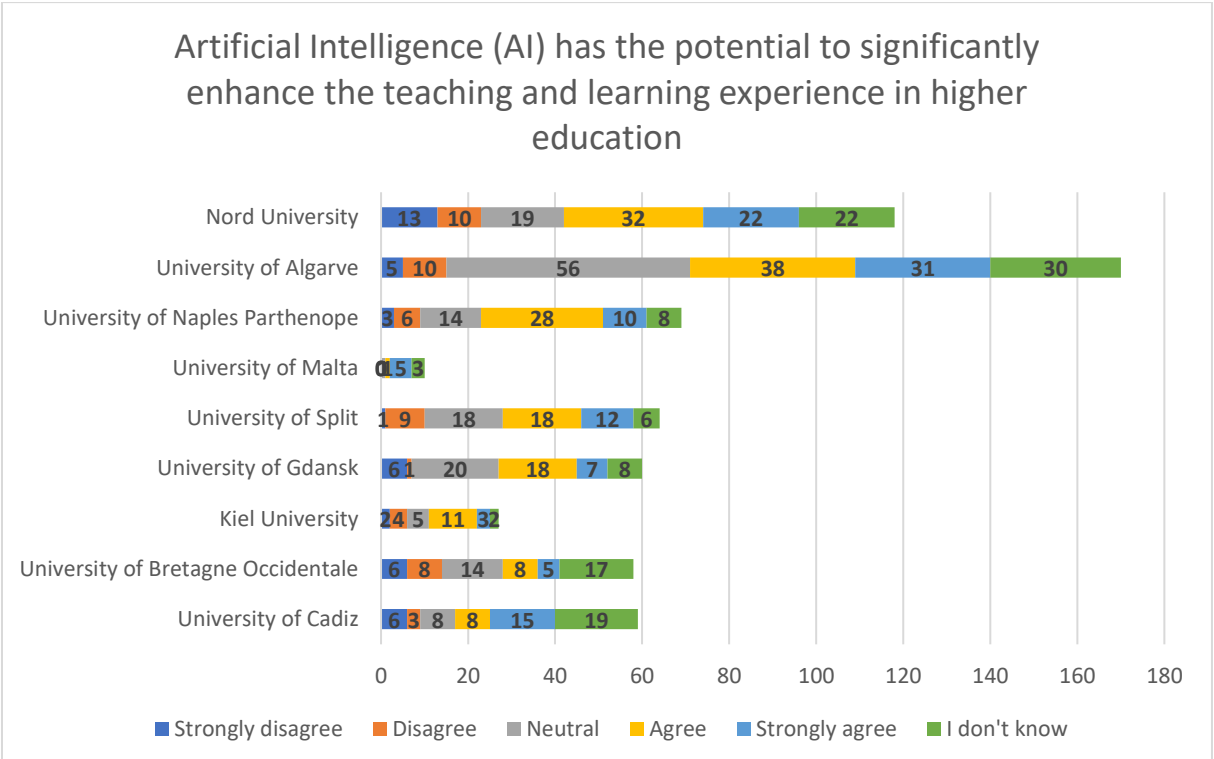





My university has clear guidelines regarding the use and implications of artificial intelligence such as ChatGPT
Nord University
University of Algarve
University of Naples Parthenope
University of Malta
University of Split
University of Gdansk
Kiel University
University of Bretagne Occidentale
University of Cadiz
0
20
40
60
80
100
120
140
160
180
Strongly disagree
Disagree
Neutral
Agree
Strongly agree
I don't know


The students at my university get regular training in how to critically engage with artificial intelligence
Nord University
University of Algarve
University of Naples Parthenope
University of Malta
University of Split
University of Gdansk
Kiel University
University of Bretagne Occidentale
University of Cadiz
0
20
40
60
80
100
120
140
160
180
Strongly disagree
Disagree
Neutral
Agree
Strongly agree
I don't know



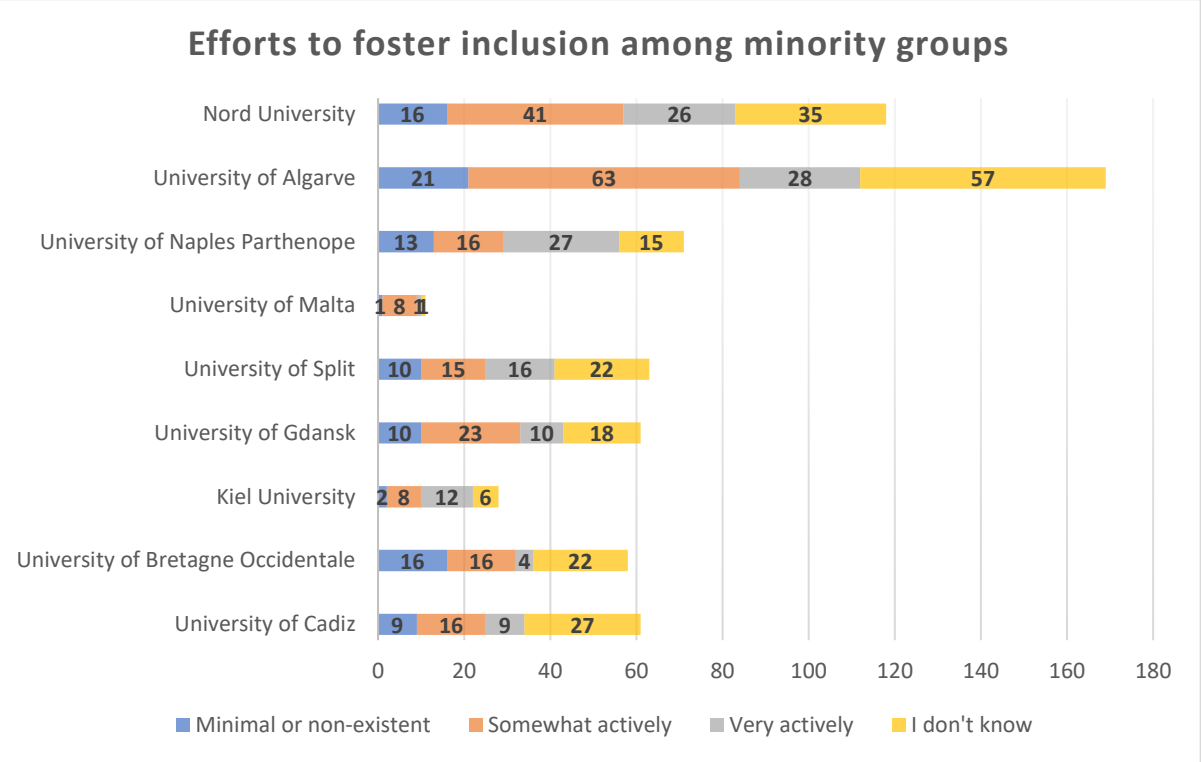


Addressing inclusion of minority groups, individuals with special needs, and gender sensitivity

The last section in the survey addressed the inclusion of minority groups and individuals with special needs, gender sensitivity and being open to different opinions and worldviews in the SEA-EU universities. The respondents were asked to assess their university's commitment to promoting inclusion across seven different dimensions within work and study life. The first dimension includes university efforts to foster inclusion among minority groups, particularly ethnic, racial and religious

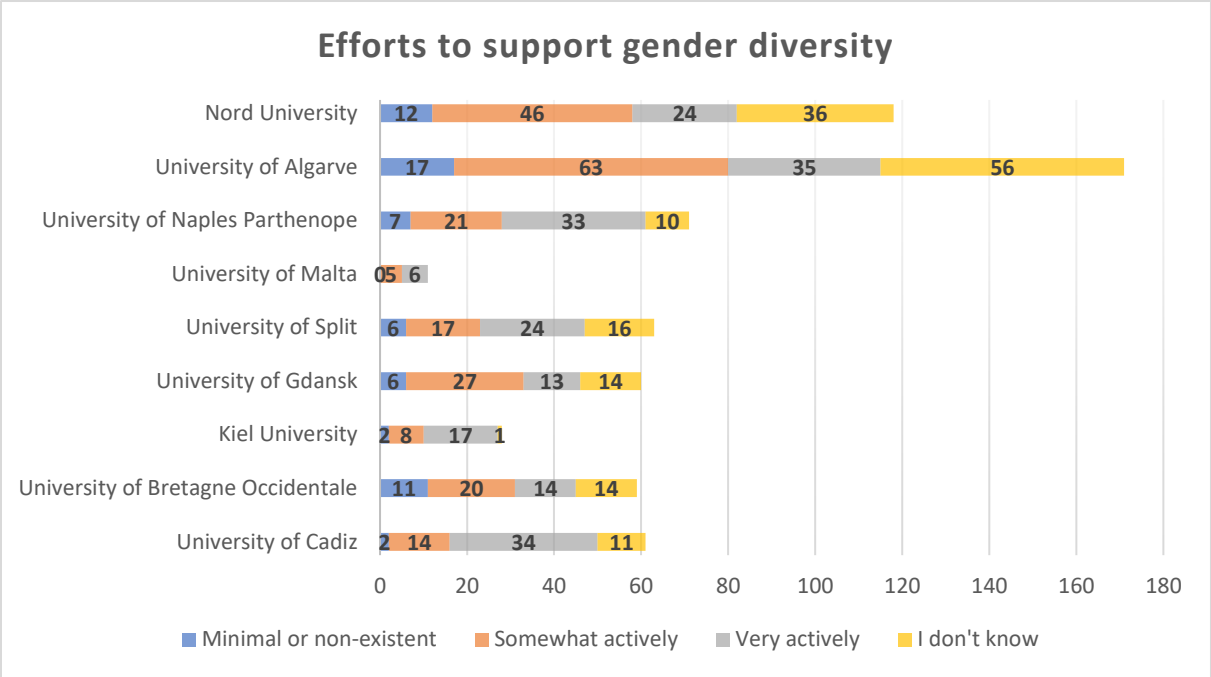
communities. A total of 640 respondents provided answers pertaining to this dimension. Among the survey participants, 15% expressed the belief that their university's efforts in this regard are minimal or non-existent. However, a larger proportion of respondents, encompassing 32% and 21% of the total, perceive their universities' efforts in promoting the inclusion of minority groups as somewhat active and highly active, respectively. A third of the respondents (32%) opted for the response 'I don't know'.

