ISCTE IUL
REPOSITÓRIO
INSTITUTO UNIVERSITÁRIO DE LISBOA

Repositório ISCTE-IUL

Deposited in *Repositório ISCTE-IUL*:
2026-07-14

Deposited version:
Accepted Version

Peer-review status of attached file:
Peer-reviewed

Citation for published item:
Nogueiro, T., Saraiva, M. & Rolo, A. (2024). Erasmus+ 2021–2027 in higher education: Contributions to the 2030 agenda and to the Sustainable Development Goals. In João Reis, Tiago Pinho, Vítor Barbosa, Luís Barreto, Sandrina B. Moreira, Pedro Pardal, João Nabais, Carlos Mata, Ana Mendes (Ed.), Driving quality management and sustainability in VUCA environments: 4th International Conference on Quality Innovation and Sustainability (ICQIS). (pp. 225-241).: Springer.

Further information on publisher's website:
10.1007/978-3-031-52723-4_18

Publisher's copyright statement:
This is the peer reviewed version of the following article: Nogueiro, T., Saraiva, M. & Rolo, A. (2024). Erasmus+ 2021–2027 in higher education: Contributions to the 2030 agenda and to the Sustainable Development Goals. In João Reis, Tiago Pinho, Vítor Barbosa, Luís Barreto, Sandrina B. Moreira, Pedro Pardal, João Nabais, Carlos Mata, Ana Mendes (Ed.), Driving quality management and sustainability in VUCA environments: 4th International Conference on Quality Innovation and Sustainability (ICQIS). (pp. 225-241).: Springer., which has been published in final form at https://dx.doi.org/10.1007/978-3-031-52723-4_18. This article may be used for non-commercial purposes in accordance with the Publisher's Terms and Conditions for self-archiving.

Use policy

Creative Commons CC BY 4.0
The full-text may be used and/or reproduced, and given to third parties in any format or medium, without prior permission or charge, for personal research or study, educational, or not-for-profit purposes provided that:

- a full bibliographic reference is made to the original source
- a link is made to the metadata record in the Repository
- the full-text is not changed in any way

The full-text must not be sold in any format or medium without the formal permission of the copyright holders.

Serviços de Informação e Documentação, Instituto Universitário de Lisboa (ISCTE-IUL)
Av. das Forças Armadas, Edifício II, 1649-026 Lisboa Portugal
Phone: +(351) 217 903 024 | e-mail: administrador.repositorio@iscte-iul.pt
https://repositorio.iscte-iul.pt

Erasmus+ 2021-2027 in Higher Education: Contributions to the 2030 Agenda and the Sustainable Development Goals

Abstract. The 2030 Agenda for Sustainable Development, approved by all UN member states in 2015, includes the 17 Sustainable Development Goals (SDGs), which are seen by Boeren (2019) as a Programme of actions not only for people but also for the planet and prosperity. These goals are essentially intended to help nations work together to build a cleaner world and a fairer global society while safeguarding the environment, and are aligned with those advocated by the Erasmus+ Programme. Both the Programme and the SDGs have goals to be achieved and associated indicators that should be used as tools to achieve these goals that corroborate those outlined in the 2030 Agenda. This work aims to find out to which SDGs contribute most the Erasmus+ Programme. To this end, we used a qualitative analysis of the Regulation that led to the creation of the Erasmus+ Programme for the period 2021-2027 and the 17 SDGs. It was concluded that the most relevant SDGs are 4, 5, 8, 9, 10, 13, 16 and 17 and that the Erasmus+ Programme seems to have a strong potential to drive and mobilize Sustainable Development in the world through the participation of people and the projects implemented and developed. It was also concluded that SDG 4 contributes directly or indirectly to the other selected SDGs, but no SDG contributes to SDG 4.

Keywords: Erasmus+ 2021-2027, Higher Education, 2030 Agenda, Sustainable Development Goals.

1 Introduction

In 2015, through the approval of the 17 Sustainable Development Goals by UNESCO that define the 2030 Agenda that addresses sustainable development in various dimensions, effective institutions are promoted in addition to peace and justice.

The SDGs are thus a rallying point for all countries - rich, poor and middle-income - to work together to increase prosperity while safeguarding the environment. They recognize that eradicating poverty requires methods that promote economic growth and meet a variety of social needs, such as education, health, social protection, and employment opportunities, all while combating climate change and protecting the environment.

The specific objectives of the Erasmus+ Programme are defined in a common way for the various fields. They are to be met through learning mobility (Key Action 1), cooperation between organizations and institutions (Key Action 2) and support for policy development and cooperation (Key Action 3) that have a mainly transnational or international character (EUR-Lex Access to European Union Law. Document 32021R0817, 2021). The Programme Regulation currently in force aims to ensure full respect for the rights to gender equality and non-discrimination based on sex, racial or ethnic origin, religion or belief, disability, age or sexual orientation and to promote the application of Articles 21 (non-discrimination) and 23 (equality between women and men) of the Charter of Fundamental Rights of the European Union (Charter of Fundamental Rights of the European Union, 2016). Academic freedom should be protected by nations receiving funds under the Programme, in accordance with Article 13 (Freedom of the Arts and Sciences) of the Charter (Charter of Fundamental Rights of the European Union, 2016).

