



Engaging SDGs for Transformative Education
and Enhanced Sustainability in Universities

WP3 - Deliverable 3.1 Literature Review

30th November 2023



Co-funded by
the European Union

About SDG4U

SDG4U key priority is to stimulate innovative learning and teaching practices through engaging SDGs to transformative education and sustainability practices in universities. The project will support and enhance the implementation of SDGs in higher education by embedding sustainability across teaching, research, operations, and community outreach.

The project is funded by the Erasmus+ programme of the European Union and spans over 36 months (December 2022 – December 2025).

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Document Information

Project Title	Engaging SDGs for Transformative Education and Enhanced Sustainability in Universities
Project n.	2022-1-EL01-KA220-HED-000088776
Deliverable	Literature review
Work package	WP3
Status	Final
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Abstract	The literature review is the first deliverable of WP3. It is aimed to document existing tools and methodologies used by higher education institutions around the world in the promotion of the SDGs. The resulting inventory of methodologies would serve as a basis for the subsequent deliverables of the work package, which include the development of innovative content and tools for teaching the SDGs. The literature review would also contribute to the WP3 primary goal of increasing clarity on the SDGs understanding in higher education.

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Executive Summary

Deliverable 3.1 is the result of the 1st activity of Work Package 3 (WP3) under the title "Literature Review". The report provides a literature review regarding teaching methodologies to integrate the SDGs into courses/modules in higher education. Multiple practices were identified from the literature across the three dimensions (Interdisciplinarity, Action-based learning, Multi-actor involvement) of ESDGs, as mooted by SDSN (2020).

In particular, for the literature review (task 3.1), the aim was to collect good practices and tools used by academic institutions around the world to promote and implement SDGs. The literature review has as its ultimate goal the mapping of the practices used by universities and at the same time provided a very good basis for the creation of innovative educational material for the LifeLong Learning (LLL) Seminar (D3.3-5).

Top performing universities per SDG were identified using the Times Higher Education Impact Rankings. A case study from that university relevant to ESDG for that SDG (e.g. SDG 2 - Zero Hunger) was then identified from that university's website. The case study was then matched with one of the various teaching methodologies outlined by the literature review.

The mapping of methodologies point to Action-Based Learning as the most commonly utilized of the three dimensions established by SDSN (2020). Thus, universities seem to rely on active students' involvement to introduce values and the need to work for sustainability. Within that dimension, Industry Partnerships, Internships, Collabs, Fieldwork and Labs as well as Project-based methods were the most frequently used teaching methodologies by the identified universities across the SDGs.

The completion of this deliverable demonstrated the importance and necessity of integrating the Sustainable Development Goals (SDGs) in higher education. As argued above, highlighting practices from universities around the world to promote the SDGs leads to the creation of an important list of methods and tools for promoting the SDGs within the academic community, while at the same time it can contribute to collaboration between academic institutions and stakeholders through the exchange of knowledge and experiences. Finally, the D3.1 serves as a guide for the next phases of WP3, providing material that will help in the development of innovative educational content, but also the basis for discussion and exchange of experiences between the partners.

1. Introduction

In the ever-increasing challenges facing humanity: poverty, inequality, environmental and humanitarian crises, the development of sustainability is an imperative for the modern world. In this context, states, governments and the productive sector can play an important role. Higher education institutions are not an exception. On the contrary, their key role in shaping the professional profiles of future generations makes it particularly relevant for them to bridge the gap between their students and sustainable development (Aleixo et al., 2018). By raising awareness, providing information, and preparing students to be engaged citizens, universities can empower individuals to address global challenges.

The relationship between universities and sustainable development is not a new phenomenon. As early as the 1970s, with the rise of the environmental movement, initiatives in this area began to appear in universities. Not surprisingly, the fundamental role of universities in sustainability has been reflected in a series of declarations, charters and initiatives that have been ratified by them to demonstrate their commitment to sustainable development (Talloires Declaration, 1990; Halifax Declaration, 1991; Swansea Declaration, 1993; World Association of Higher Education for Sustainability, 2000; Graz Declaration on the Commitment of Universities to Sustainable Development, 2005; Rio+20 Initiative for the Sustainability of Higher Education, 2012). The [2030 Agenda and the Sustainable Development Goals](#) reinforced the need for the academic community to adapt to the new reality and probably represents the most holistic and integrative framework to follow the path towards sustainability. Universities play a key role in educating members of the academic community about the Sustainable Development Goals and in promoting new models for managing social or environmental issues within academic institutions.

The project proposal is aligned with the universal call for action embedded in the 2030 Agenda and points to the opportunity to add a new dimension to university objectives — expanding from the valuable work of cultivating knowledge to also emphasizing education and interconnection among institutions and their members in support of equitable and sustainable development. Specifically, WP3 aims to: enrich academic courses or modules with SDGs principles and learning outcomes related to sustainability goals through interaction with all partners involved; to bring innovative tools and methodologies; to connect academic fields with SDGs and establish synergies to introduce the mapping tool to the academic community; to co-create content related to SDGs understanding in higher

education; to empower facilitators through capacity and skills building activities and to develop a dissemination strategy to promote the WP deliverables.

In this context, the literature review is the first deliverable of WP3. It is aimed to document existing tools and methodologies used by higher education institutions around the world in the promotion of the SDGs. The resulting inventory of methodologies would serve as a basis for the subsequent deliverables of the work package, which include the development of innovative content and tools for teaching the SDGs. The literature review would also contribute to the WP3 primary goal of increasing clarity on the SDGs understanding in higher education.

2. Literature review

2.1. The role of universities in promoting sustainability from the different core areas

Since the development of the 2030 Agenda and the Sustainable Development Goals, countries and organizations have been making progress in the field of sustainability. Academic institutions play a crucial role in propagating the sustainability movement (Grano & Correia, 2020; Pareek et al., 2024; Chankseliani & McCowan, 2021). A sustainable university has been defined by Velaquez et al. (2006, p.3) as “a higher educational institution, as a whole or as a part, that addresses, involves and promotes, on a regional or a global level, the minimization of negative environmental, economic, societal and health effects generated in the use of their resources to fulfil its functions of teaching, research, outreach and partnership as well as stewardship in ways to help society making the transition to sustainable lifestyles”. The many ways in which universities can contribute to the SDGs is described below.

Education and Curriculum

Students are learning about sustainable development through formal but also informal learning opportunities. Many universities are showcasing active support in this effort by updating their curricula to align with the Sustainable Development Goals (SDGs). Education plays a vital role in preparing tomorrow's leaders to drive the sustainability movement forward (Grano & Correia, 2020).

Research and Innovation

Research and innovation are crucial for the support of local and national governments as well as companies, NGOs and other relevant agents in achieving the SDGs. In recent years, there has been a surge in publications focused on sustainable development, reflecting the growing interest in this field. Higher Educational Institutions are also developing various projects whose impact further propagates the sustainability movement (Filho et al., 2024).

Community Outreach

The role of universities goes beyond offering educational tools and conducting research. They also serve as a bridge between academia and the broader society, helping to expand their impact, in all these activities grouped under the label “University Third Mission”. This

increased outreach is crucial for enhancing the effectiveness of their sustainability efforts (Grano & Correia, 2020).

Sustainability Reporting and Assessment

There are numerous efforts within the domain of sustainability reporting, as many academics believe that sustainability reporting is essential for helping organizations better define their sustainability strategies and showcase improved results (Grano & Correia, 2020). Reporting also allows institutions to be inspiring examples to others, assess their performance against set indicators and define areas of strengths.

Campus Operations and Environmental Management

Initiatives of universities becoming greener are noticed all around the world. Indicators have been developed to calculate their efficiency, further promoting their efforts and making them more transparent (Sima et al., 2019). Green Campuses, as a simple example, not only fosters the idea of sustainable institutions, but also offers examples “by doing”.

Multi-stakeholder Alliances

The magnitude of HEIs’ commitment to building on the sustainability movement becomes apparent in their crucial efforts to create a global network focused on achieving the SDGs. They create synergies with both public and private stakeholders, they create interdisciplinary and multidisciplinary international frameworks, and they establish research centres and institutes with an impact that vastly exceeds the academic community. Such initiatives are crucial not only for advancing sustainability knowledge but also for elevating it as a global priority, fostering a collective movement for a sustainable future (Filho et al., 2024).

2.2. Literature review on learning approaches to introduce sustainability in HEIs

The 2030 Agenda represents a universal call for action for different agents. As mentioned earlier, universities are one of those agents. While that command offered no doubt, the way in which the SDGs should be incorporated was not straightforward. In that regard, the United Nations (UN) Sustainable Development Solutions Network (SDSN) was established by UN Secretary-General Ban Ki-Moon, and economist and professor, Jeffrey Sachs, with the intention to mobilize the “world’s universities, think tanks, and national laboratories for action on the Sustainable Development Goals (SDGs) and the Paris Agreement, empower societies through free online education, and translate scientific evidence and ideas into solutions and accountability”.

The SDSN, aware of the difficulties universities might encounter to translate the SDGs to their core activities, provided a comprehensive guide to help them integrate the 2030 Agenda into their operations, research, and teaching (SDSN, 2020). The guide encourages higher education institutions to adopt a holistic approach, embedding the principles of sustainability across various disciplines and promoting innovative, cross-sectoral collaborations. By aligning their curriculum and research agendas with the SDGs, universities can not only educate students on global challenges but also contribute to solving them through research, community outreach, and sustainable campus practices. SDSN's framework emphasizes the role of universities as leaders in sustainable development, encouraging them to foster partnerships, engage with local and global communities, and prepare students to address pressing environmental, social, and economic issues in their future careers.

According to this guide, universities should bear in mind that the integration of Education for Sustainable Development Goals (ESDGs) into students’ curricula requires a different approach and that traditional methods used in regular subjects may not apply. In that vein, the SDGs span a wide range of interrelated topics, continuously evolve in response to real-world conditions, and represent the cutting edge of global challenges. They entail adaptation to local contexts, cross-cutting soft skills, and collaboration across sectors, with solutions varying widely by region. The aim of ESDGs is to empower students to become proactive in creating a sustainable future. To address the unique demands of the SDGs, ESDG programs must adopt transformative learning approaches uncommon in universities, such as interdisciplinary studies, action-based learning, and collaboration with diverse stakeholders. In what follows, the features the transformative learning approaches should comply with, as suggested by the SDSN, are briefly discussed along with some illustrating methodologies that could be helpful in their achievement.

Interdisciplinarity

One of the great difficulties in translating the 2030 Agenda into university education lies in the cross-cutting nature of the SDGs. The SDGs are not isolated compartments but are interrelated, so they can only be addressed from an interdisciplinary perspective. Thus, action on one SDG can have a positive (synergy) or negative (trade-off) impact on the others. In other words, successfully addressing one SDG requires, at the same time, gauging the impact on the other SDGs.

Interdisciplinarity in sustainability teaching is critical, as it integrates diverse fields to address complex environmental, social, and economic challenges. Sustainability issues, such as climate change, resource depletion, and social inequality, are multifaceted and cannot be solved within the bounds of a single discipline. By combining insights from fields like environmental science, economics, sociology, and engineering, students gain a holistic understanding of sustainable development. In that regard, Barth and Michelsen (2013) claimed that interdisciplinary approaches foster systems thinking and critical reflection, essential skills for sustainability professionals who must navigate complex, interconnected systems. Similarly, Lozano et al. (2017) found that sustainability programs embracing interdisciplinary methods enhance students' capacity to engage with diverse stakeholders, an essential competency in promoting sustainable practices.

