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HIGHER EDUCATION INSTITUTIONS (HEIs) AND SDG 16: INTER- AND TRANSDISCIPLINARY COOPERATION TOWARDS IMPACT

Introduction

In 2015 all Member States of the United Nations (UN) adopted the Sustainable Development Goals (SDGs) – a voluntary set of objectives – also known as "Global Goals" or "2030 Agenda". Therefore, it is not surprising that many Higher Education Institutions (HEIs) worldwide choose to do so as well. HEIs comprise traditional universities, colleges, and other education institutions delivering high education, including applied sciences or polytechnique universities. They are all knowledge institutions that serve society through independent research, education, and societal service provision, making HEIs valuable partners in the collaborations aiming to promote the SDGs.

The Global Goals offer HEIs the opportunity to restructure their strategy and integrate sustainable development in their systems in a holistic way to respond to the current societal challenges.[1, 2] HEIs are in a unique position in society as they are considered neutral and influential players,[3,4]

> **HEIs are in a privileged position to reinforce the most effective skills in promoting justice and consensus, such as conflict resolution tools**

which allows them to foster dialogue. Their position stimulates and encourages interdisciplinary collaborations by bringing together expertise from various fields such as social sciences and humanities (SSH); science, technology, engineering and mathematics (STEM); medical sciences, and other related domains.[5] Likewise, partnerships with non-academic partners from industry, policymakers, and civil society actors (transdisciplinary collaborations) are gaining more relevance to approach the "wicked problems" of current times.[6] As critical and independent partners, HEIs can stimulate and catalyze change through inter- and transdisciplinary collaborations with other societal partners.

Goal 16 of the Sustainable Development Goals is dedicated to "promoting peaceful and inclusive societies for sustainable development, the provision of access to justice for all, and building effective, accountable institutions at all levels." On a holistic level, Goal 16 reflects the close interconnection uniting inequality, peace, and environmental questions to global development principles.

While education directly relates to SDG 4, it is transversal to all 17 goals. The relation between SDGs 4 and 16 is, as highlighted by 'UNESCO's 2019 Global Education Monitoring Report',[7] one of interdependence – education is not possible without the safety of peaceful and just societies, while education is vital in promoting these values.
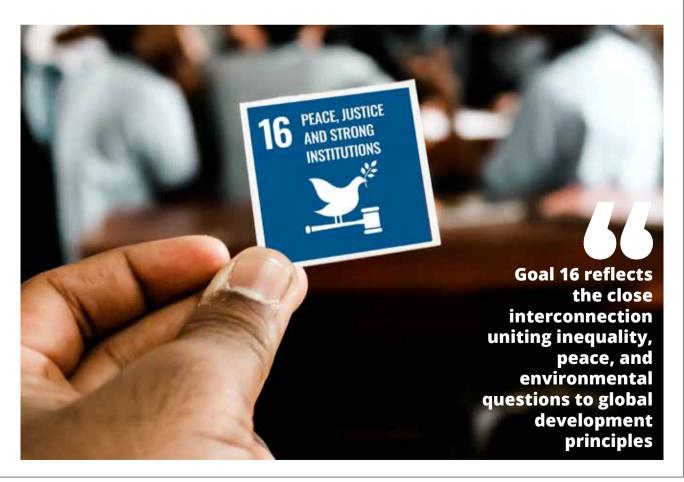
The role of HEIs in the achievement of SDG 16

Following Sustainable Development Solutions Network's typology, there are four main fields in which HEIs can promote all SDGs: education, research, governance and operations, and external leadership.[9] Contributions to SDG 16 in these four fields can be found in the literature. We will clarify the role of HEIs in promoting peace, justice, and inclusivity by mapping these possibilities.