This work aims to find out which SDGs contribute most to the Erasmus+ Programme. To this end, we used a qualitative analysis of the Regulation that led to the creation of the Erasmus+ Programme for the period 2021-2027 and the 17 SDGs.

This paper presents the following structure: Introduction, Brief Presentation of the Themes, Methodology, Presentation and Discussion of the Results, Conclusions, Limitations, and Future Research Proposals.

Next section briefly presents the themes of Eramus+ Programme and the Sustainable Development Goals.

2 Brief Presentation of the Themes

The Erasmus+ Programme builds on over 25 years of experience in European education, training and youth Programme, encompassing intra-European and international cooperation. Erasmus+ is the result of the merger of several previous European Programmes undertaken between 2007 and 2013 by the European Commission. It aims to go beyond these Programmes by promoting synergies and Cross-Enrichment in different fields of education, training and youth, removing artificial barriers between Actions and project formats, fostering new ideas, attracting new actors from the labour market and civil society, and stimulating new forms of cooperation.

The 2021-2027 Programme aims to be a direct instrument to support sustainable growth, quality jobs and social cohesion, to boost innovation and strengthen European identity and active citizenship through lifelong learning, educational, professional and personal development of individuals (Regulation (EU) 2021/817 (2021) of the European Parliament and of the Council of 20 May 2021).

Bañon Gomis, Guillén Parra, Hoffman & McNulty (2011) emphasize that sustainability is not just a "fad or trend" valued by circumstantial conditions. Its importance is linked to the ethics that guide human conduct, reflecting the values of courage, prudence, and hope. The term "sustainability" may even be popular today, but the concept itself has ancient and universal roots.

Feil and Schreiber (2017) state that sustainability consists of a goal or parameter defined through scientific criteria, which measures and monitors the results generated by the use of Sustainable Development strategies. Sustainability is a way of being and living that requires aligning human practices with the limited potential of each biome and the needs of today's and tomorrow's generations (Boff, 2017).

The SDGs, which represent and define the global priorities for the 2030 Agenda signed by nearly 190 countries, seek to focus global efforts around a set of common goals and targets. The 17 SDGs are defined in areas that impact the quality of life of all citizens of the world, including future generations. According to the United Nations, the 2030 Agenda and the 17 Sustainable Development Goals are the common vision for humanity, a contract between world leaders and people, and a list of actions to be taken on behalf of the people and the planet (United Nations, 2023).

In recent decades, a broad spectrum of decision-makers has become interested in the topic of Sustainable Development. People and society can only prosper if all countries and regions experience continuous, inclusive, and sustainable economic progress (Fleacă, Fleacă & Maiduc, 2018).

Figure 1 presents the 17 SDGs according to social, environmental, economic and institutional dimensions.



Fig. 1. SDGs Dimension Pyramid

The social dimension includes 6 SDGs, namely, those that aim to end poverty in all its forms everywhere (SDG1), end hunger, achieve food security and improved nutrition and promote sustainable agriculture (SDG2), ensure healthy lives and promote well-being for all at all ages (SDG3), ensure inclusive and equitable quality education and promote lifelong learning opportunities for all (SDG4), achieve gender equality and empower all women and girls (SDG5) and reduce inequality within and among countries (SDG10). The next step of the pyramid also presents 6 SDGs for the environmental

dimension. These 6 SDGs are those that intend to ensure availability and sustainable management of water and sanitation for all (SDG6), access to affordable, reliable, sustainable and modern energy for all (SDG7) and sustainable consumption and production patterns (SDG12), take urgent action to combat climate change and its impacts (SDG13), conserve and sustainably use the oceans, seas and marine resources for sustainable development (SDG14) and protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification and halt and reverse land degradation and halt biodiversity loss (SDG15). The SDG8 meaning to promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all, SDG9 to build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation and SDG11 related to make cities and human settlements inclusive, safe, resilient and sustainable are the 3 SDGs that concerns the economic dimension. At the top of the pyramid is the institutional dimension with 2 SDGs: SDG16 - Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels and SDG17 - Strengthen the means of implementation and revitalize the global partnership for sustainable development (United Nations, 2023).

According to the United Nations, the 17 SDGs presents 169 targets in total. Under the 17 SDGs and on this date 3802 events were promoted, 1344 publications were made, and 7376 actions were taken (United Nations, 2023).

However, and keeping in mind the Erasmus+ Programme Regulation, it was possible to verify that the Programme does not contribute to all 17 SDGs. Thus, those to which the Programme does contribute were identified and are presented in the Presentation and Discussion of the Results section.

3 Methodology

The methodology focused on the qualitative analysis of the SDGs in the context of higher education, as well as the analysis of Regulation (EU) 2021/817 of the European Parliament and Council of 20 May 2021 establishing Erasmus+: the Union Programme for education and training, youth, and sport.