Notably, the majority of respondents in Gdansk (54%), Algarve (54%), Nord (57%), Kiel (72%), and Naples Parthenope (61%) stated that their universities are making moderate to substantial efforts in promoting the inclusion of minority groups. However, many respondents in Cadiz (44.3%), Bretagne Occidentale (37.9%) and Split (34.9%) were not aware of any initiatives related to the inclusion of minority groups.

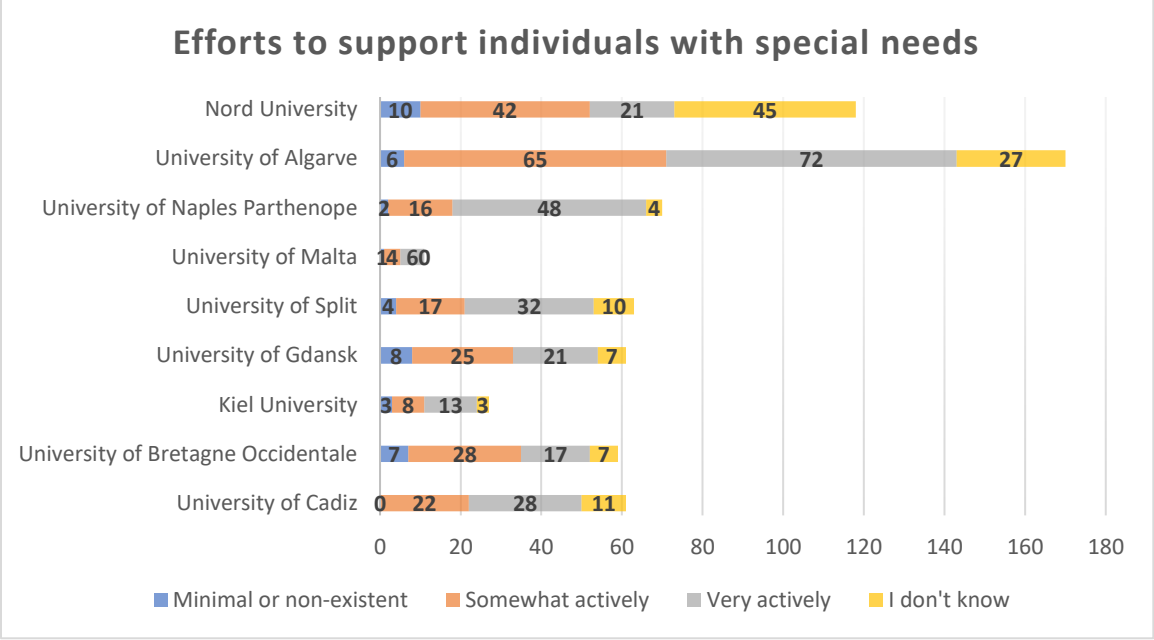


The second dimension relates to the universities' commitment to gender sensitivity. The survey participants were asked about the degree of their universities' engagement in fostering inclusivity, regardless of individuals' gender identities. Among the 642 respondents that answered this question, a significant proportion (65.6%) perceive their university's efforts to be moderate to high level, while about a fourth of the respondents (25%) lack knowledge of any such initiative.

The majority of respondents from Cadiz (56%), Kiel (61%) and Naples Parthenope (47%) state that their universities are highly active in promoting gender sensitivity, while a third or more of respondents from Bretagne Occidentale (34%), Gdansk (45%), Algarve (37%) and Nord (39%) state that their university promotes gender sensitivity 'somewhat actively'. We also find a lack of awareness among many respondent (Nord (30.5%), Algarve (32.7%), Split (25.4%), Gdansk (23.3%) and Bretagne Occidentale (23.7%)) revealing the need for awareness-raising activities in these universities.



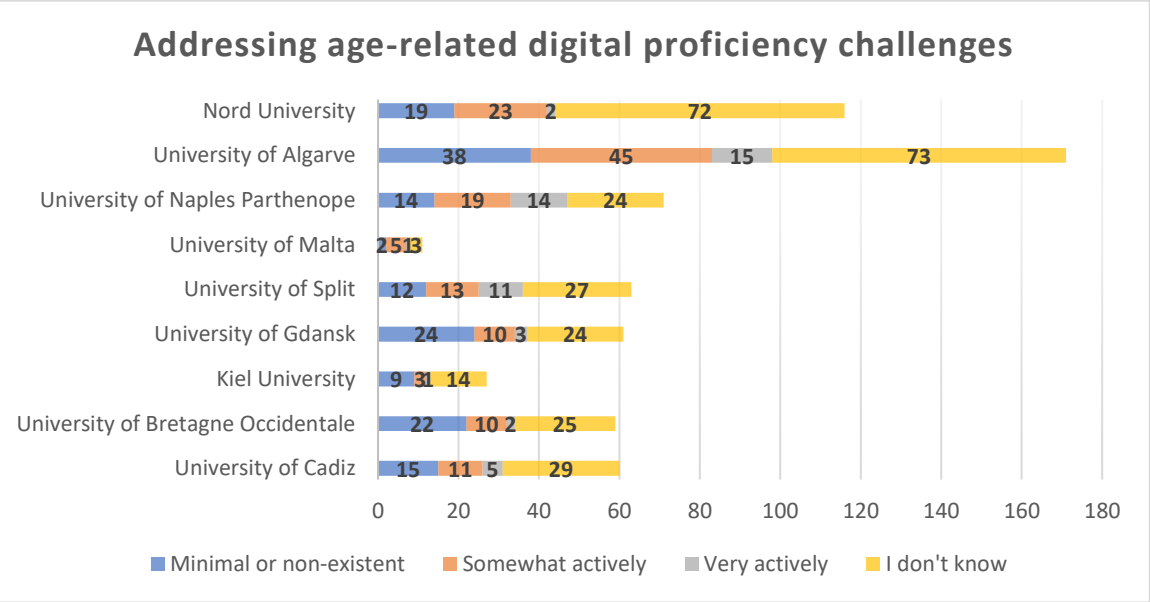
A comparable scenario emerged when examining the third dimension, which aimed to assess the extent to which the universities provide support to students and staff with special needs. A significant proportion of respondents from Naples Parthenope (69%), Kiel (48%), Split (50.8%) and Algarve (42%) perceive their university's support for special needs individuals to be high. No respondents from Cadiz perceived support for individuals with special needs as 'minimal or non-existent', with many indicating 'very actively' (46%) followed by 'somewhat actively' (36.1%). A notable proportion of respondents from Nord (38%) expressed uncertainty about their universities efforts in supporting individuals with special needs indicating a need for improved communication or awareness.



The fourth dimension relates to addressing challenges associated with digital proficiency among individuals of different age groups. Almost half of all the respondents (46%) expressed a lack of knowledge regarding their universities' efforts in addressing age-related digital challenges. A notable group (24%) considered their university's efforts in this regard to be limited or non-existent, while 22%

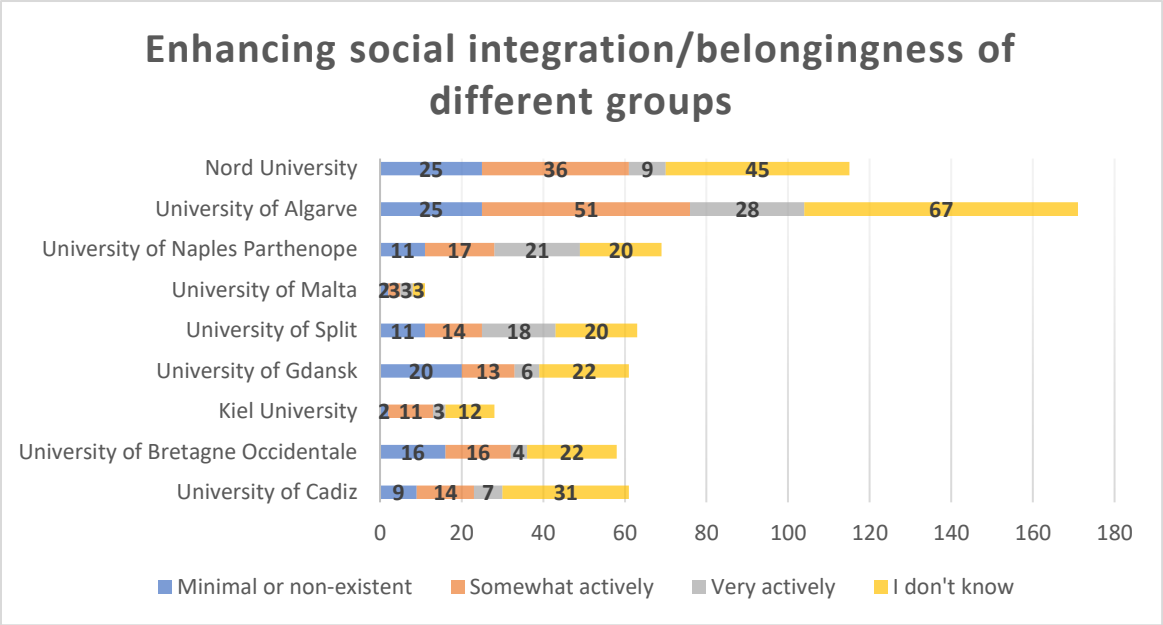
considered them to be moderate. Only a minority of respondents (8.5%) assessed their universities as actively addressing age-related digital challenges to a high degree.