Regarding **education**, while it is a sustainability goal on its own, it enjoys a strong connection with SDG 16. Education for sustainable development that is inclusive and mobilizes youth for societal action is crucial for creating a sustainable future.[10] HEIs can increase knowledge on topics such as legal rights and environmental law. They can develop students' competencies to think through complexity and enhance their learning through dialogue and communication. They can inspire them to engage in deep reflection, develop a worldview, and value sensitivity.[11] HEIs are in a privileged position to reinforce the most effective skills in promoting justice and consensus, such as conflict resolution tools. They can foster values of gender awareness-raising, of non-discrimination, and advocate for participatory democracy.[12] In terms of integrating these subjects into the curriculum, there are two ways. A horizontal integration implies integrating sustainable development into the different courses and topics. The vertical integration involves creating specific courses focusing on the SDGs. The first option is seen as more effective as it tackles the complexity of sustainability questions.[13] HEIs' role in education can also go beyond the students enrolled. These institutions can provide tailored training on the SDGs to local stakeholders, such as NGOs, the private sector, and governmental institutions, and become partners in trans, it is transdisciplinary co-creation trajectories.[14]

Through **research**, HEI can contribute to evidence-based policymaking, for instance, by evaluating SDG indicators in an independent manner, such as an Egyptian case study indicates.[15] This contribution ensures that official and governmental data on SDGs implementation is scrutinized, meaning that HEIs and civil society actors can ensure that the evaluation of SDGs implementation is transparent and objective. The case study shows that this is particularly important for SDG 16, as state institutions express finding the reporting process on the matter extremely challenging. According to the "Asso-ciation for the Advancement of Sustainability in Higher Education's 2019 Technical Manual," it is important to ensure that research is open and accessible. This will strengthen the transparency and accountability of institutions and allow non-academics to access quality peer-reviewed research as reliable sources. Furthermore, research carried out in HEIs can contribute to the achievement of SDG 16 through applied or problem-solving research, through critical scholarship, and through the research process itself.[17]

In terms of **governance**, according to a study from Qatar's Center for Conflict and Humanitarian studies,[18,] HEIs can contribute towards achieving SDG 16 in conflict-affected contexts. HEIs can exert agency in political conflict resolution by, for example, ensuring academic freedom in the face of conflict so that political action can be assessed. They can also serve as mediators between local demands and the global logic of the SDGs as a peacebuilding model. An excellent example of how to put it into practice is in Sierra Leone's Makeni University. Its civic education program aims

> **Goal 16 reflects the close interconnection uniting inequality, peace, and environmental questions to global development principles**

at consolidating the democratic system through voter education and the monitoring of elections, for example,[19] actively strengthening institutions' transparency and reliability. Additionally, HEIs' can support Goal 16 in conflict-affected regions by addressing the social, political and economic inequalities, and engaging constructively in identity politics.[20] They could also contribute by improving educational opportunities and attainment levels, which, as a result, could decrease the level of conflict.[21]

In another sense, HEIs can and should lead by example in relation to sustainable forms of governance – incorporating the spirit of SDG 16 in their regulations in issues of employment, finance, support services, and others is a way to promote sustainable forms of institutional governance.[22] Involving staff, students, and key stakeholders in HEIs' decisions or ensuring multicultural acceptance on campus, are practical ways for HEIs to pave the way.[23] Education should strive to be free from discrimination, violence and harassment, fostering skills through which the students can also fight inequality in their communities, according to The Commonwealth's 2017 Curriculum Framework for the Sustainable Development Goals.[24] This approach includes providing a gender-sensitive, rights-based, community-oriented,

and inclusive education, mainly aimed towards vulnerable and marginalized groups while committing to end all forms of inequality.

> ## Education should strive to be free from discrimination, violence and harassment

When it comes to **external leadership**, many have pointed out that HEIs provide education to the future 'sustainable development leaders'.[25] Young leaders with a sustainable mindset entering government institutions and the private sector, capable of stimulating the existing links between local and global societies.[26] With this in mind, it is crucial that HEIs strengthen public engagement and participation when addressing the SDGs, as exposing these future leaders to the UN's Agenda 2030 will hopefully influence their future institutional behavior. This can be achieved, for example, by providing educational opportunities such as lectures and workshops in which leading experts discuss topics of sustainability, but also by being vocal about HEIs'

interventions in policymaking and advocating for sustainable development.[27] The SDGs provide the opportunity to enhance this leadership role given that most HEIs already have the research and education expertise needed to build capacity and support policymaking,