To perform this analysis, we first defined the key words that would make the link between the content of Regulation (EU) 817/2021 and the SDGs. Then, based on the description of the goals and indicators of the 17 SDGs, we selected those that were considered relevant and with a clear link to Higher Education and the Erasmus+ Programme. We integrated our research findings with a literature review for the discussion The discussion of the results obtained on the contribution of SDG 4 to the other SDGs was based on random bibliography searched in open source. To perform the search, we used as a base word Education, and then associated it with words like innovation, decent work, inclusion, equality, among others. All qualitative analysis was carried out manually by the authors, which means that no qualitative data analysis software was used.

4 Presentation and Discussion of Results

This section presents and discusses the results obtained from this work. Thus, the following figure presents a summary of the results.



SUSTAINABLE DEVELOPMENT GOALS 4 – Quality Education (Social Dimension)

Keywords: Inclusive, Quality, Lifelong learning, Inclusive + lifelong learning

Target 4.3 - Equal access to affordable technical, vocational and higher education; Indicator 4.3.1; Items (1) (…) Investing in learning mobility for all, regardless of background and means, (…) and (13) (…) The Program should support an inclusive and broad EU Youth Dialogue, (…)

Target 4.4 - Increase the number of people with relevant skills for financial success; Indicator 4.4.1, Item (11) (…) A coherent lifelong learning approach is central to managing the different transitions (…)

Target 4.5 - Eliminate all discrimination in education; Indicator 4.5.1; Items (4) (…) Principle 1 of the European Pillar of Social Rights provides that everyone has the right to quality and inclusive education (…); (7) (…) confirmed the key findings of the report on the mid-term evaluation of the 2014-2020 Program (…); (8) (…) This would allow more people to move to another country to learn or work and would allow (…); (18) (…) In fulfilling its objectives, the Program should be more inclusive by improving participation (…); (29) (…) Implementing bodies should promote measures to ensure that the DiscoverEU initiative is (…); and (30) (…) At the same time, in order to ensure broad and inclusive access to the Program, (…)

Target 4.7 - Education for sustainable development and global citizenship; Indicator 4.7.1; Items (33) (…) In its communication of 18 July 2017 entitled 'Strengthening Innovation in Europe's Regions: Strategies for resilient, inclusive and sustainable growth', (…); and (12) (…) The Program is a key component of building a European Education Area. Following on from its communication 2017 (…)

Target 4.B - Expand higher education scholarships for developing countries; Indicator 4.B.1; Items (3) (…) Principle 1 thereof, which relates to education, training and lifelong learning. (…) and (6) (…) while calling for a number of improvements, such as making the Erasmus+ Program more inclusive, (…)

Target number 4.C - Increase the supply of qualified teachers in developing countries; Indicator 4.C.1; Item (32) (…) The Program should support those European Universities in developing joint long-term strategies for high-quality education, research and innovation and for service to society (…)

SUSTAINABLE DEVELOPMENT GOALS 5 – Gender Equality (Social Dimension)

Keyword: Equal

Target 5.1 - End discrimination against women and girls: End all forms of discrimination against all women and girls everywhere; Indicator 5.1.1; Items (4) (…) The European Pillar of Social Rights also makes clear the importance of good quality early childhood education and care and of ensuring equal opportunities for all (…); (26) (…) The participation of recent graduates in learning mobility should be based on objective criteria, and equal treatment should be ensured (…); (64) (…) In particular, this Regulation seeks to ensure full respect for the right to equality between women and men and the right to non-discrimination based on sex, racial or ethnic origin, religion or belief, disability, age or sexual.

Target 5.C - Adopt and strengthen policies and enforceable legislation for gender equality: Adopt and strengthen sound policies and enforceable legislation for the promotion of gender equality and the empowerment of all women and girls at all levels; Indicator 5.C.1; Item (43) (…) The principles of transparency, equal treatment and non–discrimination set out in the Financial Regulation should be (…)

SUSTAINABLE DEVELOPMENT GOALS 8 – Decent Work and Economic Growth (Economic Dimension)

Keywords: Employment, Decent work (quality jobs), Economic growth (only expressions associated to sustainable growth),

Target 8.3 - Promote policies to support job creation and growing enterprises; Indicator 8.3.1; Item (59) (…) It is necessary to ensure the complementarity and consistency of the Program actions, including those without a transnational or international character, with activities undertaken by the Member States (…); (Chapter XI, Article 32) (…) The Program shall be implemented so as to ensure its overall consistency and complementarity with other relevant Union policies, (…); (8) (…) This would allow more people to move to another country to learn or work and would allow the Program to focus on inclusiveness and on reaching (…); (13) (…) a new EU Youth Strategy', the Program should support high-quality youth work, tools and systems for the training of youth workers, (…); (12) (…)The Program should be equipped to contribute to the successor of the strategic framework for European cooperation in education and training and (…); (33) (…) The Bruges Communiqué of 7 December 2010 on enhanced European Cooperation in Vocational Education and Training for the period 2011-2020 called for support of vocational excellence for (…); (39) (…) In line with the European Green Deal as a blueprint for sustainable growth, the actions under this Regulation should respect the 'do no harm' principle without changing the fundamental character (…); and (Key action 2) (…) 2.2.2. partnerships of vocational education and training providers (platforms of centres of vocational excellence) embedded in local and regional strategies for sustainable growth, (…) Target 8.5 - Full employment and decent work with equal pay; Indicator 8.5.1; Item (Article 3) (…) The general objective of the Program is to support, through lifelong learning, the educational, professional (…)