A substantial percentage of respondents from Nord (62%), Kiel (52%), Cadiz (48%), Split (43%), Algarve (43%), and Bretagne Occidentale (42%), expressed uncertainty regarding their universities' endeavours in addressing these challenges. An equal proportion of respondents (39%) from Gdansk, either expressed uncertainty or held the perception that the support in this regard is 'minimal or non-existent'. A noteworthy percentage of respondents from Bretagne Occidentale (37%) and Kiel (33%) view the support as 'minimal or non-existent'. A lower proportion of respondents across all universities, spanning from 1.7% in Nord to 20% in Naples Parthenope, perceive the level of support as 'very active'.



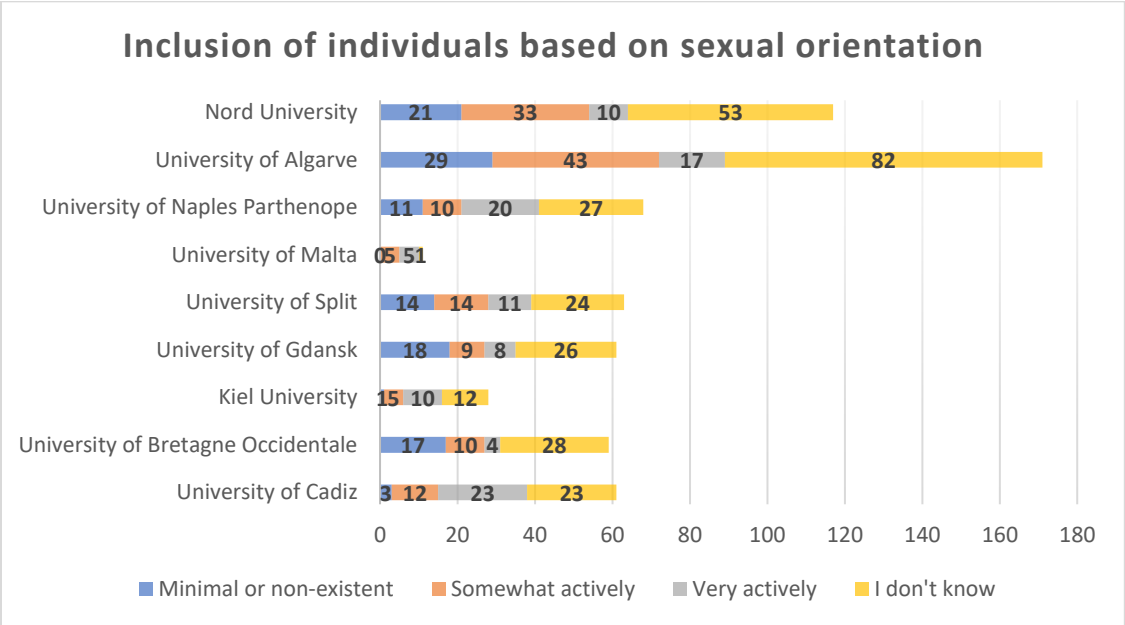
The respondents were also asked to assess their universities' initiatives in enhancing a sense of belongingness among diverse groups (the fifth dimension of the inclusion-questions). A total of 637 responses were received. About 38% of the respondents stated they were not aware of any such initiatives. 'Somewhat actively' is the response category chosen by moderate number of respondents (28%) across all universities, followed by 'minimal to non-existent' and 'very actively' response categories constituting 19% and 16%, respectively.

Many respondents from Cadiz (51%), Bretagne Occidentale (38%), Kiel (43%), Gdansk (36%), Split (32%), Algarve (39%) and Nord (39%) were not aware of any such initiatives in their university. A third of the respondents from Naples Parthenope (30%) and Split (29%) perceived their universities as very actively promoting social integration and belongingness of different groups. Interestingly, at the University of Bretagne Occidentale, a similar proportion of the respondents (28%) held the view that their university's efforts in this regard were either minimal/non-existent or moderate. A comparatively higher percentage of respondents from Gdansk (33%) indicated that their university's efforts in enhancing social integration or belongingness of different groups is 'minimal or non-existent'.



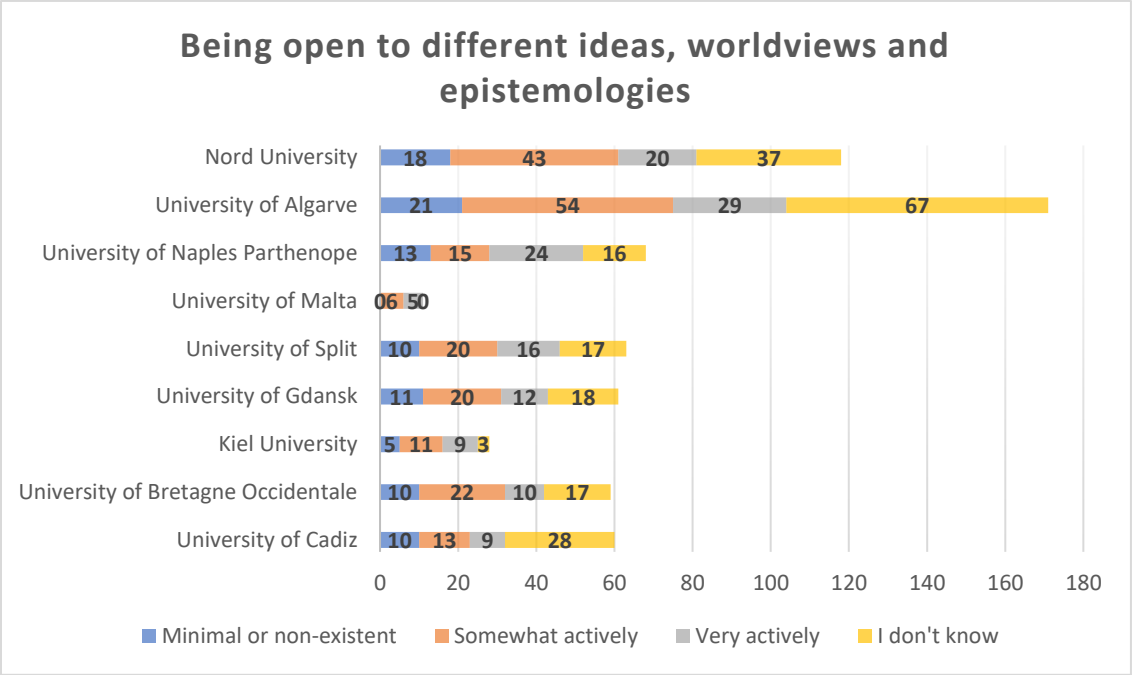
The sixth dimension touches upon the university's approach to promoting inclusion of persons with diverse sexual orientation. Of the total 639 respondents that answered this question, a considerable group (43.2%) replied 'I don't know', indicating either an absence of such initiatives or a lack of information about the topic. Others replied that their university has initiatives that target this area either 'somewhat actively' (22.1%) or 'very actively' (17%). However, 18% of respondents evaluate their universities' efforts in inclusion of sexual orientation to be 'minimal or non-existent'.

The most prevalent answer among the respondents from all universities on this topic (with the exception of Malta and Cadiz) shows a notable lack of awareness concerning their universities' actions for advancing inclusiveness with regard to sexual orientation. At the University of Cadiz, similar proportion of respondents reply that they lack awareness of such initiatives as those that believe that their university is actively working towards inclusion of sexual orientation (38%).



The final dimension relates to the universities' openness to different ideas, worldviews and epistemologies. Among the 639 respondents, approximately equal proportion of respondents (31.8%

and 31.9%) chose either 'I don't know' or 'Somewhat actively', respectively, in reference to their universities' willingness to embrace diverse ideas, worldviews and epistemologies. 'Very actively' is a less frequently chosen category among respondents (21%) followed by 'minimal or non-existent' category constituting only 15%. More than one-third of the respondents from Bretagne (37%), Kiel (39%), Gdansk (32%), Split (32%) and Nord (36%) indicate a moderate level of openness. 'Very actively' is the most frequently chosen category (35.3%) among the respondents from Naples Parthenope. A large share of respondents from Cadiz (47%) and Algarve (39%) expressed a state of uncertainty regarding this aspect.



Summarizing reflections, lessons learned and preparing for the upcoming workshop

Lessons learned and competence sharing opportunities

We summarise below some of the most salient lessons we learned from developing and implementing the survey in the nine SEA-EU universities. This will hopefully build knowledge and make the process of designing and conducting other surveys in the alliance more agile.