HEIs and the community

The previous four categories focused mostly on how HEIs can singularly impact the promotion of SDG 16. Still, other sources point out the need to understand HEIs' role as one stakeholder amongst many. Establishing meaningful partnerships to achieve the SDGs can help to build "empirical and analytical consensus on problems and solutions, encourage cross-sectoral and interdisciplinary collaboration for innovation and provide cost-effective data and science-based evidence for policymakers and governments to address multiple goals and interlinkages across all SDGs."[28] In their 2019 study, Franco and Tracey highlight how HEIs, stakeholders, and communities can join forces in solving common problems through various bottom-up approaches under the umbrella term "community capacity-building initiatives."[29] Providing concrete examples, the authors suggest that practical skills enhancement (such as decision-making, ne-

gotiation, and communication skills, in both individual and collective senses), conceptual skills development (on topics such as peace, reconciliation, trust, and emotional intelligence), and community development (leadership, inclusion of indigenous knowledge and the search for local solutions) are areas in which HEIs can cooperate with other agents in the community.[30] The authors stress the importance of these initiatives being community-led as a whole, according to local needs, and respecting local knowledge. Thereby, they encourage initiatives to be taken beyond the HEIs.

Some authors have stressed how social sustainability issues are sometimes overlooked in sustainability initiatives compared to environmental sustainability issues. They highlight the need to understand the interconnectedness of

these topics. Participants of a 2018 qualitative study on how Higher Education for sustainable development can be integrated into policy, curriculum and practice, all agreed that focusing on 'diverse and vulnerable community groups such as indigenous communities and refugees'[31] could be a solution

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to this, while also committing to the achievement of SDG 16.

An example of how HEIs can engage the community, particularly its most vulnerable members, can be found in De Montfort University's Global Hub for SDG 16.[32] Being the UN-certified hub for SDG 16 in HEI, this UK University develops a series of projects and multidisciplinary research on current peace and justice issues. One of these projects was the Local Refugee Support Programme, offering mentoring to young refugees to pursue further educations, skill development sessions in partnership with local charities (such as IT and language classes), and other activities that engaged community stakeholders.[33]

De Montfort University's Global Hub for SDG 16 also created specialized research groups, such as the Crimi-

nal Justice Research Group, that has recently developed projects on zero tolerance to slavery and human trafficking. In addition, they have created courses and programs, such as the International Human Rights LLM, focusing primarily on SDG 16 and promoting active learning through partnerships with civil society organizations, encouraging students to take action in refugee aid, for example. They are engaged with all four categories that the Sustainable Development Solutions Network (SDSN) identified as relevant for promoting the SDGs and engaging local stakeholders frequently, providing many examples of good practices.

Goal 16 evaluation

Another role HEIs can fulfill in the UN's Agenda for Sustainable Development is to thoroughly evaluate the SDGs implementation level in their activities. By doing so, HEIs can create resources that determine what areas need more attention and identify opportunities for future undertakings. At the same time, it can promote existing activities, stimulating students' informed involvement in these.[34]

The magazine "Times Higher Education" (THE) publishes an annual impact ranking on each SDG that exemplifies this evaluation methodology. It bases on four main criteria in the case of SDG 16: quantity and quality of research on peace and justice topics; university governance measures, such as student union's role, academic freedom protections, and engagement of local stakeholders; working with governments as experts or through policy-focused re-search; and the proportion of graduates in law and civil enforcement, as educating these practitioners will impact the future of institutions.[35]

Toronto University's Expanded Student Engagement Project[36] developed their evaluation and promotion project by creating three inventories that students could consult on sustainability-related opportunities beyond formal education. One of the inventories focused on community-engaged learning opportunities, another on co-curricular and extracurricular activities, and the third on sustainability presence in the university's courses. On this last matter, the university ascertained that 20% of the courses in the inventory included education on SDG 16, making it the second most present SDG after SDG 13 (Climate Action).[37]

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They concluded that over 1200 courses provided education on one or several SDGs and that SDG 16 was one of the most covered

Edinburgh University's Department of Social Responsibility and Sustainability established a curriculum review project to analyze the inclusion of the SDGs in their curriculum. The project consisted of an electronic appraisal of the Business School courses on Degree Regulations and Programmes of Study (DRPS) and a faculty survey that included staff and students. The project found that, respectively, only 7 and 10 percent of the search term hits related to SDG 16 in the undergraduate and postgraduate curriculum. In addition, staff experienced a lack of guidance on successfully integrating the sustainable development goals in their curriculum.[38]

Chang and Lien's study of NUK (the National University of Kaohsiung, in Taiwan)[39] similarly mapped the extent of SDG's embeddedness in the university's curriculum. They concluded that over 1200 courses provided education on one or several SDGs and that SDG 16 was one of the most covered.[40] When assessed in terms of different faculties, the law faculty revealed the most prevalence of SDG 16 inclusion in the curriculum. As the authors highlight, although there is an ordinary association between an SDG's thematic aim and the course's subject, it is evident that interdisciplinary approaches to SDGs are still lacking.