SUSTAINABLE DEVELOPMENT GOALS 9 – Industry, Innovation and Infrastructure (Economic Dimension)

Keywords: Innovation (and research)

Target 9.5 - Enhance research and upgrade industrial technologies; Indicator 9.5.1; Items (12) (…) The Program should be equipped to contribute to the successor of the strategic framework for European (…); (15) (…) The Program should be able to support any field of study and should, in particular, contribute to strengthening the Union's innovation capacity by supporting activities that help people develop (…); (16) (…) Synergies with the Horizon Europe Program established by Regulation (EU) 2021/695 (…); (31) (…) thereby recognising the fundamental role of the institutions and organisations in equipping individuals (…); (32) (…) the European Council called for cooperation between research, innovation and education to be encouraged (…); (33) (…) The Program should provide the means to respond to those calls and support the development of transnational platforms of centres of vocational excellence embedded in local and regional (…); (59) (…) It is necessary to ensure the complementarity and consistency of the Program actions, including those without a transnational or international character, with activities undertaken (…); (Article 3) (…) contributing to sustainable growth, quality jobs and social cohesion, to driving innovation and to strengthening European identity and active citizenship. (…); (Key action 2) (…) partnerships for innovation to strengthen Europe's innovation capacity (…); (Article 32) (…) in particular those relating to education and training, culture and the media, youth and solidarity, employment and social inclusion, (…); (Annex I) (…) 2.2.2. partnerships of vocational education and training providers (platforms of centres of vocational excellence) (…); (Key action 2) (…) 2.3.1. alliances: strategic cooperation between key players in the field of education and training and in business and research that foster innovation and modernisation of education and training systems and 2.3.2. projects that foster innovation, creativity, e-participation, and social entrepreneurship in the fields of education and training and youth (…); **Indicator 9.5.2.**

SUSTAINABLE DEVELOPMENT GOALS 10 – Reduced Inequalities (Social Dimension)

Keyword: Inequalities (inclusion, equality and non-discrimination)

Target 10.3 - Ensure equal opportunities and end discrimination; Indicator 10.3.1; Item (14) (…) There is a need to focus, in particular, on grassroots sport, taking into account the important role that sports play (…); (18) (…) Therefore, within a Union-wide framework of such measures aimed at increasing (…); (48) (…) In addition to assessing the overall effectiveness and performance of the Program, it is of particular (…); (59) (…) It is necessary to ensure the complementarity and consistency of the Program actions, including those without a transnational or international character, with activities undertaken (…); (Article 3) (…) (a) the learning mobility of individuals and groups, and cooperation, quality, inclusion and equity, excellence, creativity and innovation at the level of organisations and policies in the field of education and (…); (Article 15) (…) The Commission shall, by 29 November 2021, develop a framework of inclusion measures to increase participation rates among people with fewer opportunities, as well as guidance (…); (Article 24) (…) The interim evaluation of the Program shall assess the overall effectiveness and performance of the Program, including as regards new initiatives and the delivery of inclusion (…); (Article 32) (…) The Program shall be implemented so as to ensure its overall consistency and complementarity with other relevant Union policies, Programs and funds, in particular those relating (…); (Annex I) (…) Not-for-profit sport events: events held either in one country or simultaneously in several countries to raise awareness of the role of sport in diverse areas such as social inclusion, equal opportunities (…); (Annex II) (…) Inclusion: 2.4.1. The number of people with fewer opportunities taking part in activities under key action 1; 2.4.2. The number of newcomer organisations and institutions taking part in the Program under key actions 1 and 2 (…)

SUSTAINABLE DEVELOPMENT GOALS 13 – Climate Action (Environmental Dimension)

Keyword: Climate

Target number 13.3 - Build knowledge and capacity to meet climate change; Indicator 13.3.1; Items (59) (…) in particular those relating to education and training, culture and the media, youth and solidarity, employment and social inclusion, research and innovation, industry and enterprise, digital policy, (…); (Article 32) (…) The Program shall be implemented so as to ensure its overall consistency and complementarity with other relevant Union policies, Programs and funds, in particular those relating to education and training, culture and the media, youth and solidarity, employment and social inclusion, research and innovation, industry and enterprise, digital policy, agriculture and rural development, environment and climate, cohesion (…); (Annex I) (…) 1.1. Learning mobility: short-term, long-term, group or individual mobility on diverse thematic areas and study subjects, including forward-looking (…); (Annex II) (…) 2.6. Climate contribution: 2.6.1. The share of activities addressing climate objectives under key action 1; 2.6.2. The share of projects addressing climate objectives under key action 2 (…)