- Timing challenges: Conducting surveys during periods that coincide with holidays, exams, or other busy times can be problematic. In the case of summer holidays, we learned that conducting a survey involving nine universities in different countries, simultaneously, and aligning schedules becomes particularly challenging. This resulted in the survey remaining open over a period of two months (from June to August).
- Timing for optimal responses: Identifying the best times and tailoring the launch of surveys to coincide with ideal times in the different universities (that is, adopting different launch dates) could be crucial for successful survey implementation.
- Survey fatigue: Overusing surveys can lead to survey fatigue among respondents. Even individuals who are genuinely interested in the survey's topic may struggle to engage and respond when surveys are frequent.

- New member engagement: The novelty factor within the alliance tends to yield a high response rate among new alliance members, that might be due to their initial enthusiasm and interest.
- Responsibility for raising awareness: Raising awareness among staff about the SEA-EU alliance and surveys and other projects alike is a university-specific responsibility. Having someone working hands-on at each university is crucial to ensure a high response rate.
- Valuing respondents: Those who respond to the survey provide valuable and relevant information, reflecting their prioritization of the survey's subject matter. Even if there is a general low response rate to the survey, we still have 674 responses, which creates a great community of interested and engaged academic staff and a substantial potential for further activities.
- The collaborative process of co-creating the survey in the core academic team, with our interdisciplinary advisory panel of experts, and the feedback and support from partner universities is a valuable asset and makes for an excellent foundation for future activities planned in this task.

We now have an overview courses on different topics suggested by the respondents to the survey. However, due to the general low response rate, we recommend initiating a dialogue with our alliance partners, in order to provide an opportunity for further input, particularly from those universities that had exceptionally low response rates. To facilitate this, we propose sharing the suggested subjects, along with the identified needs and preferences with partner universities. This way, we can gather feedback to ensure that we have adequately addressed the central needs, preferences, and opportunities for collaboration within the academic landscape of the alliance. Furthermore, by sharing the short competency report with the alliance community we may also gather additional information about available courses and training programs our survey may not have picked up. We also will take into account the availability of existing online courses in the domain of marine and blue studies.

We may also discuss how to establish strategies within the alliance to ensure the comprehensive incorporation of Sustainable Development Goals (SDGs) in teaching and learning activities, including the recognition of different interpretations and perspectives on the SDGs in different national and cultural contexts.

In the digital sphere, we can find a flexible approach that generates training opportunities across the universities. Through dialogue with partners, we can find ways to exchange and share courses that include basic, intermediate and advanced levels of knowledge. Furthermore, we need to discuss content and interdisciplinary approaches in introductory courses and develop new courses in accordance with new collaborative relationships in the alliance. The survey has identified considerable positive attitudes to share and exchange knowledge and experience in both the green and digital fields. This is an indication that we have strong contributors within the alliance who are eager to learn from each other. We also need to be open for new ideas - perhaps going even beyond the green and digital dichotomy – to facilitate and develop groundbreaking initiatives.

Looking towards the workshop

The results and short competency report serve as an ideal starting point for initiating discussions and inviting a meaningful dialogue. Where the survey provides a quantitative and tabular overview of needs and preferences, as well as the existing courses within green and digital fields, a workshop on course design and organization (MS9) will be conducted with a qualitative approach. We are also exploring opportunities to expand the qualitative aspect by investigating the possibility of connecting with

academic communities through participation in staff weeks. Additionally, we are looking into the potential for seed funds to finance an extended exploration, which might include workshops in all universities and facilitating cross-disciplinary and transnational collaborations within the alliance and perhaps even with academic partners outside Europe.

One relevant aspect to investigate is how specific Sustainable Development Goals (SDGs) and topics might be influenced by diverse cultures and disciplinary contexts. This could be combined with the digital dimension and whether it would be possible to think in a twin transition (European Commission 2022). Could it be relevant to develop training pathways where the green and digital competency development are intertwined? Another point for discussion is whether the idea of "green" is suitable for accommodating the various university programs. While a narrow approach may appear less appealing to certain individuals, a broad approach might risk becoming too ambiguous. This illustrates an important discussion that will naturally influence the courses and initiatives that will be prioritized moving forward.

Regarding digital competence, we found that the COVID-19 pandemic has elevated the digital competency levels and transformed the digital practices of the respondents. We also observed significant variation in digital teaching practices. This brings forward the question of how we can tailor initiatives to meet the diverse needs and experiences of educators. How can we ensure that our efforts not only cater to the basics but also challenge and enhance the competence of those already at higher levels? What specific courses or learning pathways could be designed to meet the evolving needs of our diverse faculty and staff? With a substantial portion of respondents reporting high levels of digital pedagogic competence, can we harness their expertise to facilitate a positive influence on the development of those who perceive their competence as lower? How can we create collaborative spaces and mentorship programs that allow our more proficient members to guide and inspire their colleagues, fostering a collective growth in digital pedagogic skills?

We must also acknowledge that the local context plays a significant role. Variations in digital infrastructure, learning management systems, and software platforms across universities can introduce challenges when attempting to transfer specific technical aspects of training. One potential avenue to tackle this challenge is to adopt a pedagogy-first approach, emphasizing how to effectively achieve pedagogical goals using the capabilities of digital technology, at the same time as we focus on providing guidance on adapting to local digital infrastructure and technological solutions.

It is also imperative for us to consider the development of offerings that create space for critical discussions about the ethical and responsible use of digital technology in education. This also applies for the use of advanced language models and artificial intelligence (AI) which are rapidly reshaping both society and education and introducing profound questions about the future of teaching, learning, and the organization of university programs and courses. The survey data underscores the high degree of uncertainty and limited training in the field of AI among both students and staff. This highlights a pressing need to address this gap and provide opportunities for training and education. What does AI, and the rapid development of increasingly sophisticated AI systems, mean for pedagogy, knowledge acquisition, and the design of educational experiences? AI has the potential to revolutionize education, offering opportunities to create adaptable, flexible, and advanced learning experiences. However, it also introduces new risks and challenges, such as rethinking assessment design and safeguarding privacy.

Providing students and staff with training opportunities in AI could be of paramount importance not only to address the present needs but also to prepare for the future. Investing resources to make this a shared endeavour within our alliance is worth considering, as it ensures that we stay at the forefront of educational innovation while responsibly addressing the complexities AI brings to our teaching practices.

In conclusion, the survey is one step of our work in task 2.2 and an opening phase of our further activities. It is important that we avoid the risk of silo thinking around the various tasks in SEA-EU 2.0 and connect the dialogue around task 2.2 to the task that deals with green and digital fields in other work packages and tasks such as SEA EU Goes digital and SEA EU Goes greener, and the joint degree programs that are being developed. As some of the goals of the alliance is to connect, discover and share knowledge for development of new educational landscapes we can say that the work with the survey has given rich information about this potential in the alliance, and we will build on this further.

References

Bennich, T., N. Weitz and H. Carlsen. 2020. Deciphering the scientific literature on sdg interactions: A review and reading guide. *Sci Total Environ* 728: 138405-05.

Berg, A., Güler, E., Sandtrø, T. A., Carella, A. R., Lysebo, M., Haugen Thor, J. H., & Norvalls, M. (2020). Designing an Interdiciplinary Course in a Makerspace-Towards collaborative creativity for a sustainable society.

European Commission. Joint Research Centre. 2022. Towards a green & digital future: Key requirements for successful twin transitions in the European Union. Publications Office. https://data.europa.eu/doi/10.2760/977331

FormAkademisk - Forskningstidsskrift for Design Og Designdidaktikk.

Chankseliani, M. and T. Mccowan. 2021. Higher education and the sustainable development goals. *Higher Education* 81, no 1: 1-8.

CohenMiller, A. 2024 (forthcoming). Transformative Moments in Qualitative Research. Method, Theory, and Reflection, Routledge, Taylor&Francis

Hodges, C., Moore, S., Lockee, B., Trust, T., & Bond, A. (2020, March 27). The difference between emergency remote teaching and online learning. *Educause Review*. https://er.educause.edu/articles/2020/3/the-diffe rence-between-emergency-remote-teaching-and-online-learning

International Commission on the Futures of Education. 2020. *Education in a post-COVID world: Nine ideas for public action.* Paris, UNESCO. (Accessed 28 september 2023) https://en.unesco.org/sites/default/files/education_in_a_post-covid_world-nine_ideas_for_public_action.pdf.

Leal Filho, W., F. Frankenberger, A.L. Salvia, U. Azeiteiro, F. Alves, P. Castro, M. Will, J. Platje, V.O. Lovren, L. Brandli, E. Price, F. Doni, M. Mifsud and L.V. Ávila. 2021. A framework for the implementation of the sustainable development goals in university programmes. *Journal of cleaner production* 299: 126915.

Moallemi, E.A., E. Bertone, S. Eker, L. Gao, K. Szetey, N. Taylor and B.A. Bryan. 2021. A review of systems modelling for local sustainability. *Environ. Res. Lett* 16, no 11: 113004.

Markauskaite, L., Carvalho, L. & Fawns, T. The role of teachers in a sustainable university: from digital competencies to postdigital capabilities. *Education Tech Research Dev* 71, 181–198 (2023). https://doi.org/10.1007/s11423-023-10199-z

Moriña, Anabel. 2017. "Inclusive Education in Higher Education: Challenges and Opportunities." European Journal of Special Needs Education 32 (1): 3–17. [Taylor & Francis Online]

Pradhan, P., L. Costa, D. Rybski, W. Lucht and J.P. Kropp. 2017. A systematic study of sustainable development goal (sdg) interactions. *Earth's future* 5, no 11: 1169-79.

