

Original Article

## The integration of Sustainable Development Goals (SDG) in the Pedagogical Projects of Accounting Courses in Brazil

A integração dos Objetivos de Desenvolvimento Sustentável (ODS) nos Projetos Pedagógicos dos Cursos de Ciências Contábeis no Brasil

José Hilton Santos Aguiar<sup>I</sup> , Sonia Maria da Silva Gomes<sup>I</sup> ,  
Sônia Maria da Silva Monteiro<sup>II</sup> , Fátima de Souza Freire<sup>III</sup> 

<sup>I</sup> Federal University of Bahia, BA, Brazil

<sup>II</sup> Polytechnic Institute of Cávado and Ave, Portugal

<sup>III</sup> University of Brasília, DF, Brazil

### ABSTRACT

**Purpose:** The study aims to analyze how Brazilian Higher Education Institutions (HEIs) with the highest scores in the last National Student Performance Exam (NESP 2018) are integrating the Sustainable Development Goals (SDGs) into the Pedagogical Projects of their Accounting Courses.

**Design/methodology/approach:** Content analysis was performed on 11 Pedagogical Projects of Courses (PPCs), examining 118 categories related to the 17 SDGs and their goals.

**Findings:** SDG 4 (Quality Education) and SDG 9 (Industry, Innovation, and Infrastructure) were found in all PPCs. SDG 2 (Zero Hunger and Sustainable Agriculture), SDG 10 (Reduced Inequalities), and SDG 8 (Decent Work and Economic Growth) appeared in 81.8%, 72.7%, and 54.5% of the PPCs, respectively. On the other hand, no results were found for SDG 14 (Life Below Water), SDG 15 (Life on Land), and SDG 17 (Partnerships for the Goals). For SDGs 4 and 9, we found associations with the corresponding targets 9.5, 9.b, 4.3, 4.4, 4.5, and 4.7.

**Originality/value:** This study represents the first Brazilian effort to understand the pedagogical approaches to the SDGs in Accounting courses within Higher Education Institutions in Brazil. It stands out for using innovative methods, still rarely explored in accounting research, combining qualitative approaches and content analysis with the support of NVIVO software.

**Keywords:** SDGs; Education for sustainability; Accounting; Brazilian higher education

### RESUMO

**Objetivo:** O estudo visa analisar como as Instituições de Ensino Superior (IES) brasileiras com as maiores notas no último Exame Nacional de Desempenho de Estudantes (ENADE 2018) estão integrando os

Objetivos de Desenvolvimento Sustentável (ODS) nos Projetos Pedagógicos dos seus Cursos de Ciências Contábeis.

**Desenho/metodologia/abordagem:** Foi realizada uma análise de conteúdo em 11 Projetos Pedagógicos de Cursos (PPCs), examinando 118 categorias relacionadas aos 17 ODS e suas metas.

**Resultados:** O ODS 4 (Educação de Qualidade) e o ODS 9 (Indústria, Inovação e Infraestrutura) foram encontrados em todos os PPCs. O ODS 2 (Fome Zero e Agricultura Sustentável), ODS 10 (Redução das Desigualdades) e ODS 8 (Trabalho Decente e Crescimento Econômico) apareceram em 81,8%, 72,7% e 54,5% dos PPCs, respectivamente. Por outro lado, não foram encontrados resultados para os ODS 14 (Vida na Água), ODS 15 (Vida Terrestre) e ODS 17 (Parcerias e Meios de Implementação). Para os ODS 4 e 9, encontramos associações com as metas correspondentes 9.5, 9.b, 4.3, 4.4, 4.5 e 4.7.

**Originalidade/valor:** Este estudo representa o primeiro esforço brasileiro para compreender as abordagens pedagógicas dos ODS em cursos de Ciências Contábeis nas Instituições de Ensino Superior no Brasil. Destaca-se pelo uso de métodos inovadores, ainda pouco explorados na pesquisa contábil, combinando abordagens qualitativas e análise de conteúdo com o suporte do software NVIVO.

**Palavras-chave:** ODS; Educação para a sustentabilidade; Contabilidade; Ensino superior brasileiro

## 1 INTRODUCTION

In 2015, the UN launched the 2030 Agenda, comprising 17 Sustainable Development Goals (SDGs) with the target of global implementation by 2030. These objectives are universal, and education, beyond being an independent SDG (SDG 4), plays a central role in promoting sustainable development. Education is essential not only for achieving SDG 4 but also for supporting the other SDGs, which requires educational systems to incorporate these principles into their curricula and pedagogical practices.

The literature highlights four areas of action for Higher Education Institutions (HEIs) to promote the SDGs (Leal Filho et al., 2021; SDSN, 2017): (i) Education, by integrating the SDGs into educational programs; (ii) Research, through the development of studies that contribute to the 2030 Agenda; (iii) Governance, incorporating the SDGs into institutional policies; and (iv) Community Engagement, fostering dialogue and partnerships to strengthen SDG-related actions.

In the field of accounting, research has focused on how Brazilian companies contribute to the SDGs through sustainability reports (Lopes & Eugénio, 2020; Da Silva et al., 2021) and how HEIs address the SDGs in their curricula and activities (Vieira, 2022; Rocha, 2021). Recent studies highlight the need for greater integration of the

SDGs into higher education, especially in Brazil, where few courses have incorporated these objectives into their pedagogical projects (Rocha, 2021).