SUSTAINABLE DEVELOPMENT GOALS 16 – Peace, Justice and Strong Institutions (Institutional Dimension)

Keyword: Peace and justice (fundamental rights)

Target 16.A - Strengthen national institutions to prevent violence and combat crime and terrorism; Indicator 16.A.1; (28) (…) The Program should encourage the participation of young people in Europe's democratic life, including by supporting activities that contribute to citizenship education and participation projects (…); (64) (…) This Regulation respects the fundamental rights and observes the principles recognised in particular by the Charter of Fundamental Rights of the European Union (the 'Charter') (…)

SUSTAINABLE DEVELOPMENT GOALS 17 – Partnerships for the Goals (Institutional Dimension)

Keyword: Partnerships

Target 17.9 - Enhanced SDG capacity in developing countries; Indicator 17.9.1; Item (Key action 2) Cooperation among Organisations and Institutions

Fig. 2. Relationship between Sustainable Development Goals targets 4, 5, 8, 9, 10, 13, 16 and 17 and respective indicators and items from Regulation (EU) 2021/817

By defining keywords associated with the SDGs for Higher Education, it was possible to identify these word(s) in the text of Regulation (EU) 2021/817 (2021). When extracting the expressions associated with these words, it was necessary to somehow correlate them with the selected targets and indicators. Analysing Figure 2, several results are highlighted.

Thus, in social dimension in which SDG 4, 5 and 10 are integrated, it was possible to associate the following keywords Inclusive, Quality, Lifelong learning, Inclusive + lifelong learning, Equal and Inequalities (inclusion, equality and non-discrimination). Regarding the economic dimension, the keywords identified were Employment, Decent work (quality jobs), Economic growth (only expressions associated to sustainable growth) and Innovation (and research). SDGs 8 and 9 are linked to this dimension. To SDG 13, integrated into the environmental dimension, the keyword Climate was associated. Finally, the keywords Peace and Justice (fundamental rights) and Partnerships are associated with SDG 16 and 17, which are included in the institutional dimension.

In the context of Higher Education and the Erasmus+ Programme, not all indicators are relevant and truly fit these realities. In the scope of this study, it was possible to identify several indicators associated with higher education but not all of them have a direct or indirect relationship with items from the Regulation (EU) 2021/817 of the Programme. The same happened with the identified SDGs,

It was thus possible, in the framework of SDG 4, to associate indicators 4.3.1 (participation rate of youth and adults in formal and non-formal education and training in the previous 12 months, by sex) items (1) and (13), to 4.4.1 (proportion of youth and adults with information and communications technology (ICT) skills, by type of skill) item (11), to 4.5.1 (parity indices (female/male, rural/urban, bottom/top wealth quintile and others such as disability status, indigenous peoples and conflict-affected, as data become available) for all education indicators) items (4), (7), (8), (18), (29) and (30), to 4.7.1 (the extent to which (i) global citizenship education and (ii) education for sustainable development, including gender equality and human rights, are mainstreamed at all levels in (a) national education policies; (b) curricula; (c) teacher education; and (d) student assessment) items (12) and (33), to 4.B.1 (the volume of official development assistance flows for scholarships) items (3) and (6), and to 4.C.1 (the proportion of teachers in (a) pre-primary; (b) primary; (c) lower secondary; and (d) upper secondary education who have received at least the minimum organized teacher training (e.g. pedagogical training) pre-service or in-service required for teaching at the relevant level in a given country) item (32).

Concerning SDG 5, the research led to the identification of indicators 5.1.1 (whether or not legal frameworks are in place to promote, enforce and monitor equality and non-discrimination on the basis of sex) with associated items (4), (26) and (64), and 5.C.1 (Proportion of countries with systems to track and make public allocations for gender equality and women's empowerment) with related item (43).

Regarding SDG 8, the indicators and items identified are 8.3.1 (proportion of informal employment in non-agriculture employment, by sex) with the related items (59), (Chapter XI, Article 32), (8), (12), (13), (33), (39) and (Key action 2), 8.5.1 (the average

hourly earnings of female and male employees, by occupation, age and persons with disabilities) related to (Article 3).

With regard to SDG 9, two indicators were identified, specifically 9.5.1 (research and development expenditure as a proportion of GDP) and 9.5.2 (the number of researchers (in full-time equivalent) per million inhabitants). In this case indicator 9.5.1 was the only one to have items under the Erasmus Regulation, namely (12), (15), (16), (31), (32), (33), (59), (Article 3), (Key action 2), (Article 32), (Annex I) and (Key action 2).

For SDG 10 only the indicator 10.3.1 (the proportion of population reporting having personally felt discriminated against or harassed in the previous 12 months on the basis of a ground of discrimination prohibited under international human rights law) to which the items (14), (18), (48), (59), (Article 3), (Article 15), (Article 24), (Article 32), (Annex I) and (Annex II) are associated.