This idea of interdisciplinarity somehow deviates from what is traditionally done in university education, with silos represented by departments or faculties. It is necessary to overcome this barrier and seek opportunities for collaboration between different disciplines to effectively address the challenges of sustainable development. Inviting guest lectures or external experts, promoting joint projects or encouraging the formation of interdisciplinary teams from different faculties and programs can assist professors in achieving the goal.

Miroiu (2011), in a publication promoted by the UNESCO European Centre for Higher Education, proposed some guidelines for promoting **gender-inclusive curriculum** in higher education. This gender-focused learning aims to integrate gender equity and social inclusion into all subjects to raise awareness and create inclusive environments regardless of the discipline or specific course. This path would foster discussion and projects around gender issues and equity (SDG 5 Gender Equality).

In the same vein, Barrows and Tamblyn (1980) stated that **interprofessional education (IPE)** encouraging collaborative problem-solving among students could lead to a more adaptive approach to the problem at hand. Students from medicine, nursing, and social may work together to address health challenges and adopt a holistic care strategy for community health, thus promoting SDG 3 Good health and well-being.

More recently, Horn et al. (2023) conducted a literature review on **Interprofessional education (IPE)** to sustainability issues and provided a comprehensive overview of the design elements and strategies that professors could use to actually deal with sustainability from a holistic perspective. For example, a course might blend ecology (SDG 13 Climate Action) with urban planning to explore sustainable city designs (SDG 11 Sustainable Cities and Communities) where vulnerable citizens' needs are also considered (SDG 1 No Poverty and SDG 10 Reduced Inequalities).

Action-based learning

Traditional lecture-based learning approaches are likely to fall short when it comes to addressing the SDGs. In this sense, more direct involvement of students in the activities programmed in the subjects may lead to a more satisfactory outcome. As such, integrating real-world projects and problem-solving activities into SDG-focused education offers valuable benefits that go beyond conventional lectures. This experiential approach enables students to observe the practical application of SDG solutions and the challenges of turning theory into action. It enhances their analytical skills, fosters interdisciplinary competencies, and links the SDGs to their personal and professional lives. According to Wiek et al. (2014), action-based learning not only increases student engagement but also fosters the development of competencies such as systems thinking, collaboration, and problem-solving. In the sustainability arena, Stubbs and Schapper (2011) showed that the use of active learning approaches enhance students' ability to address sustainability issues through a holistic lens, equipping them with the skills needed to drive meaningful change. Active learning in sustainability teaching emphasizes engaging students directly in the learning process through hands-on, experiential activities that deepen their understanding of sustainability concepts.

From the professor standpoint, this method supports faculty development, encourages collaboration across disciplines, expands research possibilities, and produces tangible ideas for sustainable development initiatives both on campus and in the broader community. It should also be acknowledged though that this framework poses challenges for the professors, as the design and execution might be more demanding than lecture-based learning.

Different methodologies might be applied to facilitate active learning on students. For example, **Simulation teaching** exercises could engage students in a role-play exercise where they act as stakeholders in a climate negotiation, intended to promote empathy and understanding of environmental issues (SDG 13 Climate Action, SDG 14 Life Below Water and SDG 15 Life on Land) from diverse perspectives such as the need for support from reliable institutions (SDG 16 Peace, Justice and Strong Institutions) and the impact on the

access to water (SDG 6 Clean Water and Sanitation) for vulnerable communities (SDG 10 Reduced Inequalities). Similarly, students could work with simulated climate change scenarios to assess environmental impacts and adaptation (SDG 13 Climate Action). Additionally, immersive learning and virtual environments could be used to teach different courses (Ewers et al. 2024). In marine conservation and biodiversity, students could study ocean ecosystems via virtual simulations and hands-on marine projects (SDG 14 Life Below Water),

Another learning approach refers to **Problem-Based Learning**, which encourages students to solve open-ended, real-world problems, enhancing critical thinking and collaborative skills. Universities such as Aalborg University in Denmark have been widely renowned for promoting critical thinking and solution-oriented skills among their students (SDG 4. Quality Education)

Experiential Learning represents another avenue for students' active learning (Kolb, 2014). It refers to a practical approach to education that emphasizes learning through direct experience, reflection, and application. It includes internships, labs, and fieldwork, among others. For example, students might participate in a field project where they work with local farmers to understand sustainable agriculture practices, analysing soil samples and studying crop rotation methods (SDG 13 Climate Action and SDG 15 Life on Land) as well as discussing their impact of fighting hunger (SDG 2 Zero Hunger).

As research is one of the core missions of universities, **Research-led Teaching** could also contribute to students better understanding of sustainability problems. In this case, students engage in active research projects, allowing them to learn through data collection, analysis, and fieldwork (Healey and Jenkins, 2009). For example, chemistry students might work alongside faculty to study the efficiency of solar panels in different weather conditions, analyse energy output, and explore the environmental impact of renewable energy sources (SDG 7 Affordable and Clean Energy). In the same vein, students could get involved in **Hands-On Learning** to focus on renewable energy and the different solutions such as solar or wind energy systems. They could work in lab and technology project to learn the different options through a practical orientation (SDG 7 Affordable and Clean Energy).

Industry Partnerships, Internships, Collaborations, Fieldwork and Labs also belong to the group of methodological approaches relying on action-based learning. For example, a partnership could be established between a university course and a local company so that students gain insights into workforce recruitment, development and lifelong learning (SDG 4 Quality Education and SDG 8 Decent Work and Economic Growth). Similarly, another project could engage students in collaborative projects that address engineering and infrastructure challenges through innovative solutions (SDG9 Industry, Innovation, and Infrastructure). As suggested by Afacan (2023), in the field of urban planning, students could also participate in urban sustainability labs to actively provide solutions and contribute to

sustainable urban planning as well as to the creation of green spaces and inclusive and climate-resilient environments (SDG 10 Reduced Inequalities; SDG 11 Sustainable Cities and Communities and SDG 13 Climate Action). Another example illustrating fieldwork to favour students learning through active participation was proposed by Stears (2010). This author engaged students in biodiversity and land conservation projects, requiring direct interaction with local ecosystems and focusing on the protection of ecosystems and studying land-based biodiversity (SDG 15 Life on Land).

Multi-actor involvement

As mentioned earlier, the 2030 Agenda is a universal call to action, which implies that a multitude of actors should participate and contribute to the path of sustainable development. This open and multi-actor conception entails the need for these diverse actors to work together and contribute their perspective on the issue or challenge being addressed. These agents may belong to the business community, the public administration, civil society or the community, among others. Undoubtedly, the incorporation of these agents into universities requires the strengthening of the bridges that are established between higher education institutions and these other external instances, it means leaving the comfort zone for the faculty but also brings value, insights, knowledge and first-hand experience that enriches the training of future professionals.

To attain the multi-stakeholder approach in sustainability teaching, probably the most widely used methodology is **Community-Based Learning**. This educational orientation usually combines classroom instruction with community engagement, enabling students to apply academic knowledge to address real-world issues in collaboration with local organizations or groups. In sustainability education, this method allows students to work on projects that support environmental, social, and economic sustainability, creating reciprocal benefits for both students and the community. This approach encourages students to develop skills in teamwork, communication, and problem-solving while gaining insights into the social dynamics and practical implementation of sustainable solutions. At the same time, embracing community-based learning contributes to enhanced student engagement, the development of civic responsibility, and the promotion of deeper learning, as students see the tangible impact of their efforts in the community, fostering a sense of social responsibility and creating meaningful exchanges (Bringle and Hatcher, 1996, Weerts and Sandmann, 2010). An example of this methodology could be channelled through students' engagement with local communities, often through service projects, to work in underserved areas to help address poverty, healthcare, and educational needs (SDG 1 No Poverty, SDG 3 Good Health and Well-Being, SDG 4 Quality Education). Another example was offered by Goggins and Hajdukiewicz (2022), as they facilitated the connection between engineering students and diverse marginalized communities to foster inclusivity, empathy, and social

responsibility. A more ambitious approach to this multi-stakeholder learning process could bring on board partners such as universities, government, NGOs, private companies and civil society to work for sustainability through cross-sectoral networking and alliances (SDG 17 Partnerships for the Goals) as suggested by López-López et al. (2019).

The previous three dimensions (Interdisciplinarity, Action-based learning, Multi-actor involvement) and the associated learning approaches and educational methodologies can be used independently or combined to shape teaching methodologies to include SDGs at universities. The list presented above is exhaustive so other proposals could also be utilized in this context and lead to very positive results in terms of familiarization and processing of the concept of sustainable development by university students.

Among the highly ranked universities in the THE ranking for SDGs we have identified the following potential educational methodologies (see Table below).

TABLE 1: Educational Methodologies to Introduce Sustainability in Higher Education Institutes*

DIMENSIONS	EDUCATIONAL METHODOLOGY
Interdisciplinarity	1. Interprofessional Education (IPE) 2. Gender-inclusive curriculum 3. Sustainability-Focused Coursework 4. Peace and Social Justice Education
Action-based learning	1. Simulation Teaching 2. Based Learning (PBL) 3. Experiential Learning 4. Research-Led Teaching 5. Hands-On Learning 6. Hands-On Learning in Renewable Energy 7. Industry Partnerships and Internships 8. Project-Based Innovation Labs 9. Urban Sustainability Labs 10. Conservation Fieldwork and Ecology Labs 11. Marine Biology and Virtual Ecosystem Simulations 12. Fieldwork and Climate Simulations

Multi-actor involvement	1. Community-Based Learning 2. Community-Engaged Learning for Inclusivity 3. Collaborative, Multi-Stakeholder Learning Projects
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*examples of the educational methodologies can be found in Annex

3. Methodology

3.1. University selection: The Times Higher Education Impact Ranking as a reference framework

The evaluation criteria chosen for selecting successful initiatives used by universities to implement sustainability in their courses was their position within the Times Higher Education (THE) Impact Ranking. The inclusion of the THE Impact Rankings as part of the selection process ensures that the examples featured in this guide came from institutions that are leaders in advancing the SDGs in higher education.

THE ranking system is recognized globally as a benchmark for academic excellence and institutional impact. It has been publishing annual evaluations of Higher Education Institutions since 2004, although their most well-known ranking, THE World University Ranking, with a new methodology, was presented in 2011.

Over the years, THE has expanded its scope, by developing new rankings addressing more specific topics: World Reputation Ranking, Young University Ranking, several regional rankings (Asia University Ranking, Latin America University Ranking, Japan University Ranking...). In 2019, years after the presentation of the 2030 Agenda and in a moment when universities were already assuming their role as important agents in promoting sustainability, THE developed THE Impact Ranking. It assesses universities across each SDG, offering a measure of each institution's commitment to the 2030 Agenda through their teaching, research, and community engagement.

It comprises a set of indicators for each SDG (although some of them are repeated in more than one SDG, as the transversality of the 2030 Agenda is considered), both quantitative and qualitative. Universities themselves fulfil the indicators and provide the links or evidence that will allow evaluators to check the information and give a score for each section and each SDG. Information related to research in sustainability is directly measured by THE, using the Scopus dataset. Universities must get evaluated in at least three SDGs of their choice and SDG 17 to be full participants of THE Impact Ranking.

The number of participant universities has increased significantly since its first edition: from 467 in the 2019 edition to 1,963 in 2024. Therefore, its importance as a methodology for evaluating universities' performance implementing the SDGs and its popularity among

institutions is undeniable. By focusing on universities with high rankings in this category, we ensure the selection of institutions recognized globally for SDG contributions.

Information related to the 2024 THE Impact Ranking has been used for the following tables, as the results were published in June 2024. It measures data of 2021-22 academic course, since due to the COVID19, the data collection was delayed for one year. Using the 2023 ranking (measuring 2020-21) would have provided outdated information and that is the reason why the 2024 edition was used as the reference in this deliverable.