This one-sided thematic focus is stressed in other sources, in particular when it comes to the need for developing interdisciplinary connections, such as those between STEM and the social sciences and humanities (SSH), fostering a holistic understanding of

SDG 16 is thus seen as foundational to the conditions that can enable other Goals and a sustainable future to be attained

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sustainability. Engineering faculties, in particular, are found to often disregard the social aspects of sustainability, with a 2018 study finding SDG 16 to be of second-lowest importance for teachers and the least integrated into research.[41] The authors stress the importance of connectors between different research centers, transcending the boundaries of disciplines and the universities themselves, and engaging non-scientific stakeholders in research processes.[42]

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Need for joint efforts of HEIs, businesses, governments, and non-governmental organizations to launch community capacity-building initiatives towards achieving the SDGs Agenda

The evaluation of SDG 16 by students has, in the past, shown its centrality for HEI and the achievement of other SDGs. Mugisha's 2017 study, for example, focused on students' perceptions of what SDGs were most important for the future of their coun-

try, South Sudan.[43] They considered SDG 16 the most important since, as one student puts it, 'peace is a priority because it would allow other goals to be achieved'.[44] SDG 16 is thus seen as foundational to the conditions that can enable other Goals and a sustainable future to be attained.

Discussion and conclusions

HEIs have the capacity to generate, translate and disseminate knowledge relevant to achieving the SDGs and contribute to a just, peaceful, and inclusive society. By implementing active policies for developing SDGs through their education, research, governance, and external leadership activities, promoting awareness among other actors, and acquiring the skills and mindsets needed, HEIs play a key role in the 2030 Agenda.[45]

The rationale of Goal 16 is closely linked with criminology and criminal justice, as a fair and effective criminal justice system, the prevention of violence, and respect for human rights, are all essential elements for a peaceful and inclusive society.[46] However, interdisciplinary synergies are needed on the one hand, such as those between STEM and the social sciences and humanities (SSH). And on the other hand, transdisciplinary cooperation and partnerships with non-academic partners such as policy makers, civil society

actors and industry. Inter- and transdisciplinary approaches to the SDGs are fundamental in promoting the capacity to understand and act on 'wicked' problems and are essential to align education outcomes with the SDGs.

Furthermore, this contribution also highlights the need for joint efforts of HEIs, businesses, governments, and non-governmental organizations to launch community capacity-building initiatives towards achieving the SDGs Agenda without losing sight of the local needs and knowledge.

The growing awareness among Universities to play an active role, next to the traditional missions of education and research, and to engage in societal challenges (and market demands) to contribute to society (Third Mission of Universities) has been implemented differently depending on the socio-economic contexts of the Universities. For instance, at Ghent University a range of interconnected activities have been implemented to strengthen this Third Mission, such as the installation of 10 interdisciplinary research consortia with focus on societal impact (IDC).[47] Among others, the interdisciplinary consortium "IDC Crime, Criminology and Criminal Policy" has taken steps to include and engage key actors in a longterm and structural way. A noteworthy example is the CaST – Com-

munities and Students Together - project which focuses on how universities can work more effectively and inclusively within their city's communities by providing students with opportunities to work on local societal challenges.[48,49]

In addition to devising and implementing the inter- and transdisciplinary projects and initiatives, it is necessary to thoroughly evaluate the level of SDGs implementation in HEIs own activities and initiatives to formulate recommendations for further actions to support the 2030 Agenda. It

is also essential that HEIs map the inclusion of SDGs and disseminate the results to staff and students to enhance their working knowledge of SDGs and the underlying principles and use that knowledge in their future careers and personal lives.

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