SDG 13 also have one indicator identified, namely 13.3.1 (the number of countries that have integrated mitigation, adaptation, impact reduction and early warning into primary, secondary and tertiary curricula) linked to the items (59), (Article 32), (Annex I) and (Annex II).

Associated with SDG 16 and 17 are identified indicators for each, specifically 16.A.1 (the existence of independent national human rights institutions in compliance with the Paris Principles) and 17.9.1 (the dollar value of financial and technical assistance committed to developing countries), respectively. For indicator 16.A.1 the items of the Regulation (EU) 2021/817 are (28) and (64) and for indicator 17.9.1 the item is (Key action 2).

Being aware of the contribution that the Erasmus+ Programme can have to the 2030 Agenda, as demonstrated by the identification of the indicators within Higher Education and their association with Regulation (EU) 2021/817, it is possible to realize that the SDGs do not contribute in an isolated and independent way to the desired sustainability.

Education is the basis for building citizenship and civic participation, for preserving the environment and health, for financial sustainability, among others (Bortolon & Mendes, 2014; de Sousa, de Medeiros, Mendonça & de Oliveira, 2011; Ferreira, 2017; França, 2011; Loureiro, 2004; Vasconcelos, 2007).

The awareness that systematic knowledge is more than an essential cultural resource is the starting point for the right to education. As a part of the cultural heritage, the citizen gains access to cognitive and formative patterns, increasing his chances of participating in the fate of his society and contributing to its transformation. Access to education is also a form of openness, providing the person with a key to self-construction and perceiving oneself as capable of choices. In this perspective, the right to education is an opportunity for citizen development, a path to diversified possibilities, and a tool to increase self-esteem. The specification occurs in the struggle for the universalization of schooling when new rights are recognized, such as the right of children under the age of six to attend a school appropriate for their age, or when the right of women, young people, and adults to attend schools is acknowledged, even today. This is also true for people with special requirements who, for whatever reason, become disabled in their motility, hearing, or other abilities and begin to demand their own

educational model that accommodates their unique demands. Because social actors recognize the value of knowledge in the society in which they live, the right to education becomes a nonviolent weapon of political claim and participation. As a result, education as a right and its implementation in social practices become a tool for reducing inequities and discrimination and enabling peaceful coexistence among people all over the world. The civil presupposition of universal citizenship is the dissemination and universalization of quality school education as a citizenship right, which is part of what Kant once considered one of the conditions "of perpetual peace": the truly republican character of the States that guarantee this right of freedom and equality for all, among other things (Cury, 2006).

To be addressed in a way that simultaneously promotes the development of knowledge, attitude, and skills required for the preservation and improvement of environmental quality and community quality of life, environmental education must be adapted to contemporary circumstances in the city, or the environment in which students live. Consequently, the practice of Environmental Education within the school requires much encouragement and commitment, because there is a need for immediate awareness about the problem of environmental degradation, assuming the role of social responsibility, beginning with basic actions that will become habits and practices established in society; this is the role of environmental education within the school (da Silva, 2016). Nonetheless, the author believes that the importance of environmental education in the school context is evident in terms of developing students' knowledge, skills, and attitudes toward environmental preservation. Thus, environmental education must be present at all educational levels, with the goal of reaching all students and reinforcing what they learned in the early grades. As a result, instructors can and should create environmental initiatives and engage with concepts and knowledge aimed at environmental preservation and sustainable resource use. Environmental education must be present at all educational levels, with the goal of reaching all students and reinforcing what they learned in the early grades (da Silva, 2016). Only through environmental education can a culturally complete society be achieved, and it is necessary to articulate educational actions, adequate conditions, and educator training so that they can work with environmental education themes and activities in a way that raises students' awareness and develops their criticism, generating new concepts and values about nature, and contributing to environmental preservation (Bortolon & Mendes, 2014).

According to Pretto (1999) if we think of technologies at the service of the production of knowledge and culture, we can think of the insertion of the country in the so-called globalized world market, from another perspective, that is, of effective citizenship. Schools must be stimulating places in which the teaching of mathematics and science mathematics and science imply the potential to alter. Education must prepare young people to work in teams, to study on their own, to solve issues, to believe in their potential, to have personal integrity, initiative, and the ability to invent. It must inspire innovation and provide opportunities for everyone. In this context, it must be made clear that public policy in the field of science and technology must be wide, encompassing not only innovation but, more fundamentally, scientific progress, with scientific education at all levels as a priority. It is vital to remember that scientific illiteracy will exacerbate disparities by further marginalizing already excluded majorities from the

job market. To be successful, educational system reform must originate from the community, involving and valuing teachers, so that we as a society may get some perspective in knowledge society. (Zancan, 2000)

The valuing of labor is essential for the realization of human dignity, as is the execution and consolidation of decent work as a fundamental right guaranteed to all (Miraglia, 2010). Work provides the citizen's right to feel productive, included, appreciated, and independent, which is much more than a financial concern. Adversities resulting from work relationships bring people with disabilities to a level of normalcy; that is, these are situations that any working subject can face, and this, too, provides satisfaction. Work is promoted today as a symbol of the right to citizenship and human dignity from a societal standpoint. The relationship between people with disabilities' education and qualifications has a direct impact on their salary and the employment they hold (Passerino & Pereira, 2014). The modern world requires more schooling, qualification, up-to-date knowledge, and the learning of new technologies, but placing into the labor market is becoming more difficult every day, not only because of the new labor world demands, but also because of the increase in unemployment, among the older people, the less qualified, the younger layers, and especially among the young people who have not yet had their first job. (de Souza Nascimento & Miranda, 2007).