Punie, Y., editor(s), Redecker, C., European Framework for the Digital Competence of Educators: DigCompEdu , EUR 28775 EN, Publications Office of the European Union, Luxembourg, 2017, ISBN 978-92-79-73718-3 (print),978-92-79-73494-6 (pdf), doi:10.2760/178382 (print),10.2760/159770 (online), JRC107466.

Skirbekk, G. 2019. Epistemic Challenges in a Modern World. From "fake news" and "post truth" to underlying epistemic challenges in science-based risk-societies. "ZEITDIAGNOSEN", LIT Verlag, Zürich

Skulmowski A, Rey GD. COVID-19 as an accelerator for digitalization at a German university: Establishing hybrid campuses in times of crisis. Hum Behav Emerg Technol. 2020 Jul;2(3):212-216. doi: 10.1002/hbe2.201. Epub 2020 Jun 19. PMID: 32838228; PMCID: PMC7283701.

Temesgen, A.K., Storsletten, V.M.L., Jakobsen, O.D. 2019. Circular Economy – Radical change or reducing symptoms? *Philosophy of Management* 20, 37–56 (2021). https://doi.org/10.1007/s40926-019-00112-1

International Commission on the Futures of Education, 2020. Education in a post-COVID world: Nine ideas for public action. UNESCO. https://unesdoc.unesco.org/ark:/48223/pf0000373717.

UNESCO. 2016. Education 2030: Incheon Declaration and Framework for Action for the Implementation of Sustainable Development Goal 4: Ensure Inclusive and Equitable Quality Education and Promote Lifelong Learning Opportunities for All.

Wackernagel, M. and Rees, W.E.. 1996. Our Ecological Footprint: Reducing Human Impact on the Earth. New Catalyst Bioregional Series

Appendix 1 Courses on the SDGs sorted by university

University name	**Could you name one or more courses that you see as at the forefront of knowledge of SDGs?**
University of Cadiz	
University of Bretagne Occidentale (9)	• Educating in responsability • L3 AES : RSE L3 AES AGE : Projet de gestion et innovation • Master AUDE (urban and environmental planning) ... in the Faculty of Sciences • Master Conservation et Gestion de l'Environnement • Master Génie Mécanique (processus de conception des solutions d'ingénierie) • Politique des activités physiques adaptées • Sciences et sociétés • Sports and genders • Sustainable development blue manager
Kiel University (3)	• Aus der Forschung in die Bildung + • Nachhaltige Herstellung von Lebensmittel • Environmental Valuation Economics of Optimal Climate Change Mitigation and others
University of Gdansk	
University of Split (4)	• Introduction to education for sustainable development • Marine pollution and protection of environment • Political Economy Maritime Law • Sociology
University of Malta (6)	• Master in Education for Sustainable Development • Study Units: Bachelor: - Sustainable Engineering • Sustainable Manufacturing • Master: -Sustainable Product Development • The Institute for Climate Change and Sustainable Development at the University of Malta has a number of research projects that address the SDGs. • There are various courses within the Masters in ESD
University of Naples Parthenope (19)	• All the courses included in the curriculum "Environment and Sustainability" (third year) of the BA in "Economia e commercio" (Economy and Business) • Tourism and Sustainable Development (BA in Management of Tourism Enterprises • All the courses included in the MA in "Biology for Sustainability" • Monitoring and Evaluation of Environmental Impact (MA in Civil Engineering) • Economy of Sustainable Development (MA in Economy of the Sea). • UNESCO Chair in "Environment, Resources and Sustainable Development", linked to the namesake PHD program. • Climate finance for Energy sustainability • Contamination Lab Uniparthenope

University name	Could you name one or more courses that you see as at the forefront of knowledge of SDGs?
	• Corporate Governance of Shipping Companies Sustainable Disclosure and Reporting • Economia dello sviluppo sostenibile Politica economica dell'ambiente • Economics, statistics and sustainability (Ph.D progr.) • Environmental phenomena and risks (Ph.D) • Economics for finance, corporations and sustainability (EQF 7) • Civil and Environmental Engineering for Territorial Safety and Environment Protection (EQF 7) • Financial Markets • Finanza sostenibile ed economia circolare Economia del cambiamento climatico Economia applicata dell'ambiente And some more • Igiene • Physical chemistry • Public Management
University of Algarve (3)	• Gestao Marinha e Costeira • Urban green infastructure • Water Economy (mentioned by 2 respondents)
Nord University (15)	• Bærekraftig næringsutvikling, Forretningsutvikling • Circular economy • Considering sustainabililty; SAM5012 • DR433F - Science and Ethics in Practice • ECO5020 Business Models for Circular Economy • ECO2009 Sustainability in Practice • ECO5020 forretningsmodeller for sirkulær økonomi • Ecological economics for sustainable local societies (MBA) • FIl1001 Examen philosophicum - ethics, sustainability and social responsibility (bachelor) • Education for Sustainable Development at Master's level for teacher education. The focus is mostly on natural sciences. • ENG2005 (Literature and Environmental Catastrophe), led my Dr. Andrew McKendry, comes to mind, but this is just the beginning of what we could do here. The English Department at Nord University (where I work) is well poised to contribute teaching that explores various SDGs with relevant English-language literature as a teaching tool. This is just a matter of deciding which goals/themes are most important for us explore this way, and then let us build appropriate courses for the target audience. • Global ledelse • LED5011 Responsible leadership and ethics • Livestock and One Health BIO5012 • nursing in an intercultural consept

Appendix 2 Courses on sustainability beyond the SDGs

Name of the university	**Could you name one or more courses that address sustainability and green transition beyond the SDGs? Please include the course code and course name.**
University of Cadiz	
University of Bretagne Occidentale (25)	· Energetic Ressources (Master SML STPE, Year 1, Geosciences Ocean) · Dynamiques d'organisations · Responsabilité sociale des organisations · Entreprises et développement durable · Module Pédagogique numérique Médecine et Santé Environnementale = National teaching module (recorded) available for French Medical schools · UEE- Conduite de Projet.(L2) · UEB- Méthodologie de la prévention santé(L2) · UEB- Action motrice adaptée(L3) · Séminaire Transitions, M2-Enviro Institut de Geoarhitecture · Masters ALC TILE - Environmental studies M2 · DSCV4PFE - Principes Fondamentaux d'Ecologie · Management of activities: R4.03 · SAE4.01 : project · AGEG5120 : biogéographie · LEGL704 Géomorphologie, risques cotiers et adaptation des littoraux 1 · LEGL9RIS Géomorphologie, risques cotiers et adaptation des littoraux 2 · LSMLSOC Sciences et Sociétés · Sustainable development - value creation · Resilience & Leadership · Collaborative work on sustainable and innovative projects · marine renewable energies (Master 2 - EGEL - IUEM -UBO) · urban geography (Bachelor 1 - UFR Lettre SHS - UBO) · récrational boating and the environment (Master 2 - EGEL - IUEM -UBO) · Turquoooise ;) · DSCT5CGRD Licence 3 Ouverture Master : Connaissances en géologie et recherche documentaire
Kiel University (9)	· basics of hydrology and climatology · hydrological extremes · we have various courses on environmental issues · Integrated Environmental Management MNF-geogr307-01 · The Representation of Nature in North American Poetry, Essays, Narrative Fiction, and Film (Winter term 2022/23 - UNIVIS code 051294)

Name of the university	Could you name one or more courses that address sustainability and green transition beyond the SDGs? Please include the course code and course name.
	· Reading Climate Change: Literary Ecology, Ecocriticism, and the Challenges of Climate Change (Winter term 2023/24 - UNIVIS code 050971) · SDG 5 Gender equality ist adressed in courses on discourse linguistics · My courses on Environmental Justice, Concepts of Sustainable Development, Human Geography of Climate Change, all at the Insitute of Geography at Kiel University. We discuss the SDGs critical, e.g. a lack of justice implications and a conflict of aims in them. · biol257 Großes ökologisches Geländepraktikum mit Begleitseminar
University of Gdansk	
University of Split (13)	· The management of tourism development EUT302 · Tourism destination management EUT203 · Environmental Sociology · Introduction to education for sustainable development · Bioethics .... · Comparative literature · Introduction to civic education (FFPD115) · Family pedagogy (FFPD42) · Partnership beetween family and institutions (FFPD 43) · Courses at the Faculty of law in Split that include environmental issues like Sociology, Maritime and Transport Law, International Law of the Sea, Marine Environment Protection Law, Carriage of Nuclear Substances by Sea, Criminal Law Environmental Protection, · Political economy · Maritime law · Analytical Chemistry, Chemometrics
University of Malta (5)	· This is something that be need to consider with more attention in the performing arts courses. · At the moment, we are carrying out research in the context of SDs and dance, and we also have MA by research students who are exploring the problematic of dance education and the SD goals. · SWP3540 Strategy in social policy · The Centre for Environmental Education and Research offers a whole Masters programme on ESD · SOC 1061 - Island Life · SOC 2079 - Sociology of Space and Place
University of Naples Parthenope (21)	· Integrate reporting · Gestione delle risorse umane e sostenibilità · Analisi organizzativa e delle relazioni tra imprese