The top five highest ranked universities in each SDG have been analysed in order to identify remarkable initiatives of implementation of the specific SDG in academic courses. After the previous literature review on the different learning approaches used by HEIs for this purpose, the selected initiatives of each university have been categorized in one of them. In the tables, the number of SDGs in which each one of the top 5 universities has a great performance has been registered too. In that regard, it was assumed that a university performs well if it is ranked among the first 100 universities. The initial hypothesis, that will be further developed, is that a university who succeeds in one SDG usually also has a great commitment to other SDGs, and therefore, it usually has a great score in the overall THE Impact Ranking

In addition to identifying the methodologies most widely used by universities in relation to the SDGs, working with the THE impact ranking has also allowed us to know, to a certain extent, whether they exclusively address a) the SDG in which they occupy a high position in the ranking or whether, on the contrary, b) they occupy prominent positions in several of them.

The following table 2 summarizes the distribution of the 68 selected universities (top 100 universities in THE Impact Ranking 2024) and the appearance, in top positions, across multiple SDGs. Seventeen (17) of them appear several times in the tables, (as they are among the top 5 universities in more than one SDG). Universities' initiatives have been highlighted in section 3.2, TABLE 2. The inclusion of 68 universities, with several appearing in top positions across multiple SDGs, demonstrates a broad and inclusive dataset.

TABLE 2: Universities OF the THE Impact Ranking 2024 appearing in top positions across multiple SDGs.

Number of SDGs	Number of universities
10 or more	21
[5-9]	22
[2-4]	20
1	5

As can be seen, most universities present a good performance in a significant number of SDGs beyond the one in which they belong to the top five, demonstrating the interrelationship between goals. This provides clear evidence of the cross-SDG performance.

- For example, Aalborg University in Denmark ranks first in SDG4 and is among the top 100 universities in fourteen other SDGs.
- In the same vein, the University of Alberta in Canada ranks fourth in SDG2, second in SDG 14 and is among the top 100 universities in eleven other SDGs.
- Similarly, Arizona State University ranks second in SDG 11 and first in SDG14 and is successful in eleven other SDGs.
- It is important to note that some other universities focus mainly on one single SDG and do not really work very intensely in the others, frequently because of their specialized orientation. That is the case of Fujita Health University, basically succeeding in SDG3, Women University Multan, in Pakistan, focused on SDG 5, and the Catholic University of Portugal, standing out in SDG 16.

The distribution of universities across multiple SDGs highlights the interrelationship between goals, showing that top universities often excel in more than one area, which reinforces the robustness of our analysis

3.2 Leading universities by SDG according to the THE impact ranking

TABLE 3: Leading universities by SDG according to the THE impact ranking.

SDG 1 - No Poverty							
University	Country	Score SDG 1	General Score and Position	Other Successful SDGs	Initiative	Description	Methodology
1. Universitas Airlangga	Indonesia	92.7	90.3, 81st	SDG 2 – 51st SDG 3 – 33rd SDG 4 – 20th SDG 5 – 4th SDG 6 – 24th SDG 7 – 26th SDG 12 – 49th SDG 14 – 38th SDG 16 – 57th SDG 17 – 42nd	Social Activity Project (Proyek Kemanusiaan)	The Social Activity Project is a humanitarian project that encompasses social activities conducted for a foundation or humanitarian organization that is approved by the University, both within the country and abroad. These projects are aimed at addressing various social challenges and promoting the well-being of individuals and communities in need. The Social Activity Project can be undertaken by students at any semester of their academic journey.	Action based Problem-based method

2. York University	Canada	92.2	93.1, 35th	SDG 5 – 50th SDG 9 – 95th SDG 10 – 33rd SDG 11 – 13th SDG 12 – 30th SDG 14 – 32nd SDG 16 – 44th SDG 17 – 35th	Climate impact on vulnerable communities	This is a groundbreaking social innovation initiative that aims to drive positive change at the intersection of climate change, housing and poverty reduction.	Multi actor Involvement Community Based Learning
3. University of Johannesburg	South Africa	88.8	93.0, 36th	SDG 2 – 93rd SDG 4 – 53rd SDG 5 – 13th SDG 8 – 6th SDG 10 – 46th	The University of Johannesburg's Centre for Ecological Intelligence (CEI)	The Centre for Ecological Intelligence at UJ runs a Research, Training, and Food Systems Hub. The goal of this centre is to teach people how to grow their own food, first at UJ and then in urban and peri-urban areas. Students have practical experience with sustainable agricultural methods by working on projects that encompass Agroecology, aquaponics, hydroponics, and aquaculture. The goals of these programs are to change communities and give students real-world skills for a sustainable future	Action Based Experiential learning

4. University of Indonesia	Indonesia	88.5	93.7, 31st	SDG 2 – 6th SDG 3 – 24th SDG 4 – 79th SDG 5 – 42nd SDG 6 – 13th SDG 7 – 23rd SDG 8 – 55th SDG 9 – 71st SDG 16 – 35th	Community anti-poverty programs	The university through a range of initiatives that integrate academic knowledge with community engagement.	Multi actor Involvement Community Based Learning
5. Abdullah Gül University	Turkey	87.3	84.0-89.1, 101th to 200th	SDG 2 – 91st SDG 4 – 9th SDG 6 – 63rd SDG 7 – 48th SDG 11 – 35th SDG 12 – 52nd SDG 13 – 7th SDG 14 – 91st SDG 15 – 75th	Kayseri Model Factory	The university participates in the “Model Factory Series” Through which local businesses are supported, indirectly aiding poverty reduction efforts.	Multi actor Involvement Community Based Learning

SDG 2 - Zero Hunger

University	Country	Score SDG 2	General Score and Position	Other Successful SDGs	Initiative	Description	Methodology
1. Queen's University	Canada	90.3	97.1, 8 th	SDG 1 – 38th SDG 6 – 34th SDG 11 – 7th SDG 12 – 76th SDG 13 – 45th SDG 14 – 17th SDG 15 – 30th SDG 16 – 3rd SDG 17 – 96th	Soul Food	The university actively addresses food insecurity within the local community through initiatives like the student-run organization. Soul Food. The organization collects surplus food from campus cafeterias and distributes it to four local shelters.	Action Based Experiential learning
2. Oklahoma State	United States of America	89.9	84.0-89.1, 101-200th	SDG 10 – 76th SDG 17 – 89th	Farm to Fork Course	Each Spring, Dr. Bailey Norwood, a professor of agricultural economics offers the “Farm to Fork” course. This program involves approximately 200	Action Based Experiential

University						students working in the gardens at the Daily Bread Food and Resource Center, cultivating fresh fruits and vegetables for the local community. This initiative not only provides practical agricultural experience but also directly addresses food insecurity in the area.	learning
3. Lincoln University	New Zealand	89.5	84.0-89.1, 101-200th	SDG 13 – 71st SDG 15 – 52nd SDG 17 – 54th	Breakfast Briefings organized by the Lincoln Institute for Agri-Food Technology (LIAT).	The university through events like “Breakfast Briefings” events hosted by The Lincoln Institute for Agriculture and Technology. This collaborative approach equips students with the knowledge and skills needed to address real-world issues in agriculture and food security, thereby contributing to sustainable practices aimed at reducing hunger and ensuring food sustainability for future generations.	Action Based Experiential learning
4. University of Alberta	Canada	89.1	97.4, 6th	SDG 3 – 48th SDG 5 – 69th SDG 6 – 39th SDG 9 – 9th SDG 11 – 67th SDG 12 – 45th	Campus Gardens	The Campus Community Garden is a volunteer-run shared garden plot. In addition to creating an exciting nature-driven recreational experience for the campus community, our mandate includes: Providing the campus community with food that is locally and sustainably grown. Our	Action Based Experiential learning

				SDG 13 – 82nd SDG 14 – 2nd SDG 15 – 7th SDG 16 – 81st SDG 17 – 27th		volunteers are invited to take a portion of our harvest! - Promoting urban agriculture by teaching campus community members sustainable gardening practices. - Contributing food security on campus by providing a portion of our harvest to the Campus Food Bank. - Fostering a strong and vibrant community of neighborhood gardeners.	
5. La Trobe University	Australia	88.2	90.9, 57th	SDG 3 – 12th SDG 5 – 10th SDG 6 – 64th SDG 8 – 18th SDG 12 – 59th SDG 13 – 41st SDG 15 – 90th	La Trobe Institute for Sustainable Agriculture & Food (LISAF)	The LISAF plays a key role in integrating research and education to address food security. LISAF's approach encompasses the entire food value chain, offering students opportunities to engage in cutting end research.	Action Based Experiential learning

SDG 3 - Health and Wellbeing

University	Country	Score SDG 3	General Score and Position	Other Successful SDGs	Initiative	Description	Methodology
1. JSS Academy of Higher Education and Research	India	96.1	84.0-89.1, 101-200th	SDG 1 – 21st SDG 6 – 60th SDG 7 – 12th SDG 12 – 78th SDG 15 – 49th	School Health Appraisal Programme	The Department of Community Medicine at the university conducts an annual program for children across approximately 95 schools. The program actively involved department's student.	Interdisciplinarity Interprofessional education (IPE)
2. Australian Catholic University	Australia	95.0	84.0-89.1, 101-200th	SDG 8 – 20 th	Mary MacKillop Institute for Health Research	MMIHR brings national and international health experts together with leading organizations across a broad portfolio of health-related research areas. By fostering an environment of collaborative research, without discipline-based boundaries, the impact of MMIHR is profound and extensive,	Interdisciplinarity Interprofessional education (IPE)

						enhancing the capabilities and skills of its students.	
3. Mahidol University	Thailand	94.5	94.9, 19th	SDG 2 – 73rd SDG 4 – 35th SDG 5 – 50th SDG 6 – 94th SDG 7 – 29th SDG 12 – 95th SDG 14 – 27th SDG 15 – 63rd SDG 17 – 5th	SDGs + Mobility MaPs Initiative	The university's "SDGs + Mobility Mahidol University Projects" (SDGs + Mobility MaPs) is a game-changing initiative that aims to educate students about the obstacles that their communities face in achieving the SDGs (especially SDG3). Students work together to develop solutions that benefit their communities through project-based learning and design thinking, developing a collaborative mindset that is crucial for addressing challenging social issues.	Action Based Problem-based learning
4. Fujita Health University	Japan	94.3	-	-	Fujita Community Health Center and Otonari project	The Fujita Community Health Center is a place where local residents can go every weekday to receive free health counseling and health classes at the shopping district. About 5,000 residents visit the center every year, and it provides various consultations on prevention, daily life support, housing, medical care, and nursing care, as well as about 400 lectures on daily life. In the "Otonari Project," about 60 university students live on the	Interdisciplinarity Interprofessional Education (IPE)

						fourth and fifth floors of the Toyoake housing complex and participate in activities for local community contribution as mutual supporters for residents, regardless of their undergraduate year. They are working on "experiencing community-based integrated care systems" and "solving community issues".	
5. RCSI University of Medicine and Health Sciences	Ireland	93.9	79.3-83.9, 201-300th	-	RCSI Student Engagement and Partnership (StEP) programme	Co-developed by students and staff, the RCSI Student Engagement and Partnership (StEP) programme drives positive change across the RCSI community for the benefit of human health.	Interdisciplinarity Interprofessional Education (IPE)