Higher education institutions (HEIs) promote lifelong learning, high-quality education, equity, and a variety of resources to assist empower global citizens to face today's and tomorrow's challenges. They play a critical role in ensuring a sustainable future for every citizen, which is a goal shared by all 17 Sustainable Development Goals (SDGs). (De La Torre, Perez-Encinas & Gomez-Mediavilla, 2022).

Through lifelong learning, the Erasmus+ Programme aims to support people's educational, professional, and personal development in the fields of education and training, youth, and sport in Europe and beyond, thereby contributing to growth sustainability, quality jobs, social cohesion, driving innovation, and strengthening European identity and active citizenship. Erasmus+ intends to foster individual and group learning mobility, as well as cooperation, quality, inclusion, equity, excellence, creativity, and innovation at the organizational and policy levels in the sphere of education and training; non-formal and informal learning mobility and active participation among young people, as well as cooperation, quality, inclusion, creativity, and innovation at the organizational and policy levels in the field of youth; and sport staff learning mobility, as well as cooperation, quality, inclusion, creativity, and innovation at the organizational and policy levels in the field of sport. (Nogueiro & Saraiva, 2023).

5 Conclusions

This study concluded that SDGs 4, 5, 8, 9, 10, 13, 16 and 17 receive contributions from the Erasmus+ Programme. Indeed, as can be seen from the analysis of Regulation (EU) 2021/817 there is a very strong relationship between it and the sustainability underlying the SDGs associated with education, inclusion and equality, climate, decent work, innovation, peace and justice and partnerships. The contribution that the Erasmus+ Programme can have to the 2030 Agenda, is demonstrated by the identification of the

indicators within Higher Education and their association with Regulation (EU) 2021/817. This conclusion allows us to realize that the SDGs do not contribute in an isolated and independent way to the desired sustainability.

In the previous section it was possible to verify the influence or the contribution that education (SDG 4) has in the achievement of other Sustainable Development Goals like the ones studied in this work. As seen, Education is the basis for building citizenship and civic participation, for preserving the environment and health, for financial sustainability, among others. The universal right to education is the guarantee of the opportunity given to citizens to make more informed and sustainable choices in various areas, improving their existence in society. Access to education is also a sort of openness, since it provides a key to self-construction and the perception of oneself as capable of making choices. In this perspective, the right to education is a chance for citizen development, a gateway to new opportunities, and a means of boosting self-esteem. Only through environmental education can a culturally complete society be achieved and generate new concepts and values about nature contributing to environmental preservation. Better education provides better and differentiate skills, giving people the possibility to have more decent works with a better remuneration that will allow a better quality of life. Work gives citizens the right to feel productive, included, valued, and self-sufficient, which is much more than a financial concern. Given this evidence, we can consider education as the pillar of a more sustainable society and world. The Erasmus+ Programme, being strongly associated with education and training, allows the achievement of such noble goals linked to the 2030 Agenda as inclusion, the right to equality, access to decent work, better quality of life, and social and global peace and justice.

6 Limitations, and Future Research Proposals

One limitation to this research paper has to do with the robustness of the choice of keywords that were used to selected for each of the SDGs; these keywords should have been validated by EC and/or UNESCO. Another limitation is the fact that no key actions of the Erasmus+ Programme were analyzed, which would ensure greater robustness to the results through the treatment of European Commission reports on the Programme.

As future research projects we propose the analysis and processing of participant reports to understand the real contribution of the Erasmus+ Programme to the 2030 Agenda; the analysis of SDGs based on the realities of each key action of the Erasmus+ Programme; and the study of capacity building projects for higher education (CBHE) coordinated by Portuguese institutions and their alignment with Agenda 2030 and the sustainability strategy for Portugal.

References

1. Bañon Gomis, A. J., Guillén Parra, M., Hoffman, W. M., & McNulty, R. E.: Rethinking the concept of sustainability. Business and Society Review, 116(2), 171-191 (2011).