Name of the university	Could you name one or more courses that address sustainability and green transition beyond the SDGs? Please include the course code and course name.
	· Analisi organizzativa e project management · Organizzazione aziendale
	· "Structural Funds and Europrojecting" (since next year "European Funds and projecting methods"), Course of Public Management LM-63 · Public Mangement (LM63), specialization in Sustainable development and Public Administration · Hydraulic Stuctures · Design of Hydraulic Structures for safery of the territory · Corporate Governance of Shipping Companies · Sustainable Disclosure and Reporting · Labour Accounting · Transport law and sustainable mobility · Navigation law · Igiene · Statistica economica · Financial Markets · Corporate Finance · LSE48 - GESTIONE DEI RISCHI FINANZIARI - FINANCIAL RISK MANAGEMENT; · A000750 - GESTIONE E CONTROLLO DEI RISCHI FINANZIARI - BUSINESS RISK CONTROL AND MANAGEMENT; · M184 - GESTIONE FINANZIARIA DELLE IMPRESE INTERNAZIONALI - FINANCIAL MANAGEMENT OF INTERNATIONAL BUSINESS
University of Algarve (11)	· Coastal management · Introduction to climate changes · Jogo de Empresa (14391040). · From climate science to action. · Circular Economy - Sustainable materials Management. · Become a sustainable business change Agent. · Principles of sustainable Finance. · Impacte do Homen nos Oceanos · Urban green infrastructure 17741008 · Landscape as infrastructure, 15491131 · Environmental assessment and landscape recovery, 15491143
Nord University (27)	· ECO2008 Sirkulær økonomiforståelse · ECO5030 Økologisk økonomi for bærekraftig samfunnsutvikling · SPO1006, Media and Games – History and Culture · SPO2110, Game lab 3 - Serious Games · SPO1007, Ethics and Professionalism · ECO5016 Dynamic Management Control · ECO2009 - Sustainability in Practice · Global ledelse

Name of the university	Could you name one or more courses that address sustainability and green transition beyond the SDGs? Please include the course code and course name.
	· BCS115x
	· NIP600 · Considering sustainability SAM5012 · SAM5012 Kritiske perspektiver på bærekraft · DR433F - Science and Ethics in Practice · LED5011 Responsible leadership and ethics · Livestock and One Health BIO5012 · ECO5020 Business Models for Circular Economy · ECO9005 Circular Business Models · ECO6000 Circular Economy for the Oil and Gas Industry · ECO5017 CIrcular Economy, · ECO1018 Circular Bioeconomy,... · Hus1003 Klima og bærekraft · LED2004 - Strategisk innovasjonsledelse · ORG2004 - Innovasjon og sirkulær økonomi · ORG2005 - Bærekraftig næringsutvikling · ENT5011 - Innovasjon og forretningsutvikling · ORG5016 - Sirkulær økonomi, forretningsmodeller og innovasjon · ENT5003 Social and Sustainable Entrepreneurship

Appendix 3 Courses on digital competence

University name	D11 Could you name one or more courses at your university that you see as at the forefront of "digital knowledge"?
University of Cadiz	
University of Bretagne Occidentale (10)	• (National + local) Teaching module on AI and Heath in construction • Conduite de projet Nouvelles technologies • Courses from UBO's Service d'Ingénierie et d'Appui à la Médiatisation pour l'Enseignement (SIAME). IUT Quimper's R1.05 Environnement économique de l'entreprise. • courses in ocean modelling and in ocean data science • Digital tools • not a course, a training program provide by the faculty of sport and education sciences : Master FAPI • PIM Isblue • PIX Voltaire • SHIFT® licence • This course is for sure, one among others : The course "participation and environmental Law" given for Master 1 DAM in Sea-Eu context, By A. Pomade (combine quizz, Vdo, collaborative work, dialogue with students from Split Univ. & UBO).
Kiel University (1)	• ZKE It is the course I teach.
University of Gdansk	
University of Split (7)	• Distance education, Multimedia didactic, Media pedagogy, Media sociology • Information and Communication Technology for Student in the Primary Education • Systems of Distance Teaching • System of E-learning
University of Malta (2)	• B.Sc. (Hons) Health Science • Master of Education in e-Learning
University of Naples Parthenope (9)	• All the courses in the BA and MA in IT and IT engineering. • Engineering • Information and Communication Technology and Engineering (Ph.D progr.) • Computer Science, Biomedical and Telecommunications Engineering (EQF 6) • Information Technologies Engineering for Communications and Health (EQF 7) • Computer Science (EQF 6) • Computer Engineering and Science for cybersecurity (EQF 6) • Machine Learning and Big Data (EQF 7) • Public Management
University of Algarve (1)	• Jogo de Empresa (14391040).
Nord University (14)	• All clinical practice in nursing studies are superviced digital from the university due to follow ups and sensoring students.

University name	D11 Could you name one or more courses at your university that you see as at the forefront of “digital knowledge”?
	• At master´s level many theoretical courses are partly digital, master´s thesis etc • BI300F - Scientific Communication and Research Methods BI224F - Scientific Methods • Course on artificial intelligence (AI) and social and emotional competence (SEC) in education • DigiPed - a practical course in internet pedagogy and didactics. • Digital forretningsutvikling, prosjektledelse • E-health, digital communication and welfare technology • Game labs at Bachelor of games and entertainment technology. The PfDK courses at Nord's teacher department. • LED5005 Strategisk ledelse av teknologibedrifter i dynamiske omgivelser • Music technology • PPU/YFL • Profesjonsfaglig digital kompetanse - part of master i tilpasset utdanning, Nord • SYK2005, real life projects . Promoting mental health amongst children and adolencents • The DigiPedcourse, Magnhild O. Torske (FBA) also has one or two courses that really uses digital knowledge well. • Tricky question. What is to be in the "forefront"? We have courses dealing substantiable in "digital knowledge", but I am not sure they represent something so new and innovative that other universities could benefit from them. After all, online teaching has been going on since the mid to late eighties in Norway, and much of what we are doing is anchored in well-known international and national research on online education.

Appendix 4 Task 2.2 description

Objective: *Encourage innovative training activities that foster digital, green, interdisciplinary and transversal skills.*

Task 2.2. Fostering inclusive, digital and green interdisciplinary and innovative training pathways (NORD/UG)

Within a world in constant transformation, HEIs must support personal and professional promotion. Our global world requires responsible, critical citizens who can develop personally and professionally and meet the contemporary needs of society. To prepare students for the ongoing changes, we need to equip academic teachers and staff with the green and digital skills needed for the future. This competence building is sought through developing and offering a varied set of courses and facilitating exchange of experiences across academic teachers and staff. The related activities include:

- **Assessing the various needs and preferences for competence building within the SEA-EU.** A survey will be undertaken to gather information that will aid in designing and organising courses at different levels, ranging from the introductory level to the highly experienced level.

- **Developing and organising innovative training for *digital challenges*.** It will be a set of courses exploring various themes, for example "real life" problem solving related to modern and digital pedagogies, student-centred learning, novel roles of educators, digital tools for learning, programmes dedicated to sustainable education, or integrating green and digital skills into any teaching curriculum. They will be built around a series of video tutorials, solo and group activities, and online case studies. It will be a forum of exchange and mutual learning. By this we will create a pool of excellent educators. Each partner will develop and organise one or two courses according to their best practices.

- **Developing and organising innovative training for *green challenges*.** The Sustainable Development Goals (SDGs) are key principles for SEA-EU. An online transdisciplinary course module on challenges related to sustainability will be developed. The main targets are: (i) *Bachelor students entering the universities* for them to be sensitive to SEA-EU and its green commitment, and (ii) staff of the universities, as part of their life-long learning competence building. Each partner will develop and organise one or two courses according to their best practices. The module will be available for the whole SEA-EU community. Other kinds of 'green' training activities will be developed and made available as digitally shared resources at the SEA-EU scale. To mention one example, UBO has developed innovative activities, such as a yearly simulation of climate change conference. The simulation in the shape of role plays, allows the students to experience how to work on transverse knowledge about climate change, and to deal with other parties that could have different points of view. The next simulation around COP27 will be done at the SEA-EU scale.

- **Seminar of Innovative Green and Digital Pedagogy**. It will be a summary event addressed to academic teachers and dedicated to novel methodologies, tools and approaches responding to the needs of the changing HEI ecosystem. The seminar will consist of a set of dedicated workshops and debates where researchers will share their experience in innovative pedagogies and tools they are using during online and onsite education. The seminar, in the form of an onsite event (5 days), will be open to approximately 50 participants and organised at NORD.

The final achievement of the seminar and the innovative training schemes will be a Digital Sharing of Innovative Tools and Pedagogies as an open-source of good practices ready to implement and to replicate within Alliance.

MS8	Completed survey	2	NORD	Courses at different levels require information about people`s competences level and course needs/preferences	M9	Short competency report
MS9	Work shop	2	NORD	Meet to discuss the design and organising of green and digital courses	M15	Agenda and attendance list, publication on website
MS10	SEA-EU Seminar of Innovative and Green and Digital Pedagogy Programme	2	NORD	A summary event addressed to academic teachers and dedicated to novel methodologies,to exchange experiences with course participants regarding digital sharing	M36	Agenda and attendance list; publication on website.

D2.1	Digital sharing of innovative tools and pedagogies	2	NORD	/DEC —Websites, patent filings, videos, etc/	/PU — Public/	M42	Public online information, in English.

Appendix 5 The Survey Questionnaire

Assessing the various needs and preferences for competence building within the SEA-EU

S.1 Which university do you work at?

University of Cadiz
University of Bretagne Occidentale
Kiel University
University of Gdansk
University of Split
University of Malta
University of Naples Parthenope
University of Algarve
Nord University

S.2 How would you describe your role at your university?

Please select all that apply.

Management
Research
Teaching

S.3 In which level do you teach?