SDG 4 - Quality Education

University	Country	Score SDG 2	General Score and Position	Other Successful SDGs	Initiative	Description	Methodology
1. Aalborg University	Denmark	91.4	98.0, 4th	SDG 1 – 44th SDG 2 – 61st SDG 6 – 42nd SDG 7 – 42nd SDG 8 – 69th SDG 9 – 91st SDG 10 – 4th SDG 11 – 15th SDG 12 – 50th SDG 13 – 8th SDG 14 – 3rd SDG 15 – 50th SDG 16 – 98th	IT tools provide underprivileged in South Africa better education	A group of IT students from Aalborg University (AAU) are currently in South Africa where they are offering schools in slum areas digital tools for mathematics education. In addition to helping kids, the tools also provide data to teachers and schools who are using it to improve teaching. The latter is the most important aspect because it creates long-term and lasting changes – fully in line with the UN's Sustainable Development Goal 4: quality education.	Action Based Problem-Based Learning (PBL)

				SDG 17 – 16th			
2. Hong Kong Baptist University	Hong Kong	90.6	84.0-89.1, 101-200th	SDG 1 – 88th SDG 12 – 63rd SDG 14 – 69th SDG 15 – 74th	General Education (GE) Programme	The GE Program at HKBU provides a wide range of courses that support SDG 4. For example, classes like "An Introduction to Gender, Class, and Race" and "Service-Learning in Fighting Poverty" allowing students to get involved with local concerns and gain a thorough awareness of societal dynamics.	Action Based Problem-Based Learning (PBL)
3. Amrita Vishwa Vidyapeetham	India	90.5	90.3, 81st	SDG 3 – 7th SDG 5 – 22nd SDG 6 – 62nd SDG 7 – 87th SDG 9 – 87th	AlgoQueen Boot Camp	In order to inspire young females in grades 8 through 12 to learn how to code, Mrita organized the ICPC AlgoQueen Boot Camp, which was supported by IBM Quantum and UNICEF. This two-day event promoted gender equality in STEM professions by empowering female students through competitive programming.	Action Based Problem-Based Learning (PBL)
4. Hong Kong	Hong Kong	90.1	90.4, 77th	SDG 3 – 33rd SDG 11 – 83rd	The	The Global Student Ambassador Programme (GSAP) launched by the Student Affairs Office	Action Based Problem-Based

Polytechnic University					Global Student Ambassador or Programme (GSAP)	offers valuable learning opportunities to all full-time undergraduate students. By becoming GSAP ambassadors, they can take advantage of diversified training that includes lectures, guidance, funding support and events. The programme not only enriches participants' sense of responsibility as global citizens, but also develops their skills to tackle sustainability issues.	Learning (PBL)
5. Istanbul Technical University	Turkey	89.9	93.2, 34th	SDG 8 – 51st SDG 9 – 25th SDG 15 – 34th	EELISA communities	Under the EELISA project the EELISA communities main objective is to extend EELISA higher education from teaching and learning to the proposal of solutions to current socio-technical challenges and build innovation communities engaging students, researchers, faculty and staff members and external stakeholders in the process.	Action Based Problem based learning

SDG 5 - Gender Equality

University	Country	Score SDG 5	General Score and Position	Other Successful SDGs	Initiative	Description	Methodology
1. Western Sydney University	Australia	79.7	99.7, 1st	SDG 3 – 26th SDG 6 – 9th SDG 8 – 64th SDG 10 – 8th SDG 11 – 23rd SDG 12n – 4th SDG 13n – 4th SDG 14 – 21st SDG 15 – 3rd SDG 17 – 4th	Women in STEM Education (WiSE)	Women in STEM Education (WiSE) supports the career development of identifying women studying in the areas of science, technology, engineering and mathematics (STEM) at Western Sydney University.	Interdisciplinarity Gender Inclusive Curriculum
2. Institut	France	78.7	79.3-83.9, 201-300th	SDG 4 - 59th	MOOC	Launched by the Gender@IMT teaching and research team in March 2018, this MOOC	Interdisciplinarity

Mines-Télécom Business School					“La mixité dans les métiers du numérique” by Gender@IMT	introduces the unrecognized contribution of women in research, in software entrepreneurship and in the digital professions. It analyzes the construction processes of gendered stereotypes related to ICT and identifies the trends that lead to the deconstruction of these stereotypes	Gender Inclusive Curriculum
3. Women University Multan	Pakistan	78.5	64.5-89.8, 601-800th	-	International Webinar on International Day of Women & Girls in Science	The International Day of Women & Girls in Science was celebrated by the Department of Chemistry to disclose the facts of how women play their key roles in science & technology and every field of life to make them empower societal elements.	Interdisciplinarity Gender Inclusive Curriculum

4. Universitas Airlangga	Indonesia	78.2	90.3, 81st		Empowering Women through Mentoring	One of UNAIR's standout initiatives is its mentorship program designed to provide women students with guidance and support. Through mentorship, female students receive invaluable insights, advice, and encouragement from accomplished mentors, enabling them to overcome barriers and excel in their academic and professional pursuits.	Interdisciplinarity Gender-Inclusive Curriculum
5. Al Ain University	United Arab Emirates	77.5	89.8, 92nd		Inclusive Curriculum and Gender-Focused Learning	The university offers academic programs that address gender-related issues and encourages dialogue on gender equality within various fields of study.	Interdisciplinarity Gender-Inclusive Curriculum

SDG 6 - Clean Water and Sanitation

University	Country	Score SDG 6	General Score and Position	Other Successful SDGs	Initiative	Description	Methodology
1. University of Exeter	United Kingdom	91.8	96.1, 10th	SDG 1 – 81st SDG 2 – 19th SDG 10 – 34th SDG 12 – 7th SDG 13 – 12th SDG 14 – 6th SDG 15 – 25th SDG 17 – 35th	Future 17 Programme	The Future17 Challenge Program is a new global initiative between the University of Exeter, QS and leading international universities designed to support students to develop the skills needed to collaboratively tackle 21st Century global challenges through working with professionals to create pathways for innovative solutions to real-world issues associated with the United Nations SDGs. A fresh approach to innovation; Future17 enables students to collaborate with learners from a consortium of global partner universities in international, interdisciplinary and multicultural teams through projects defined by SDG Challenge	Action Based Research-Led Teaching

						Partners (businesses, charities, NGOs etc.).	
2. Shoolini University of Biotechnology and Management Science	India	91.4	84.0-89.1, 101-200th	SDG 7 – 5th SDG 13 – 35th	Fostering Awareness	The bond between the university and local community is fortified by our active involvement in promoting awareness about water conservation. As water scarcity is a pressing concern in our hilly locale, we consider responsible water usage and reuse as essential imperatives for the local community. We actively engage with local communities through training and demonstration camps, emphasizing the significance of water conservation steps and organizing awareness events. Furthermore, the students play an active role in environmental preservation by regularly visiting the nearby water stream (Ashwani Khadd) and local water bodies in nearby villages for clean-up initiatives. University also educates local communities about the plantation of drought tolerant plants, aiming to conserve water resources and bolster groundwater levels.	Multi Actor Involvement Community Based Learning

3. UNSW Sydney	Australia	91.2	97.2, 7th	SDG 2 – 63rd SDG 7 – 81st SDG 9 – 75th SDG 11 – 67th SDG 12 – 12th SDG 13 – 2nd SDG 14r – 8th SDG 15 – 8th SDG 16 – 85th SDG 17 – 35th	Testing the waters project	A team of UNSW researchers and students are working with local communities to maintain the health of their waterways. The project will build community knowledge of local stormwater management systems, such as wetlands, and water quality testing.	Action Based Problem based learning
4. University of Newcastle	Australia	89.7	92.9, 39th	SDG 1 – 84th SDG 3 – 22nd SDG 5 – 23rd SDG 11 – 13th SDG 12 – 62nd SDG 13 – 9th SDG 14 – 58th SDG 15 – 97th SDG 16 – 64th	Sustainable Waste Actions in the Pacific Project Training Program	CIFAL Newcastle has been working in collaboration with SPREP on the 'Design, Development, and Delivery of a Regional Virtual Vocational Training Program for the SWAP Project'. The Committing to Sustainable Waste Actions in the Pacific (SWAP) Project aims to improve sanitation, environmental, social, and economic conditions in Pacific Island countries and territories through proper waste management. As part of this program there are four different training courses to be delivered online in 2023 and	Action based Problem based learning

						early 2024 on Project Management; Sustainable Financing Mechanisms for Waste Management; Used Oil Management; and Disaster Waste Management. Participants/students will join the online training programs from different countries within the Pacific Region.	
5. University of Technology Sydney	Australia	89.1	95.2, 13th	SDG 7 – 52nd SDG 8 – 19th SDG 10 – 48th SDG 11 – 37th SDG 12 – 12th SDG 13 – 15th SDG 17 – 1st	Centre for Technology in Water and Wastewater	The research center is a pioneer in the field of alternative water sources. Center's team is focused on the development of innovative technologies that deliver abundant supplies of recycled, desalinated and harvested storm water. CTWW is a dynamic research environment enriched by leading academics, visiting professors/researchers, postdoctoral fellows, active industry partners and students. The center is focussed research and on mentoring the next generation of engineering research leaders.	Action Based Research-Led Teaching

SDG 7 - Affordable and Clean Energy

University	Country	Score SDG 7	General Score and Position	Other Successful SDGs	Initiative	Description	Methodology
1. Afe Babalola University	Nigeria	85.0	84.0-89.1, 101-200th	SDG 1: No Poverty – 15th SDG 2: Zero Hunger – 49th	ABUAD Energy Efficiency Training and Provision of Clean Energy to Local Communities	The University provides direct services to students and local communities and industries to improve energy efficiency by providing direct access to the University's Independent Power Plant (IPP), and also through workshops and seminars on energy efficiency.	Action Based Hands-On Learning in Renewable Energy
2. National Autonomous University	Mexico	84.6	91.0, 64th	SDG 1 – 20th SDG 3 – 59th SDG 6 – 43rd	I-MMÁS	A variety of topics related to affordable and clean energy addressed to online symposiums reflected the commitment of the academic and scientific	Action Based Hands-On

of Mexico				SDG 9 – 9th SDG 11 – 92nd SDG 14r – 67th		community of the different participating schools and faculties and, above all, of the students of both countries to provide a range of potential solutions to meet energy demand while mitigating environmental deterioration, reducing health risks and facing global challenges such as energy security. Clean Energy Programme conducted by faculty members of Saveetha School of Engineering. In this programme, the importance of energy efficiency plans and ways to reduce and save energy were suggested by Public awareness, effective community participation, transparent and clean administration, introduction of citizen charters and accountability at all levels can only bridge this gap.	Learning in Renewable Energy
3. Saveetha Institute and Technical Sciences	India	83.2	79.3-83.9, 201-300th	SDG 12 – 56th	Programmes for Local Community to learn about importance of energy	Clean Energy Programme conducted by faculty members of Saveetha School of Engineering. In this programme, the importance of energy efficiency plans and ways to reduce and save energy were suggested by Public awareness, effective community participation, transparent and	Action Based Hands-On Learning in Renewable Energy

					efficiency and clean energy	clean administration, introduction of citizen charters and accountability at all levels can only bridge this gap.	
4. University of Malaya	Malaysia	83.1	91.1, 63rd	SDG 1 – 11th SDG 2 – 86th SDG 5 – 54th SDG 6 – 35th SDG 8 – 91st SDG 11 – 92nd SDG 14 – 67th	Living Labs	UM Living Lab is introduced to support the aspirations of UM to be among the leading Eco-Campus while promoting the participation of the entire campus. UM's campus serves as a “living laboratory,” where students can conduct experiments and projects related to renewable energy in a real-world setting.	Action Based Hands-On Learning in Renewable Energy
5. Shoolini University of Biotechnology and Management Science	India	82.5	84.0-89.1, 101-200th	SDG 6 – 2nd SDG 13 – 35th	National energy conservation day observed at Shoolini University	Shoolini University's Center of Excellence in Energy Science and Technology is conducting an online campaign to encourage students, staff, faculty, and residents to pledge to conserve energy in Shoolini Township.	Action Based Experiential learning