2. Boeren, E.: Understanding Sustainable Development Goal (SDG) 4 on “quality education” from micro, meso and macro perspectives. International review of education, 65, 277-294 (2019).
3. Boff, L.: Sustentabilidade: o que é-o que não é. Editora Vozes Limitada, Petrópolis, RJ (2017).
4. Bortolon, B., & Mendes, M. S. S.: A importância da educação ambiental para o alcance da sustentabilidade. Revista Eletrônica de Iniciação Científica. Itajaí, Centro de Ciências Sociais e Jurídicas da UNIVALI, 5(1), 118-136 (2014).
5. Cury, C. R. J.: Educação escolar e educação no lar: espaços de uma polêmica. Educação & Sociedade, 27, 667-688 (2006).
6. da Silva, H. O. O.: A importância da educação ambiental no âmbito escolar. Revista Interface (Porto Nacional), 12(12), 163-172 (2016).
7. De La Torre, E. M., Perez-Encinas, A., & Gomez-Mediavilla, G.: Fostering sustainability through mobility knowledge, skills, and attitudes. Sustainability, 14(3), 1349 (2022).
8. de Sousa, G. L., de Medeiros, A. B., Mendonça, M. J. D. S. L., & de Oliveira, I. P.: A Importância da educação ambiental na escola nas séries iniciais. Revista Eletrônica Faculdade Montes Belos, 4(1) (2011).
9. de Souza Nascimento, E., & Miranda, T. G.: O trabalho e a profissionalização das pessoas com deficiência. Revista Entreideias: educação, cultura e sociedade, (12) (2007).
10. Feil, A. A., & Schreiber, D.: Sustentabilidade e desenvolvimento sustentável: desvendando as sobreposições e alcances de seus significados. Cadernos Ebape. BR, 15, 667-681 (2017).
11. Ferreira, J. C.: A importância da educação financeira pessoal para a qualidade de vida. Caderno de Administração, 11(1) (2017).
12. Fleacă, E., Fleacă, B., & Maiduc, S.: Aligning strategy with sustainable development goals (SDGs): Process scoping diagram for entrepreneurial higher education institutions (HEIs). Sustainability, 10(4), 1032 (2018).
13. França, L. H. D. F. P.: O envelhecimento populacional e seu reflexo nas organizações: a importância da educação ao longo da vida. Boletim Técnico do Senac, 37(2), 49-60 (2011).
14. Loureiro, I.: A importância da educação alimentar: o papel das escolas promotoras de saúde. Revista Portuguesa de Saúde Pública, 22(2), 43-55 (2004).
15. Miraglia, L. M. M.: O direito do trabalho e a dignidade da pessoa humana pela necessidade de afirmação do trabalho digno como direito fundamental. In: XIX Encontro Nacional do CONPEDI, pp. 9038-9047 (2010).
16. Nogueiro, T., & Saraiva, M.: TQM and SDGs for Erasmus+ Programmeme—Quality Education, Reducing Inequalities, Climate Change, Peace and Justice. Social Sciences, 12(3), 123 (2023).
17. Passerino, L. M., & Pereira, A. C. C.: Educação, inclusão e trabalho: um deba-te necessário. Educação & Realidade, 39, 831-846 (2014).
18. Pretto, N.: Educação e inovação tecnológica: um olhar sobre as políticas pú-blicas brasileiras. Revista Brasileira de Educação, (11), 75-85 (1999).
19. Regulation (EU) 2021/817 of the European Parliament and of the Council of 20 May 2021 establishing Erasmus+: the Union Programme for education and training, youth and sport and repealing Regulation (EU) No 1288/2013. OJ L 189, 28.5.2021: 1–33, https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32021R0817&qid=1641601177851&from=en, last accessed 2022/05/27.
20. Sustainable Development Goal 10 – Reduce inequality within and among countries, https://sdg-tracker.org/inequality, last accessed 2022/05/16.

21. Sustainable Development Goal 13 – Take urgent action to combat climate change and its impacts, https://sdg-tracker.org/climate-change, last accessed 2022/05/16.
22. Sustainable Development Goal 16 – Promote just, peaceful and inclusive societies, https://sdg-tracker.org/peace-justice, last accessed 2021/12/26.
23. Sustainable Development Goal 17 – Revitalize the global partnership for sustainable development, https://sdg-tracker.org/global-partnerships, last accessed 2022/05/16.
24. Sustainable Development Goal 4 - Ensure inclusive and quality education for all and promote lifelong learning, https://sdg-tracker.org/quality-education, last accessed 2022/05/16.
25. Sustainable Development Goal 5 - Achieve gender equality and empower all women and girls, https://sdg-tracker.org/gender-equality, last accessed 2022/05/16.
26. Sustainable Development Goal 8 - Promote inclusive and sustainable economic growth, employment and decent work for all, https://sdg-tracker.org/economic-growth, last accessed 2022/05/16.
27. Sustainable Development Goal 9 - Build resilient infrastructure, promote sustainable industrialization and foster innovation, https://sdg-tracker.org/infrastructure-industrialization, last accessed 2022/05/16.
28. United Nations. Transforming Our World: The 2030 Agenda for Sustainable Development, https://sdgs.un.org/2030agenda, last accessed 2023/04/01.
29. Vasconcelos, T.: A importância da educação na construção da cidadania. Saber e Educar (12), 109-117 (2007).
30. Zancan, G. T.: Educação científica: uma prioridade nacional. São Paulo em perspectiva, 14, 3-7 (2000).