Please select all that apply.

Bachelor
Master and
higher Other
I do not teach at the moment

In which level do you teach?

This element is only shown when the option 'Other' is selected in the question 'S.3. In which level do you teach? '

Questions on green inclusive, interdisciplinary and innovative training pathways

The 2030 Agenda for Sustainable Development, adopted by all United Nations Member States in 2015, provides a shared blueprint for peace and prosperity for people and the planet, now and into the future. The **SDGs** are an urgent call for action by all countries - developed and developing - in a global partnership. They recognize that ending poverty and other deprivations must go hand-in- hand with strategies that improve health and education, reduce inequality, and spur economic growth – all while tackling climate change and working to preserve our oceans and forests. (THE 17 GOALS | Sustainable Development (un.org))

S.4 How would you rate the level of competence on the SDGs at your department/faculty/institute?

Low
Mod
erate
High
I don't know

S.5 Are the SDGs included in the University's strategy documents?

Yes

No

I don't know

S.6 Does your university cooperate with other partners on the SDGs?

Yes

No
I don't know

S.7 To what extent do the SDGs influence the design of learning outcomes for your course(s)?

No influence at all

Minimal influence

Moderate influence

Significant influence

Strong influence

S.8 How often do you incorporate education for sustainable development and sustainable lifestyles in your teaching to promote a sense of environmental and social responsibility among students?

Never

Rarely

Occasionally

Often

Always

S.9 To what degree do the SDGs influence the choice of teaching methods in your courses?

Not at all

To a limited extent

Moderately

To a great extent

Completely

S.10 To what extent do you agree with the following statements regarding sustainable development and the SDGs?

Please rate your level of agreement with the following statements using a scale from 1 to 5 (1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree).

The SDGs are an effective way of achieving sustainable development

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

I don't know

The SDGs are appropriate to address environmental justice across temporal (for example, future generations) and spatial (for e.g., developing countries exposed to risks from climate change) scales

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

I don't know

Environmental justice is an important consideration in my courses

Strongly Disagree
Disagree
Neutral
Agree
Strongly Agree
I don't know

I address the three pillars of sustainability in my courses: social, environmental and economic

Strongly Disagree
Disagree
Neutral
Agree
Strongly Agree
I don't know

The SDGs are too abstract to serve a useful pedagogical purpose in my courses

Strongly Disagree
Disagree
Neutral
Agree
Strongly Agree
I don't know

Addressing the SDGs in my class would take me outside my field of expertise since the SDGs are transdisciplinary in nature

Strongly Disagree
Disagree
Neutral
Agree
Strongly Agree
I don't know

The SDGs serve as a catalyst for critical thinking, challenging the present system and fostering alternative solutions

Strongly Disagree
Disagree
Neutral
Agree
Strongly Agree
I don't know

I believe that incorporating the SDGs hinders open and honest discussions about complex questions, as it may be difficult for students to disagree with the SDGs as they are seen as a "moral standard"

Strongly Disagree
Disagree
Neutral
Agree
Strongly Agree
I don't know

Teaching the SDGs promotes activism at the expense of a scientific approach

Strongly Disagree
Disagree
Neutral
Agree
Strongly Agree
I don't know

To what extent do you agree with the following statement: I see the green transition as a topic that goes beyond the SDGs and imagines post-growth futures. (See below for definitions of green transition and post-growth futures.)

Strongly Disagree
Disagree
Neutral
Agree
Strongly Agree
I don't know

EU relates the **green transition** to the European Green Deal which is "Europe's new growth strategy, which will transform the Union into a modern, resource-efficient and competitive economy". However, there are other interpretations that may go beyond ecological modernization and see the need for more fundamental/radical changes to the way we organize the economy today.
Post growth futures relates to a shift to economies that thrive within natural limits, in which human and ecological well-being is prioritised over Gross Domestic Product (GDP).

S.11 Could you name one or more courses that address sustainability and green transition beyond the SDGs? Please include course code and course name.

This element is only shown when the option 'Agree or Strongly Agree' is selected in the question 'To what extent do you agree with the following statement: I see the green transition as a topic that goes beyond the SDGs and imagines post-growth futures. (See below for definitions of green transition and post-growth futures.)'

S.12 In your opinion, how would you rate the knowledge of first year Bachelor students on the topics of sustainability?

This element is only shown when the option 'Bachelor' is selected in the question 'S.3. In which level do you teach? '

Minimal to none Basic knowledge
Advanced knowledge and/or high level of commitment Not relevant/I don't teach first-year Bachelor students

S.13 In your opinion, how would you rate the knowledge of first year Bachelor students on the SDGs?

This element is only shown when the option 'Bachelor' is selected in the question 'S.3. In which level do you teach? '

Minimal to none Basic knowledge
Advanced knowledge and/or high level of commitment Not relevant/I don't teach first-year Bachelor students

S.14 Which sustainable development goals do you relate to in your teaching?

Please select all that apply.

Goal 1 - No poverty
Goal 2 - Zero hunger
Goal 3 - Good health and well-being
Goal 4 - Quality education
Goal 5 - Gender equality
Goal 6 - Clean water and sanitation
Goal 7 - Affordable and clean energy
Goal 8 - Decent work and economic growth
Goal 9 - Industry, innovation and infrastructure
Goal 10 - Reduced inequalities
Goal 11 - Sustainable cities and communities
Goal 12 - Responsible consumption and production
Goal 13 - Climate action
Goal 14 - Life below water
Goal 15 - Life on land
Goal 16 - Peace, justice and strong institutions
Goal 17 - Partnerships for the goals
All of the above
None of the

above

S.15 Which of the SDGs would you like to get training in?

Please select all that apply.

Goal 1 - No poverty

Goal 2 - Zero hunger

Goal 3 - Good health and well-being

Goal 4 - Quality education

Goal 5 - Gender equality

Goal 6 - Clean water and sanitation

Goal 7 - Affordable and clean energy

Goal 8 - Decent work and economic growth

Goal 9 - Industry, innovation and infrastructure

Goal 10 - Reduced inequalities

Goal 11 - Sustainable cities and communities

Goal 12 - Responsible consumption and production

Goal 13 - Climate action

Goal 14 - Life below water

Goal 15 - Life on land

Goal 16 - Peace, justice and strong institutions

Goal 17 - Partnerships for the goals

All of the above

None of the

above

S.16 At which level of complexity is your teaching of the SDGs?

Basic (just introduction of the SDGs) Intermediate

Advanced

Not

relevant

S.17 Which topics do you address in your course?

This element is only shown when the option 'Intermediate or Advanced' is selected in the question 'S.16. At which level of complexity is your

teaching of the SDGs? '

Please select all that apply.

Holistic understanding of the SDGs including synergies, tensions and trade-offs between goals and targets

Contextualisation of the SDGs to local situations

Implementation of the SDGs at different levels of governance (local, regional, national and global) in practice

Critically examining the SDGs and the areas where they could be improved Indicators and data gaps

Other

Which topics do you address in your course?

This element is only shown when the option 'Other ' is selected in the question 'S.17. Which topics do you address in your course? '

S.18 Would you and your colleagues be willing to transfer knowledge and skills to other universities in these areas?

This element is only shown when the option 'Holistic understanding of the SDGs including synergies, tensions and trade-offs between goals and targets or Contextualisation of the SDGs to local situations or Implementation of the SDGs at different levels of governance (local, regional, national and global) in practice or Critically examining the SDGs and the areas where they could be improved or Indicators and data gaps or Other ' is selected in the question 'S.17. Which topics do you address in your course? '

Yes

No

I don't know

S.19 Could you name one or more courses at your university that you see as at the forefront of knowledge of SDGs that other universities could benefit from?

Yes

There can be courses, but I can't name any.

There is none.

Could you name one or more courses that you see as at the forefront of knowledge of SDGs?

This element is only shown when the option 'Yes' is selected in the question 'S.19. Could you name one or more courses at your university that you see as at the forefront of knowledge of SDGs that other universities could benefit from?'

S.20 Which areas of knowledge of the SDGs would you need further training in?

Please select all that apply.

Basic introduction on the SDGs

Holistic (advanced) understanding of the SDGs including synergies, tensions and trade-offs between goals and targets

Contextualisation of the SDGs to local situations

Implementation of the SDGs at different levels of governance (local, regional, national and global) in practice

Critically examining the SDGs and the areas where they could be improved Indicators and data gaps

Other

Which areas of knowledge of the SDGs would you need further training in?

This element is only shown when the option 'Other' is selected in the question 'S.20. Which areas of knowledge of the SDGs would you need further training in? '

S.21 In your opinion, what is a good approach to integrate the SDGs in university teaching?

Please select all that apply.

Address aspects of the SDGs in existing courses of all disciplines

Develop a cross-disciplinary common introductory lecture series on the SDGs, open for students of all programs and disciplines

Develop new courses based on the SDGs (content & methods) in existing study programs Develop new courses in a "sustainability centre of excellence" on the SDGs (content & methods) that are open to students from different study programs and disciplines

Set-up a specific study program based on the SDGs within one faculty

Co-develop, among several disciplines, a specific study program based on the SDGs Other suggestions

In your opinion, what is a good approach to integrate the SDGs in university teaching?

This element is only shown when the option 'Other suggestions' is selected in the question 'S.21. In your opinion, what is a good approach to integrate the SDGs in university teaching? '

S.22 What can encourage the inclusion of SDGs in your (and others') course syllabus?

Please select all that apply.