SDG 8 - Decent Work and Economic Growth

University	Country	Score SDG 8	General Score and Position	Other Successful SDGs	Initiative	Description	Methodology
1. Kyungpook National University	South Korea	89.1	92.9, 39th	SDG 1 – 76th SDG 2 – 9th SDG 9 – 31st SDG 11 – 25th SDG 15 – 40th SDG 17 – 20th	‘Carbon Neutral Campus Creation Project’	Carbon Neutral Campus of Kyungpook National University is a pilot project to create an ecosystem for next-generation energy industries led by the private sector.	Action Based Industry Partnerships and Internships
2. Yonsei University	South Korea	88.1	96.0, 11th	SDG 6 – 73rd SDG 9 – 1st SDG 11 – 68th SDG 12 – 12th SDG 16 – 6th	Yonsei International Summer School (YISS) Internship Program	Taking advantage of Yonsei University's vast alumni networks and strong ties with business and educational partners, the program provides students with the opportunity to gain professional work experience and to build social networks in some of the world's leading companies and organizations.	Action Based Industry Partnerships and Internships

3. Pusan National University	South Korea	87.9	90.7, 67th	SDG 1 – 50th SDG 2 – 20th SDG 9 – 52nd SDG 11 – 34th SDG 17 – 72nd	University-Industry Collaboration	PNU collaborates with many corporations and agencies in various sectors, making it easier for students to interact in real-world assignments and study projects.	Action Based Industry Partnerships and Internships
4. Kyung Hee University	South Korea	85.6	94.3, 23rd	SDG 1 – 13th SDG 2 – 26th SDG 3 – 57th SDG 9 – 19th SDG 11 – 28th SDG 17 – 59th	Kyung Hee University Global Collaborative Summer Program	One noteworthy effort in this area is KHU's Global Collaborative Summer Program, which combines internships and corporate partnerships to give students real-world experience and improve their employability.	Action Based Industry Partnerships and Internships
5. RMIT University	Australia	85.1	97.7, 5th	SDG 5 – 81st SDG 6 – 10th SDG 7 – 91st SDG 9 – 40th SDG 10 – 1st SDG 11 – 20th SDG 12 – 41st SDG 13 – 16th	Industry Experience Program	The program is a 2-3 week virtual work experience where teams of students work collaboratively to solve a real industry client challenge. Students will receive a project brief from their client and are required to present their research and insights at the end of the program. As part of the program students receive feedback from the industry partner and mentor.	Action Based Industry Partnerships and Internships

				SDG 17 – 11st			
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SDG 9 - Industry, Innovation and Infrastructure

University *	Country	Score SDG 9	General Score and Position	Other Successful SDGs	Initiative	Description	Methodology
1. Yonsei University	South Korea	100.0	96.0, 11th	SDG 6 – 73rd SDG 8 – 2nd SDG 11 – 68th SDG 12 – 12th SDG 16 – 6th	Yonsei Science Park	The Yonsei Science Park is being developed at Yonsei University's International Campus in Songdo, Incheon. By facilitating the convergence of academic and industrial research, this research hub hopes to give students the chance to work together on creative initiatives and obtain real-world experience in industry-related research.	Action Based Research led teaching
2. University of Edinburgh	United Kingdom	100.0	89.9, 89th	SDG 12 – 45th SDG 15 – 78th SDG 17 – 81st	Support for Startups	The University's commercialisation service, Edinburgh Innovations, provides assistance to students in creating spinouts and enterprises.	Action based Problem based

					and Spinouts	Over 123 staff and student businesses and spinouts received support during the 2022–2023 academic year, bringing in £107.6 million in funding.	learning
3. Delft University of Technology	Netherlands	100.0	84.0-89.1, 101-200th	SDG 7 – 51st SDG 13 – 14th	Eco-Runner Team Delft	Eco-Runner Team Delft is a multidisciplinary student team from Delft University of Technology (TU Delft) focused on developing efficient cars powered by sustainable fuels. Every year, a new car is produced to inspire the world towards sustainable mobility.	Action based Problem based learning
4. RWTH Aachen University	Germany	100.0	201-300th	SDG 8 – 88th	Center for Sustainable Hydrogen Systems (CSHS)	The Center for Sustainable Hydrogen Systems at RWTH Aachen University is committed to a greener future and the design of a hydrogen economy. One key to success is its close collaboration with the Center for Circular Economy. The centers' joint projects aim to establish a sustainable hydrogen economy following a holistic approach.	Action based Problem based learning

5. Hanyang University	South Korea	100.0	88.9, 101-200th	SDG 8 – 78th SDG 11 – 66th	Support for Technology-Based Startups	To support technology-based enterprises, the institution has set up platforms for instruction and incubation. Students are assisted in honing their entrepreneurial abilities and starting creative businesses through the Seoul Hanyang Institute for Entrepreneurship and the ERICA Startup Education Centre.	Action Based Industry Partnerships and Internships
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(*) There are nine universities sharing the first position of the SDG 9. All of them got a 100.0 score for the SDG 9, but some of them were not ranked in the overall THE Impact Ranking. For the purpose of this deliverable, the five universities with a better score in the overall THE Impact Ranking have been selected.

SDG 10 - Reduced Inequalities

University	Country	Score SDG 10	General Score and Position	Other Successful SDGs	Initiative	Description	Methodology
1. RMIT University	Australia	92.8	97.7, 5th	SDG 5 – 81st SDG 6 – 10th SDG 7 – 91st SDG 8 – 5th SDG 9 – 40th SDG 11 – 20th SDG 12 – 41st SDG 13 – 16th SDG 17 – 11th	Social Impact Programs	Through collaborations with NGOs , RMIT investigates how students' and faculty members' active involvement may solve humanitarian concerns (e.g during COVID Pandemic) and help to lessen inequality.	Action based Research based learning
2. University of Huddersfield	United Kingdom	91.0	84.0-89.1, 101-200th	SDG 8 – 60th	Sustainability Challenge	This program, which is run by the University's Sustainability Champions, promotes employees and students to take part in events that support	Multi actor involvement

					Week	sustainable living and community involvement. In order to promote an inclusive and environmentally conscious culture, challenges include well-being walks, charitable contributions, and eco-friendly purchasing. This program, which is run by the University's Sustainability Champions, promotes employees and students to take part in events that support sustainable living and community involvement. In order to promote an inclusive and environmentally conscious culture, challenges include well-being walks, charitable contributions, and eco-friendly purchasing.	Community based learning
3. London South Bank University	United Kingdom	90.5	84.0-89.1, 101-200th	SDG 3 –45th SDG 8 – 66th SDG 17 –93rd	South Bank Students' Union (SBSU)	With a range of programs and events aimed at improving the student experience, SBSU acts as the center of campus life. A diverse and inclusive community is fostered by the abundance of student-led societies and clubs that span a wide spectrum of cultural, intellectual, and social interests. Throughout the academic year, SBSU also hosts events like Union Awards and Freshers Week, which provide students a chance to interact and network. With a range of programs and events	Multi actor involvement Community based learning

						aimed at improving the student experience, SBSU acts as the centre of campus life. A diverse and inclusive community is fostered by the abundance of student-led societies and clubs that span a wide spectrum of cultural, intellectual, and social interests. SBSU also plans events all through the school year.	
4. Aalborg University	Denmark	90.0	98.0, 4th	SDG 1 – 44th SDG 2 – 61st SDG 4 – 1st SDG 6 – 42nd SDG 7 – 42nd SDG 8 – 69th SDG 9 – 91st SDG 11 – 15th SDG 12 – 50th SDG 13 – 8th SDG 14 – 3rd SDG 15 – 50th SDG 16 – 98th SDG 17 – 16th	Problem-Based Learning (PBL) Approach	Through the use of a problem-based learning approach, AAU encourages students to work together to address real-world issues, such as social injustices. This approach fosters critical thinking and equips students with practical skills to address societal issues	Action based Problem-Based Learning

5. Sheffield Hallam University	United Kingdom	87.9	84.0-89.1, 101-200th	SDG 1 – 33rd SDG 3 – 44th SDG 8 – 68th	Student Involvement in Governance	Students take part in the Board of Governors' and other university decision-making procedures. This engagement guarantees that student viewpoints impact financial and strategic choices, especially those pertaining to diversity and sustainability.	Multi actor involvement Community engaged learning
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SDG 11 - Sustainable Cities and Communities

University	Country	Score SDG 11	General Score and Position	Other Successful SDGs	Initiative	Description	Methodology
1. University of Manchester	United Kingdom	95.7	98.5, 2nd	SDG 1 – 30th SDG 2 – 43rd SDG 3 – 76th SDG 6 – 15th SDG 7 – 56th SDG 10 – 91st SDG 12 – 7th SDG 13 – 47th SDG 14 – 7th SDG 15 – 1st SDG 16 – 57th SDG 17 – 30th	Sustainability challenge	On their second day at university, as part of our wider Stellify initiative, all 8,000 first-year students can take part in an interactive event facilitated by more than 230 staff. Working in groups, students consider the challenges arising from constructing a new university campus in the fictional city of Millchester, analysing costs and carbon whilst paying attention to the needs of the local community. Over the last three years, 24,143 students have taken part in the challenge, which has helped them to understand the complexities of environmental, social and economic dilemmas in a realistic setting.	Action based Simulation teaching

2. Arizona State University	United States	95.4	96.4, 9th	SDG 1 – 18th SDG 2 – 46th SDG 5 – 50th SDG 6 – 15th SDG 7 – 74th SDG 10 – 23rd SDG 11 – 2nd SDG 12 – 33rd SDG 13 – 11th SDG 15 – 3rd SDG 16 – 12th SDG 17 – 64th	Project Cities	Through the program, faculty and students pair with a city to co-create strategies for better environmental, economic and social balance in the places we live. Students from multiple disciplines research challenging issues chosen by the city and propose innovative sustainability solutions that enable the city to make progress toward a better future.	Action Based Problem based learning
3. Simon Fraser University	Canada	90.3	95.1, 17th	SDG 13 – 3rd SDG 14 – 55th SDG 16 – 22nd SDG 17 – 57th	Burnaby Civic Innovation Lab	Through the Civic Innovation Lab— a partnership between SFU and the City of Burnaby—the university is sharing its leading-edge research and strengths in innovation and sustainability to advance practical solutions for the city’s most pressing urban issues, from diversity and housing to sustainable growth and environmental challenges caused by climate change. Over the long-term, the initiative will provide the city with a permanent research base, where students and	Action Based Experiential learning

						researchers apply their education and knowledge to develop real-world solutions, helping solidify the city's role as a leader in solving urban issues.	
4. University of Victoria	Canada	88.8	95.2, 13th	SDG 1 – 26th SDG 6 – 39th SDG 8 – 90th SDG 10 – 63rd SDG 12 – 39th SDG 13 – 5th SDG 14 – 24th SDG 15 – 41st SDG 17 – 67th	Sustainable transportation	UVic is improving capability for a sustainable commute by implementing the student and employee transit programs, providing amenities and infrastructure for cyclists, and sustainable driving options on those days when they need a vehicle.	Action Based Problem based learning
5. Michigan State University **	United States of America	93.2	94.1, 25th	SDG 1 – 74th SDG 2 – 8th SDG 13 – 87th SDG 15 – 33rd SDG 17 – 23rd	Bailey Hall Green Roof	The university through this initiative is about establishing a rooftop garden on Bailey Hall as a step toward promoting sustainability, ecological awareness, and efficient use of space within the residential community	Action Based Experiential learning



(**) Massey University and Michigan State University share the 5th position of the SDG 11 ranking. For the purpose of this table, Michigan State University has been selected, as its overall score and position in THE Impact Ranking is higher.