More knowledge

More time

Cross-disciplinary collaboration on the SDGs

Institutional support

Other

What can encourage the inclusion of SDGs in your (and others') course syllabus?

This element is only shown when the option 'Other ' is selected in the question 'S.22. What can encourage the inclusion of SDGs in your (and others') course syllabus? '

Questions on digital, interdisciplinary and innovative training pathways

In the realm of education, **digital technology** encompasses the integration of computer devices, software applications, and work-related software into the learning process to enhance and support teaching and learning activities.
Digital pedagogic competence is the digital competences educators need to foster efficient, inclusive and innovative teaching and learning strategies. (Definition from: DigCompEdu)

D.1 How would you rate your level of digital pedagogic competence?

Low

Moderate

High

D.2 In your opinion, has the COVID pandemic changed the use of digital technology in your teaching and learning activities in the post-pandemic era?

No, it hasn't

Yes, it has

Not relevant

D.3 How has the pandemic changed your use of digital technology in teaching and learning activities?

This element is only shown when the option 'Yes, it has ' is selected in the question 'D.2. In your opinion, has the COVID pandemic changed the use of digital technology in your teaching and learning activities in the post-pandemic era?'

I have become more sceptical to digital technology and try to minimize the use of it.

I have integrated more digital teaching and learning activities in my classes.

I make extensive use of digital technology in my teaching activities including giving entirely digital courses

D.4 How frequently does your university provide training and professional development opportunities for academic staff to enhance their digital skills in teaching and learning activities?

Rarely or never

Occasionally

Regularly (every month)

Frequently

Very frequently (once a week)

D.5 How satisfied are you with the quality of training and professional development programs to enhance your digital pedagogic competences?

Very dissatisfied

Dissatisfied

Unsure

Satisfied

Very satisfied

D.6 How would you rate the accessibility of digital resources and technologies provided by your university for academic staff?

Very poor

Poor

Average

Good

Very good

D.7 How do you rate the level of digital literacy of first year Bachelor students for using digital technology for academic work?

This element is only shown when the option 'Bachelor' is selected in the question 'S.3. In which level do you teach? '

Minimal to none

Basic

Intermediate

Advanced

I don't know

D.8 To what extent do you utilize digital technology in teaching and learning activities and how does it impact students' learning outcomes?

Please rate your level of agreement with the following statements using a scale from 1 to 5 (1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree).

To enhance student engagement and understanding, I effectively employ digital technology, such as video presentations and podcasts, as alternatives to traditional lectures.

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

I promote active participation, communication, and knowledge sharing among students by utilizing digital tools for collaboration, such as online platforms and virtual classrooms.

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

I provide new and innovative possibilities for interactive learning experiences through the use of digital technology, allowing students to explore content using multimedia, simulations, and virtual environments.

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

I incorporate digital tools into assessment methods, such as online quizzes and interactive assignments, to provide more accurate and timely feedback, thereby enhancing students' learning and performance.

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

I leverage digital technology to facilitate personalized learning experiences, enabling students to progress at their own pace and access resources tailored to their individual needs and interests.

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

I utilize digital technology in teaching and/or assessments to foster the development of critical thinking, problem-solving, and digital literacy skills, which are essential for students' success in the digital age.

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

I utilize digital technology to provide seamless access to a wide range of educational resources, including online libraries, research databases, and educational platforms, expanding students' learning opportunities.

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

I employ digital simulations and virtual experiments to enhance students' understanding of complex concepts.

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

I use digital technology to enhance the socialization process among students, providing opportunities for collaboration, discussion, and community building.

Strongly Disagree

Disagree

Neutral

Agree

Strongly Agree

D.9 Which areas would you need further training in?

Please select all that apply.

Introductory course on the use of digital tools in teaching activities.

Digital tools in my teaching to activate and involve the students in the learning process (for e.g.s using student response systems like mentimeter, kahoot!, poll everywhere and the like).

Effective use of digital teaching platforms such as teams, zoom and the like. Others

Which areas would you need further training in?

This element is only shown when the option 'Others' is selected in the question 'D.9. Which areas would you need further training in?

D.10 Which areas would your university be able to transfer knowledge and skills to other universities?

This element is only shown when the option 'Management' is selected in the question 'S.2. How would you describe your role at your university? '

Introductory course on the use of digital tools in teaching activities.

Digital tools in teaching to activate and involve the students in the learning process (for e.g.s using student response systems like mentimeter, kahoot!, poll everywhere and the like).

Effective use of digital teaching platforms such as teams, zoom and the like. Other

Which areas would your university be able to transfer knowledge and skills to other universities?

This element is only shown when the option 'Other' is selected in the question 'D.10. Which areas would your university be able to transfer knowledge and skills to other universities?'

D.11 Could you name one or more courses at your university that you see as at the forefront of "digital knowledge" that other universities could benefit from?

Yes

No, there can be courses, but I can't name any. No, there is none.

Could you name one or more courses at your university that you see as at the forefront of "digital knowledge" ?

This element is only shown when the option 'Yes' is selected in the question 'D.11. Could you name one or more courses at your university that you see as at the forefront of "digital knowledge" that other universities could benefit from?'

D.12 How well does your university promote collaboration and sharing of best practices in using digital tools and technologies among teaching staff?

Very poorly

Poorly

Average

Good

Very good

D.13 To what extent does your university prioritize training for digital literacy and skills development for students?

Not a priority

Low priority

Medium priority

High priority

Very high priority

I don't know

D.14 How would you rate the availability and accessibility of digital resources and technologies provided by your university for students?

Very poor

Poor

Average

Good

Very good

I don't know

D.15 How effectively does your university provide technical support for students when using digital tools or platforms for learning?

Very ineffective

Ineffective

Average

Effective

Very effective

I don’t know

D.16 To what extent does your university encourage students to actively engage with digital tools and technologies as part of their learning experience?

Not at all

Very little

Somewhat

Quite a bit

Extensively

I don’t know

Artificial Intelligence (AI) refers to computer systems designed to perform tasks that typically require human intelligence. It involves creating algorithms and models that enable machines to learn, reason, and solve complex problems. AI aims to replicate human-like intelligence and has applications across various domains.
The **General Data Protection Regulation (GDPR)** is a law that safeguards the rights of individuals regarding the processing of their personal data. It ensures that personal data is processed fairly, transparently, and securely. The GDPR aims to protect privacy while allowing the free movement of personal data within the EU. (https://gdpr.eu)

D.17 To what degree do you agree with the following statements about artificial intelligence?

Please rate your level of agreement with the following statements using a scale from 1 to 5 (1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree).

My university critically examines the ethical implications of artificial intelligence.

Strongly disagree

Disagree

Neutral

Agree

Strongly agree

I don’t know

My university takes seriously and follows the GDPR regulations when it comes to artificial intelligence in teaching and assessment.

Strongly disagree

Disagree

Neutral

Agree

Strongly agree

I don’t know

My university has clear guidelines regarding the use and implications of artificial intelligence such as ChatGPT.

Strongly disagree
Disagree
Neutral
Agree
Strongly agree
I don't know

The students at my university get regular training in how to critically engage with artificial intelligence.

Strongly disagree
Disagree
Neutral
Agree
Strongly agree
I don't know

The academic staff at my university get regular training in how to critically engage with artificial intelligence.

Strongly disagree
Disagree
Neutral
Agree
Strongly agree
I don't know

Artificial Intelligence (AI) has the potential to significantly enhance the teaching and learning experience in higher education.

Strongly disagree
Disagree
Neutral
Agree
Strongly agree
I don't know

On inclusion of minority groups

IN.1. How actively does your university work with the inclusion of the following groups in work and study life?

Minority groups (ethnic, racial, religious groups)

Minimal or non-existent

Somewhat actively

Very actively

I don't know

Gender sensitivity

Minimal or non-existent

Somewhat actively

Very actively

I don't know

Students and staff with special needs (for example, disabilities)

Minimal or non-existent

Somewhat actively

Very actively

I don't know

Catering to age-related digital challenges

Minimal or non-existent

Somewhat actively

Very actively

I don't know

Enhancing social integration/belongingness of different groups

Minimal or non-existent

Somewhat actively

Very actively

I don't know

Sexual orientation

Minimal or non-existent

Somewhat actively

Very actively

I don't know

Being open to different ideas, worldviews and epistemologies

Minimal or non-existent

Somewhat actively

Very actively

I don't know

IN.2. In your own words, could you say a few words how your university actively works with inclusion in sustainability/green education, if any?

IN.3. In your own words, could you say a few words how your university actively works with inclusion in digital training, if any?

Background information Gender

Male
Female
Prefer not to respond

Age

18 - 25
26 - 35
36 - 45
46 - 55
56 - 65
Over 65

Years of teaching experience:

Respondent's teaching area:

Natural sciences, mathematics and statistics
Business, administration and law

Arts and humanities
Engineering, manufacturing and construction
Health and welfare
Social sciences, journalism and information
Information and communication technologies
Agriculture, forestry, fisheries and veterinary
Education
Services
Other

Respondent's teaching area:

This element is only shown when the option 'Other' is selected in the question 'Respondent's teaching area:'

Respondent's research area:

Natural sciences, mathematics and statistics
Business, administration and law
Arts and humanities
Engineering, manufacturing and construction
Health and welfare
Social sciences, journalism and information
Information and communication technologies
Agriculture, forestry, fisheries and veterinary
Education
Services
Other

Respondent's research area:

This element is only shown when the option 'Other' is selected in the question 'Respondent's research area:'