SDG 12 - Responsible Consumption and Production

University ***	Country	Score SDG 12	General Score and Position	Other Successful SDGs	Initiative	Description	Methodology
1. Bournemouth University	United Kingdom	93.6	92.9, 39th	SDG 1 – 69th SDG 6 – 56th SDG 8 – 9th SDG 13 – 42nd SDG 14 – 89th SDG 15 – 44th	Student Union	The Student Union at Bournemouth University (SUBU) embed sustainability into their operations and culture, ensuring their efforts are mindful of both immediate and long-term environmental impacts. It reflects a forward-thinking approach to creating a balance between present needs and future responsibilities.	Action Based Experiential learning
2. King's College London	United Kingdom	93.6	93.4, 33rd	SDG 1 – 93rd SDG 3 – 85th SDG 5 – 21st SDG 7 – 68th SDG 8 – 34th SDG 9 – 85th	Sustainability Auditors	Student Sustainability Auditors audit teams of Sustainability Champions at King's receive IEMA approved training on sustainability auditing, which they then use to assess the work the staff champions have done within their sustainability workbooks and to evaluate how they meet the	Action Based Experiential learning

				SDG 10 – 31st SDG 11 – 37th SDG 13 – 39th SDG 14 – 43rd SDG 15 – 18th SDG 16 – 81st		sustainability criteria. These workbooks contain various actions covering areas including waste, energy, health & wellbeing, biodiversity and service to the community. Students go through each completed action with their teams, identifying positive progress the team have made over the year and identifying any areas for improvement to take forward onto the next champions year.	
3. University of Reading	United Kingdom	93.4	94.0, 28th	SDG 2 – 71st SDG 6 – 86th SDG 8 – 80th SDG 10 – 27th SDG 11 – 93rd SDG 13 – 19th SDG 15 – 16th SDG 17 – 24th	A Living Laboratory	By using the University's facilities and surroundings as a 'Living Lab', the university provides opportunities for students to gain practical skills and direct experience in applying research, helps shape how to improve our environmental performance, use university's resources efficiently, and work towards a thriving, sustainable university.	Action Based Experiential learning
4. Western Sydney	Australia	93.3	99.7, 1st	SDG 3 – 26th SDG 5 – 1st SDG 6 – 9th	Living	Living Labs are collaborative partnerships for utilizing campus assets as a focus of teaching, research, demonstration and engagement. The	Action Based Experiential

University				SDG 7 – 75th SDG 8 – 64th SDG 10 – 8th SDG 11 – 23rd SDG 13 – 4th SDG 14 – 21st SDG 15 – 3rd SDG 16 – 68th SDG 17 – 4th	Labs	essential components of Living Lab initiatives are that they are multidisciplinary in focus and have some broader strategic opportunities. Initiatives developed to date include applications to broad societal issues of urban development, natural and cultural heritage, renewable energy, urban heat, water recycling, and peri-urban food systems.	learning
5. University of Sheffield	United Kingdom	93.1	93.1, 58th	SDG 2 – 63rd SDG 11 – 78th SDG 17 – 43rd	Donate, Don't Waste	Donate, Don't Waste is a scheme designed to help students donate reusable items, recycle waste and minimize their impact on the environment and local community when they move out of their student accommodation. It is run by the University of Sheffield, Sheffield Hallam University, Sheffield City Council and charity partners to help make it as easy as possible for students to donate reusable items and dispose of waste responsibly. Established in 2013, this scheme has diverted 66,000 bags of usable bags to charity, preventing 4,776,677kg CO2e from being sent to landfill.	Action Based Problem based learning



(***) The Bournemouth University and King's College London share the 1st position of the SDG 12 ranking.

SDG 13 - Climate Action

University	Country	Score SDG 13	General Score and Position	Other Successful SDGs	Initiative	Description	Methodology
1. University of Tasmania	Australia	92.7	98.5, 2nd	SDG 1 – 52nd SDG 2 – 63rd SDG 3 – 9th SDG 5 – 24th SDG 6 – 12th SDG 7 – 87th SDG 11 – 18th SDG 12 – 60th SDG 14 – 5th SDG 15 – 2nd SDG 17 – 14th	Integration Program for Students (SIPS) internship projects	The University of Tasmania has been certified carbon neutral by Climate Active since 2016. Sustainability Integration Program for Students (SIPS) internship projects have focused on exploring emissions reduction approaches, collecting data, and applying methodologies for emissions calculations. Also, to promote SDG 13 (Climate Action), the university has implemented several key initiatives: 1. Sustainable Living Courses & Sustainability Major: UTAS offers Sustainable Living courses and a Sustainability major that can	Action Based Experiential learning

						be integrated into most bachelor's degree programs, providing students with the knowledge and skills to contribute to climate action. 2. Global Climate Change Week: The university hosts this annual event to bring together local and international communities to discuss and address climate change. Activities include local engagements as well as global coordination on climate issues. 3. Curious Climate Program: This initiative encourages public engagement with climate science and provides opportunities for the community to interact with experts in the field.	
2. UNSW Sydney	Australia	91.2	97.2, 7th	SDG 2 – 63rd SDG 6 – 3rd SDG 7 – 81st SDG 9 – 75th SDG 11 – 67th SDG 12 – 12th SDG 14 – 8th SDG 15 – 8th SDG 16 – 85th	Environmental Sustainability Plan 2022-24	One of the University's key actions is the Environmental Sustainability Plan, which sets ambitious goals for achieving net-zero operational emissions, including reducing emissions across their value chain. This includes projects such as electrifying campuses and increasing solar capacity. The university has also focused on sustainability in campus life, including initiatives like Plastic Free Dining and smart building	Action Based Experiential learning

				SDG 17 – 35th		systems for energy and water efficiency. UNSW actively engages students and staff in climate action through various resources, such as templates and practical guides for incorporating sustainability practices into daily activities. Additionally, the university hosts Global Climate Change Week, offering a platform for local and international activities related to climate change.	
3. Simon Fraser University	Canada	90.3	95.1, 17th	SDG 11 – 3rd SDG 14 – 55th SDG 16 – 22nd SDG 17–57th	SMaRT@UNSW	The Centre for Sustainable Materials Research and Technology (SMaRT) at the University of New South Wales works with industry, national and international research partners, and governments across.	Action Based Industry Partnerships and Internships
4. Western Sydney University	Australia	89.7	99.7, 1st	SDG 3 – 26th SDG 5 – 1st SDG 6 – 9th SDG 7 – 75th SDG 8 – 64th SDG 10 – 8th SDG 11 – 23rd	Powerhouse Late: Climate	Bringing together youth insights and perspectives, pedagogy and research, works by Western design students and research from the YRRC showcased at 'Powerhouse Late: Climate'. Held in July, the event was attended by 500 people and showcased the role visual communication plays in storytelling and amplifying youth concerns about	Action Based Experiential learning

				SDG 12 – 4th SDG 14 – 21st SDG 15 – 3rd SDG 16 – 68th SDG 17 – 4th		climate change. The exhibited student work responded to the ‘100 Climate Conversations’ podcast series visually rendering the threats, possible solutions and action to address climate concerns such as fossil fuels, overconsumption, fast fashion and microplastics.	
5. University of Victoria	Canada	88.8	95.2, 13th	SDG 1 – 26th SDG 6 – 39th SDG 8 – 90th SDG 10 – 63rd SDG 11 – 4th SDG 12 – 39th SDG 14 – 24th SDG 15 – 41st SDG 17 – 67th	Climate Disaster Project	UVic's Climate Disaster Project is an international teaching newsroom that works with people affected by climate change to collect, compile and share survivor stories with local and national media outlets.	Action Based Problem based learning

SDG 14 - Life Below Water

University ****	Country	Score SDG 14	General Score and Position	Other Successful SDGs	Initiative	Description	Methodology
1. Arizona State University	United States	97.4	96.4, 9th	SDG 1 – 18th SDG 2 – 46th SDG 5 – 50th SDG 6 – 15th SDG 7 – 74th SDG 10 – 23rd SDG 11 – 2nd SDG 12 – 33rd SDG 13 – 11th SDG 15 – 3rd SDG 16 – 12th SDG 17 – 64th	Coral Restoration and Reef Conservation	ASU's Center for Global Discovery and Conservation Science is heavily involved in coral reef monitoring and restoration. Using advanced satellite and AI technologies, the Center tracks changes in coral health, aiding in targeted conservation efforts. This initiative aims to protect coral reefs from climate change impacts and support biodiversity in vulnerable marine areas. Moreover, Global Futures Laboratory – ASU's Julie Ann Wrigley Global Futures Laboratory often engages students in research, workshops, and community outreach projects that address SDG 14 and other sustainability goals. Students work	Action Based Research led teaching

						alongside faculty in developing innovative solutions to global marine challenges, including ocean pollution and resource conservation. Global Goals Talks series, organized by University of Alberta International, which includes discussions on the significance of protecting marine ecosystems. For instance, one talk, "Our Society and the Sea," highlighted actions and challenges for sustaining marine environments and explored community and individual responsibilities in marine conservation. This initiative allows students, faculty, and the community to engage directly with SDG topics through expert-led discussions and interdisciplinary perspectives on pressing global challenges. Additionally, students can participate in a hands-on marine science experience through the Bamfield Fall Program, a 15-credit intensive program that includes courses in animal structure and function, seaweed ecology, marine population dynamics, and independent research projects.	
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2. University of Alberta	Canada	96.1	97.4, 6th	SDG 2 – 4th SDG 3 – 48th SDG 5 – 69th SDG 6 – 39th SDG 9 – 9th SDG 11 – 67th SDG 12 – 45th SDG 13 – 82nd SDG 14 – 2nd SDG 15 – 7th SDG 16 – 81st SDG 17 – 27th	Our Society and the Sea	Global Goals Talks series, organized by University of Alberta International, which includes discussions on the significance of protecting marine ecosystems. For instance, one talk, "Our Society and the Sea," highlighted actions and challenges for sustaining marine environments and explored community and individual responsibilities in marine conservation. This initiative allows students, faculty, and the community to engage directly with SDG topics through expert-led discussions and interdisciplinary perspectives on pressing global challenges. Additionally, students can participate in a hands-on marine science experience through the Bamfield Fall Program, a 15-credit intensive program that includes courses in animal structure and function, seaweed ecology, marine population dynamics, and independent research projects.	Action Based Problem based learning
3. Aalborg University	Denmark	95.2	98.0, 4th	SDG 1 – 44th SDG 2 – 61st SDG 4 – 1st SDG 6 – 42nd	Danish Research	The Danish research center develops solutions to the problem of plastic pollution in the ocean. Based at AAU and funded by the Velux Foundation, the center joins Danish universities	Action Based Problem based

				SDG 7 – 42nd SDG 8 – 69th SDG 9 – 91st SDG 10 – 4th SDG 11 – 15th SDG 12 – 50th SDG 13 – 8th SDG 15 – 50th SDG 16 – 98th SDG 17 – 16th	Center	and disciplines to tackle one of the biggest environmental problems together	learning
4. Florida International University	United States	95.2	95.2, 13th	SDG 1 – 62nd SDG 6 – 59th SDG 7 – 75th SDG 10 – 87th SDG 11 – 8th SDG 15 – 32nd SDG 16 – 40th SDG 17 – 22nd	Environmental health and safety programs	FIU enforces a zero-tolerance policy against any illicit discharge, with students and staff actively working to prevent pollution in all settings—whether on campus, in local communities, or in marine environments. Situated along Biscayne Bay and near the Oleta River, FIU's Biscayne Bay Campus is part of the Biscayne Bay Aquatic Preserve, a protected area managed by the Florida Department of Environmental Protection and Miami-Dade County.	Action Based Problem based learning

						In the spirit of reducing marine pollution, FIU's Panther Dining upholds strong sustainability practices, including a policy to reduce single-use plastics and use to-go containers made from recycled PET or fully recyclable materials. The Plastics Reduction Taskforce collaborated with campus food vendors to eliminate plastic straws, cup lids, and bags from dining counters, offering them only upon request. This "Plastics If You Ask" initiative marks the first step towards creating a plastic-free campus.	
5. Griffith University	Australia	93.4	94.2, 52nd	SDG 3 – 20th SDG 5 – 13th SDG 6 – 8th SDG 8 – 25th SDG 10 – 99th SDG 11 – 54th SDG 15 – 69th SDG 16 – 26th	Coastal and Marine Research Centre	The university hosts the Coastal and Marine Research Centre (CMRC), where students can engage in research on marine biology, ecology, and coastal processes. This center has numerous collaborations with industry partners, including the Great Barrier Reef Foundation and Eco Logical Australia, allowing students to participate in real-world conservation efforts. Additionally, Griffith runs the CoastEd program, which provides educational resources for schools and community members. This initiative includes field trips and	Action Based Experiential learning

						classroom experiences that engage students of various age groups in coastal management	
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(****) Aalborg University and Florida International University share the 2nd position of the SDG 14 ranking. The University of Tasmania shares the 5th position of the SDG 14 ranking with Griffith University. For the purpose of this table, Griffith University has been selected in order to identify initiatives for a greater number of institutions, as University of Tasmania is among the top 5 positions in other SDGs.

SDG 15 - Life on Land

University *****	Country	Score SDG 15	General Score and Position	Other Successful SDGs	Initiative	Description	Methodology
1. University of Manchester	United Kingdom	96.9	98.5, 2nd	SDG 1 – 30th SDG 2 – 43rd SDG 3 – 76th SDG 6 – 15th SDG 7 – 56th SDG 11 – 1st SDG 12 – 7th SDG 13 – 47th SDG 14 – 7th SDG 16 – 57th SDG 17 – 30th	Tree Musketeers	The “Tree Musketeers” is a conservation volunteering group founded by Dr. Anna Gilchrist, a Lecturer in Environmental Management and Ecology. The group collaborates with local environmental organizations to engage in various conservation activities, including tree planting, habitat management, and species protection.	Multi Actor Involvement Community based learning
2.	Australia	96.8	98.5,	SDG 1 – 52nd	Landcare	The UTAS Landcare Society is not only healing	Action based

University of Tasmania			2nd	SDG 2r – 63rd SDG 3 – 9th SDG 5 – 24th SDG 6 – 12th SDG 7 – 87th SDG 11 – 18th SDG 12 – 60 th SDG 13 – 1st SDG 14 – 5th SDG 17 – 14th	Society – caring for the environment and community	the land, it is also improving the lives of the students involved in its activities. The Society primarily focuses on community environmental restoration projects, ranging from removing weeds from urban parks to restoring pine plantations back to native forests and restoring degraded wetlands.	Research led teaching
3. Arizona State University	United States	96.6	96.4, 9th	SDG 1 – 18th SDG 2 – 46th SDG 5 – 50th SDG 6 – 15th SDG 7 – 74 th SDG 10 – 23rd SDG 11 – 2nd SDG 12 – 33rd SDG 13 – 11th SDG 14 – 1st SDG 16 – 12th SDG 17 – 64th	Center for Biodiversity Outcomes	The centre provides insights that transform the way the world values, manages and thinks about biodiversity. By bringing together producers of knowledge with consumers of knowledge, we enable research leading to use-inspired solutions.	Interdisciplinary Interprofessional education (IPE)

4. Western Sydney University	Australia	96.6	99.7, 1st	SDG 3 – 26th SDG 5 – 1st SDG 6 – 9th SDG 8 – 64th SDG 10 – 8th SDG 11 – 23rd SDG 12 – 4th SDG 13 – 4th SDG 14 – 21st SDG 16 – 68th SDG 17 – 4th	Hawkesbury Institute for the Environment	The Hawkesbury Institute for the Environment (HIE) at Western Sydney University is a leading research center dedicated to understanding the impacts of environmental changes on terrestrial ecosystems.	Action based Research led teaching
5. Lancaster University	United Kingdom	95.4	84.0-89.1, 101-200th	SDG 1 – 43rd SDG 2 – 49th SDG 10 – 46th SDG 11 – 49th SDG 12 – 50th SDG 13 – 56th SDG 16 – 45th	Helping conserve endangered butterflies	A ground-breaking scheme which brings together student researchers, land-managers and conservation organizations to improve the viability of some of the UK's most endangered butterflies.	Action based Experiential learning

(*****) The University of Manchester and the University of Tasmania share the 2nd position of the overall THE Impact Ranking 2024.

SDG 16 - Peace, Justice and Strong Institutions

University *****	Country	Score SDG 16	General Score and Position	Other Successful SDGs	Initiative	Description	Methodology
1. Universiti Sains Malaysia	Malaysia	90.9	95.0, 18th	SDG 1 – 29th SDG 2 – 37th SDG 3 – 91st SDG 6 – 39th SDG 7 – 56th SDG 11 – 56th SDG 13 – 85th SDG 14 – 58th SDG 17 – 9th	Centre for Global Sustainability Studies (CGSS)	As an effort to create a world-class institution in championing sustainability through excellent education, research, and engagement, USM has established a center which would be able to assist USM to achieve mainstream sustainability across all levels within the USM community. The Centre for Global Sustainability Studies (CGSS) has been established to act as a conduit to help USM in the mainstreaming of sustainability within the university.	Action based Research-led Teaching
2. Western University	Canada	90.6	94.8, 21st	SDG 1 – 7th SDG 2 – 80th SDG 5 – 84th	Transition al Justice	Western is a leader in transitional justice research and hosts the only program in North America at both the undergraduate and graduate levels that	Action based Research-led

				SDG 6 – 70th SDG 8 – 24th SDG 9 – 43rd SDG 11 – 31st SDG 12 – 52nd SDG 15 – 80th SDG 17 – 71st	Research Center	focuses on transitional justice. The Undergraduate Minor in Transitional Justice and Post-Conflict Reconstruction familiarizes students with the emerging debates surrounding transitional justice and post-conflict reconstruction. The Collaborative Graduate Specialization is offered at both the master's doctoral levels.	Teaching
3. Queen's University	Canada	89.9	97.1, 8th	SDG 1 – 38th SDG 2 – 1st SDG 6 – 34th SDG 11 – 7th SDG 12 – 76th SDG 13 – 45th SDG 14 – 17th SDG 15 – 30th SDG 17 – 96th	Queen's Model Parliament	Queen's Model Parliament (QMP) is the oldest and largest model parliament in Canada. A student-led event that attracts upwards of 100 Queen's students from across all faculties, QMP is held in Canada's House of Commons where students experience the legislative process by forming political parties, running for government, drafting bills, and debating these bills on the floor.	Action based Simulation teaching
4. University of Neuchâtel	Switzerland	89.9	79.3-83.9, 201-300th	-	U Change – Student Initiatives for Sustainable	The “U Change – Student Initiatives for Sustainable Development” incentive programme supports the implementation of project ideas oriented towards sustainable development.	Action based Problem based

					Development (Program)		learning
5. Catholic University of Portugal	Portugal	89.8	79.3-83.9, 201-300th	-	Transform4 Europe (T4EU) Week	Transform4Europe Week takes place twice a year, in spring and autumn, always in a different city. Students, staff, faculty and researchers from all of the Alliance's partner universities can participate.	Action based Experiential learning

(*****) Queen's University and University of Neuchâtel share the 3rd position of the SDG 16 ranking.

SDG 17 - Partnerships for the Goals

University *****	Country	Score SDG 17	General Score and Position	Other Successful SDGs	Initiative	Description	Methodology
1. University of Technology Sydney	Australia	99.6	95.2, 13th	SDG 6 – 5th SDG 7 – 52nd SDG 8 – 19th SDG 10 – 48th SDG 11 – 37th SDG 12 – 12th SDG 13 – 15th	Institute for Sustainable Futures	The Institute conducts project-based applied research across a broad range of sectors to effect positive change	Action based Research led teaching
2. Institut Agro	France	99.3	94.8, 21st	SDG 2 – 11th SDG 14 – 11th SDG 15 – 17th	International cooperation in data collection and policy	The Agro Institute is developing collaborations with public authorities, businesses and NGOs in France and internationally for the production of scientific data, but also the definition of the best approaches for developing sustainable	Action based Industry Partnerships, Internships,

					development	agricultural and food systems.	Collaborations, Fieldwork and Labs
3. James Cook University	Australia	99.3	84.0-89.1, 101-200th	SDG 1 – 89th SDG 2 – 98th SDG 3 – 10th SDG 5 – 19th SDG 6 – 90th SDG 10 – 78th SDG 12 – 90th SDG 14 – 84th SDG 15 – 22nd SDG 16 – 98th	TropEco program	TropEco is JCU's sustainability program for staff and students, celebrating Sustainability in Action by fostering a culture of sustainability.	Action based Experiential learning
4. Western Sydney University	Australia	98.5	99.7, 1st	SDG 3 – 26th SDG 5 – 1st SDG 6 – 9th SDG 7 – 75th SDG 8 – 64th	GISU ALLIANCE: BUSINESS IN A CHANGING	The University is a founding member of the Alliance of Guangzhou International Sister-Cities Universities (GISU). GISU's ongoing annual Urban Innovation and Entrepreneurship competition has a specific focus on innovation,	Action based Experiential learning

				SDG 10s – 8th SDG 11 – 23rd SDG 12 – 4th SDG 13 – 4th SDG 14 – 21st SDG 15 – 3rd SDG 16 – 68th	WORLD	multidisciplinary and impact aligned to the Sustainable Development 2030 agenda. The competition is a platform for international peer to peer students and institutional learning.	
5. Mahidol University	Thailand	98.3	94.9, 19th	SDG 2 – 73rd SDG 3 – 3rd SDG 4 – 35th SDG 5 – 50th SDG 6 – 94th SDG 7 – 29th SDG 12 – 95th SDG 14 – 27th SDG 15 – 63rd	SDGs + Mobility MaPs 2023-2024	SDGs + Mobility MaPs serve as a transformative experience for students, raising their awareness about the challenges hindering the achievement of the Sustainable Development Goals (SDGs) within their communities. Recognizing that even the smallest unit can create a significant impact on society, this project aims to empower students to overcome these challenges effectively. Through a combination of project-based learning and design thinking, students will embark on a collaborative journey to address these obstacles and devise solutions that benefit their communities.	Action based Experiential learning

(*****) Institut Agro and James Cook University share the 2nd position of the SDG 17 ranking.

4. Conclusions

In order to identify the educational methodologies most commonly used in universities to introduce sustainability, this deliverable includes a detailed analysis of the initiatives implemented by the universities that occupy the top positions in the THE impact ranking for each of the SDGs. The classification of the methodologies is based on the three dimensions (Interdisciplinarity, Action-based learning, Multi-actor involvement) suggested by SDSN as the most prominent and appropriate formulae to address sustainable development in Higher Education Institutions.

The following table shows a summary of the methodologies drawn from the three dimensions, that is, interdisciplinarity, action-based learning and multi-actor involvement, identified by SDSN.

TABLE 4: Frequency of Methodologies by the universities that occupy the top positions in the THE impact ranking for all SDGs.

DIMENSIONS	EDUCATIONAL METHODOLOGY	FREQUENCY	PER DIMENSION
Interdisciplinarity	Interprofessional Education (IPE)	5	10
	Gender-inclusive curriculum	5	
Action-based learning	Simulation Teaching	2	67
	Problem-Based Learning (PBL)	21	
	Experiential Learning	23	
	Research-Led Teaching	9	
	Hands-On Learning in Renewable Energy	4	
	Industry Partnerships and Internships	8	
Multi-actor involvement	Community-Based Learning	7	8
	Community-Engaged Learning for Inclusivity	1	
		85	

“Action-Based Learning” appeared to be the most commonly utilized educational methodology of the three dimensions established by SDSN (2020). Thus, it seems that universities are betting on tools that involve students more actively to instill into them the values and the need to work for sustainability. Active learning engages students in the learning process through activities and discussions, encouraging them to take a central role in their education. Rather than passively receiving information, students actively analyse, synthesize, and apply concepts through learning techniques such as research-led work, project-based methods, labs, simulations, hands-on experiments industry partnerships and internships. This approach fosters critical thinking, enhances retention of knowledge, and develops skills such as collaboration and communication. Active learning may also create a more inclusive and dynamic classroom environment, catering to diverse learning styles and encouraging participation.

"Experiential Learning" was the most frequently used educational methodology by the identified universities across the SDGs. This educational methodology bridges academic knowledge with real world action, empowering students to address the SDGs through reflective and applied activities. This educational methodology fosters deeper understanding of sustainability issues while equipping students with skills and experience to contribute to global challenges. All in all, these methodologies not only align academic efforts with global sustainability priorities but also prepare graduates to become proactive contributors to achieving the SDGs in their future careers.

The “Problem-based Learning” approach also seems widely used by universities to deal with sustainability. By engaging students in collaborative work, this methodology fosters the design and implementation of projects that tackle pressing issues such as renewable energy, waste management, biodiversity preservation, sustainable consumption and sustainable urban development, among others.

References:

- Afacan, Y. (2023). Impacts of urban living lab (ULL) on learning to design inclusive, sustainable, and climate-resilient urban environments. *Land Use Policy*, 124, 106443.
- Aleixo, A.M., Leal, S. & Azeiteiro, U.M. (2018). Conceptualization of sustainable higher education institutions, roles, barriers, and challenges for sustainability: An exploratory study in Portugal, *Journal of Cleaner Production*, 172, 1664-1673.
- Barrows, H. S., & Tamblyn, R. M. (1980). *Problem-based learning: An approach to medical education* (Vol. 1). Springer Publishing Company.
- Barth, M., & Michelsen, G. (2013). Learning for change: an educational contribution to sustainability science. *Sustainability science*, 8, 103-119.
- Blumenfeld, P. C., Soloway, E., Marx, R. W., Krajcik, J. S., Guzdial, M., & Palincsar, A. (1991). Motivating project-based learning: Sustaining the doing, supporting the learning. *Educational psychologist*, 26(3-4), 369-398.
- Brataas, G., & Jensen, I. S. (2023). From coursework to fieldwork: How do teacher candidates enact and adapt core practices for instructional scaffolding?. *Teaching and Teacher Education*, 132, 104206.
- Bingle, R. G., & Hatcher, J. A. (1996). Implementing service learning in higher education. *The Journal of Higher Education*, 67(2), 221–239.
- Chankseliani, M., & McCowan, T. (2021). Higher education and the sustainable development goals. *Higher Education*, 81(1), 1-8. DOI: <https://doi.org/10.1007/s10734-020-00652-w>
- Clark, H. C. and MacDonald, M. (1991) The Halifax Declaration for a Sustainable Biosphere. *Environmental Conservation*, 19(2), Summer 1992, pp. 177. DOI: <https://doi.org/10.1017/S0376892900030708>
- Ewers, R.M., Jacob Cook, Olivia Z. Daniel, C.David L. Orme, Vivienne Groner, Jaideep Joshi, Anna Rallings, Taran Rallings, Priyanga Amarasekare (2024), “New insights to be gained from a Virtual Ecosystem”, *Ecological Modelling*, Volume 498, 110866
- Filho, W. L., Sierra, J., Price, E., Eustachio, J. H. P. P., Novikau, A., Kirrane, M., ... & Salvia, A. L. (2024). The role of universities in accelerating the sustainable development goals in

Europe. *Scientific reports*, 14(1), 15464.

Grano, C., Correia, V. (2020). Sustainable Development Goals in Higher Education. *Research Gate*. DOI: 10.14488/IJCIEOM2020_FULL_0010_37277

Goggins, J., & Hajdukiewicz, M. (2022). The role of community-engaged learning in engineering education for sustainable development. *Sustainability*, 14(13), 8208.

Healey, M., & Jenkins, A. (2009). Developing undergraduate research and inquiry. *The Higher Education Academy*.

Hmelo-Silver, C. E. (2004). Problem-based learning: What and how do students learn?. *Educational psychology review*, 16, 235-266.

Horn, A., Scheffelaar, A., Urias, E., & Zweekhorst, M. B. (2023). Training students for complex sustainability issues: a literature review on the design of inter-and transdisciplinary higher education. *International Journal of Sustainability in Higher Education*, 24(1), 1-27.

Kolb, D. A. (2014). *Experiential learning: Experience as the source of learning and development*. FT press.

López-López, I., Bote, M., Marín, L., Rubio, A. (2019). Higher Education Institutions as a Transformation Platform under the Sustainable Development Goals Framework. *European Journal of Sustainable Development*, 8(3), 306.

Lozano, R., Merrill, M. Y., Sammalisto, K., Ceulemans, K., & Lozano, F. J. (2017). Connecting competences and pedagogical approaches for sustainable development in higher education: A literature review and framework proposal. *Sustainability*, 9(10), 1889.

Miroiu, M. (2011). Guidelines for promoting gender-inclusive curriculum in higher education. *From Gender Studies to Gender IN Studies*, 229-246.

Pareek, V., Sanap, S.N., Nangare V.V., Meghrajani M., Bhowte Y., Kale K., Ansari A., 2024. Sustainable Development Goals and Higher Education: A Review of University Initiatives. *International Electronic Journal of Environmental Education*, 14(1)

Sima, M., Grigorescu, I., & Bălteanu, D. (2019). An overview of campus greening initiatives at universities in Romania. *International Journal of Sustainability in Higher Education*, 20(3), 410-422.

SDSN (2020). Accelerating education for the SDGs in universities: a guide for universities, colleges, and tertiary and higher education institutions. <https://www.unsdsn.org/resources/accelerating-education-for-the-sdgs-in-universities-a-guide-for-universities-colleges-and-tertiary-and-higher-education-institutions/>

Stears, M. (2010). Fieldwork in Ecology as a form of experiential learning: first year university students' experiences of a short experiential learning intervention. *South African Journal of Environmental Education*, 27, 114-125.

Weerts, D. J., & Sandmann, L. R. (2010). Community engagement and boundary-spanning roles at research universities. *The Journal of Higher Education*, 81(6), 632–657.

Annex

Examples of Educational methodologies

Dimension 1: Interdisciplinarity Dimension

Interprofessional Education (IPE)

- **Description:** Integrates various health disciplines, encouraging collaborative problem-solving and holistic care for community health.
- **Example SDG:** SDG 3 (Good Health and Well-being), as students from medicine, nursing, and social work learn together to address health challenges.

Gender-inclusive curriculum

- **Description:** Integrates gender equity and social inclusion into all subjects to raise awareness and create inclusive environments.
- **Example SDG:** SDG 5 (Gender Equality), fostering discussions and projects around gender issues and equity.

Sustainability-Focused Coursework

- **Description:** Incorporates sustainability principles into all subjects, encouraging students to think critically about resource consumption.
- **Example SDG:** SDG 12 (Responsible Consumption and Production), with courses covering responsible production practices and sustainable business models

Peace and Social Justice Education

- **Description:** Combines policy analysis and social justice topics, fostering skills in governance and human rights advocacy.
- **Example SDG:** SDG 16 (Peace, Justice, and Strong Institutions), engaging students in community justice and governance projects

Dimension 2: Action-based learning

Simulation Teaching / Fieldwork and Climate Simulations

- **Description:** Includes on-site ecological studies and simulated climate change scenarios to teach environmental impacts and adaptation.
- **Example SDG:** SDG 13 (Climate Action), with students conducting research in natural environments affected by climate change

Marine Biology and Virtual Ecosystem Simulations

- **Description:** Uses immersive learning and virtual environments to teach about marine conservation and biodiversity.
- **Example SDG:** SDG 14 (Life Below Water), where students study ocean ecosystems through virtual simulations and hands-on marine projects

Problem-Based Learning (PBL)

- **Description:** Encourages students to solve open-ended, real-world problems, enhancing critical thinking and collaborative skills.
- **Example SDG:** SDG 4 (Quality Education), widely adopted by Aalborg University for promoting critical thinking and solution-oriented skills

Experiential Learning

- **Description:** This approach immerses students in hands-on activities, such as internships, labs, and fieldwork, to gain practical experience.
- **Example SDG:** SDG 2 (Zero Hunger), where students participate in sustainable agriculture and food security projects.

Research-Led Teaching

- **Description:** Students engage in active research projects, often related to sustainability issues, allowing them to learn through data collection, analysis, and fieldwork.
- **Example SDG:** SDG 6 (Clean Water and Sanitation), where students work on water quality and sanitation projects

Hands-On Learning / Hands-On Learning in Renewable Energy

- **Description:** Emphasizes practical work in renewable energy labs and technology projects, like solar and wind energy systems.
- **Example SDG:** SDG 7 (Affordable and Clean Energy), involving students in projects focused on sustainable energy solutions

Industry Partnerships and Internships

- **Description:** Connects students with local industries, providing real-world experience and fostering entrepreneurship.
- **Example SDG:** SDG 8 (Decent Work and Economic Growth), where students gain insights into workforce development

Project-Based Innovation Labs

- **Description:** Involves students in collaborative projects that address engineering and infrastructure challenges through innovative solutions.
- **Example SDG:** SDG 9 (Industry, Innovation, and Infrastructure), widely used in technology and engineering fields

Urban Sustainability Labs

- **Description:** Provides students with opportunities to collaborate on sustainable urban planning, housing, and green spaces.
- **Example SDG:** SDG 11 (Sustainable Cities and Communities), where students contribute to developing more sustainable urban environments

Conservation Fieldwork and Ecology Labs

- **Description:** Involves students in biodiversity and land conservation projects, encouraging direct interaction with local ecosystems.
- **Example SDG:** SDG 15 (Life on Land), with a focus on protecting ecosystems and studying land-based biodiversity

Dimension 3: Multi-actor involvement

Community-Based Learning

- **Description:** Engages students directly with local communities, often through service projects, allowing them to apply their knowledge to real-life challenges.
- **Example SDG:** SDG 1 (No Poverty), where students work in underserved areas to help address poverty, healthcare, and educational needs.

Community-Engaged Learning for Inclusivity

- **Description:** Encourages direct involvement with diverse communities to foster inclusivity, empathy, and social responsibility.
- **Example SDG:** SDG 10 (Reduced Inequalities), where students work on projects supporting marginalized groups

Collaborative, Multi-Stakeholder Learning Projects

- **Description:** Involves partnerships between universities, government, and NGOs, allowing students to work on collaborative global sustainability projects.
- **Example SDG:** SDG 17 (Partnerships for the Goals), promoting cross-sectoral partnerships and networking