Given this gap, this study investigates how Brazilian HEIs with the highest scores in the National Student Performance Exam (NESP 2018) are embedding the SDGs into their Accounting courses. The aim is to understand how these institutions are promoting sustainability and the 2030 Agenda in their curricula, thus contributing to the training of professionals equipped to face contemporary challenges. This study seeks to raise awareness among HEIs of the urgency of their contribution to the 2030 Agenda and broaden the debate on sustainability education in accounting.

Thus, this study is justified as a social indicator, as it seeks to analyze how Brazilian HEIs offering Accounting courses have positioned themselves to meet the 2030 Agenda, considering their role in training students in the personal, social, and professional dimensions to deal with current sustainability challenges, and their own role as institutions interacting with the external environment.

This research offers practical contributions by alerting HEIs to the urgency of their cooperation for the 2030 Agenda, given their prominent role in addressing this challenge. Moreover, it aims to advance teaching and learning for sustainability and the SDGs. It also contributes to expanding research in this field of knowledge, which remains underexplored by researchers, especially using qualitative methodologies. Armed with these results, this study aims to help mitigate the various calls for accountants to gain knowledge and skills in accounting for sustainability and other aspects of sustainability, as well as address the unclear involvement of HEIs in accounting education for sustainability, as noted by Cooray, Senaratne, & Gunarathne (2022).

This article is structured into five sections: following this introduction, we present the theoretical framework on approaches to the SDGs in higher education curricula. Next, the methodology and sample are discussed. Subsequently, the study's results and their discussion are presented. We conclude with final remarks, limitations, and suggestions for future research.

## 2 THEORETICAL FRAMEWORK

### 2.1 Education for Sustainability and the Role of Higher Education Institutions

Following the United Nations Conference on the Human Environment in Stockholm (1972), the international community began to focus on Education for Sustainable Development (ESD) and Environmental Education (EE). The concept of Sustainable Development, formalized in the Brundtland Report (1987), suggests meeting present needs without compromising the ability of future generations to meet theirs, integrating economic, social, and environmental sustainability (Elkington, 2012). The Rio and Johannesburg summits reinforced this approach, leading to the creation of international plans for Environmental Education in the 1990s.

Education has become central to preventing and solving environmental problems, with UNESCO proposing Education for Sustainability (EfS) as a convergence point between ESD and EE (Tilbury, 1995; Wu & Shen, 2016). According to Gadotti (2008), sustainable education involves teaching practices for a simple and balanced life, refocusing global efforts on training citizens to contribute to a sustainable world (Barbieri & Silva, 2011).

The United Nations Decade of Education for Sustainable Development (DESD 2005-2014) sought to integrate these values into education to foster behavioral changes towards sustainability. This stimulated reflections in Higher Education Institutions (HEIs), especially in transforming Environmental Education into Education for Sustainable Development (Sherren, 2008). HEIs play a crucial role in generating new knowledge and strategies to achieve sustainable development (Galbraith, 1972; Tilbury, 1995; Jacobi, 2005; Sterling, 2011; Cars & West, 2014).

In the field of accounting, the demand for professionals with sustainability skills has grown, as reporting sustainable performance is increasingly important to stakeholders (Botes, Low, & Chapman, 2014). Although education doesn't offer all solutions, it is seen as key to fostering new relationships between people and the environment (UNESCO, 2010).

## 2.2 The Sustainable Development Goals and Their Teaching in Accounting Courses

The need to incorporate education for sustainability into accounting courses is supported by the Brazilian Constitution, which requires the promotion of environmental education at all levels (Art. 225 § 1º VI, Brazil, 1988) and by Law nº 9.795/99, which establishes the National Policy on Environmental Education. There has been increasing pressure on Higher Education Institutions (HEIs) to include sustainability in accounting curricula (Hopwood, 1990; Segovia & Galang, 2002).

Although the accounting course curriculum guidelines (CNE/CES Resolution nº 10/2004) do not explicitly mention sustainability education, they offer flexibility for adapting content to social and regional changes. As a result, sustainability issues have been introduced into curricular components related to environmental and sustainable practices (Garcia, Araújo, & Bôto, 2019). Though still a minority, these discussions foster a more holistic education and promote ethical reflections within accounting (Bebbington, 1997; Gray et al., 1994).

Business schools, including those for accounting, face the challenge of training professionals with a comprehensive understanding of environmental issues. These professionals, sensitive to ecological, social, political, and educational concerns, develop skills and attitudes to help solve these challenges (Barbieri & Silva, 2011; Jacobi, 2003; Crespo, 2018). In this context, accounting education is seen as essential for successfully addressing sustainability challenges (Botes, Low, & Chapman, 2014).

Although the integration of sustainability in accounting courses is recent and still underexplored (Bebbington & Unerman, 2018; 2020), it shows promise and presents challenges. The 2030 Agenda, adopted by more than 150 world leaders at the 2015 United Nations Summit, reflects this commitment, embodied in 17 Sustainable Development Goals (SDGs) aimed at placing the world on a sustainable and resilient path (United Nations, 2015).

Table 1 – The 17 Sustainable Development Goals

<b>Goal 1</b>	<b>End poverty in all its forms everywhere.</b>
Goal 2	End hunger, achieve food security and improved nutrition, and promote sustainable agriculture.
Goal 3	Ensure healthy lives and promote well-being for all at all ages.
Goal 4	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.
Goal 5	Achieve gender equality and empower all women and girls.
Goal 6	Ensure availability and sustainable management of water and sanitation for all.
Goal 7	Ensure access to affordable, reliable, sustainable, and modern energy for all.
Goal 8	Promote sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all.
Goal 9	Build resilient infrastructure, promote inclusive and sustainable industrialization, and foster innovation.
Goal 10	Reduce inequality within and among countries.
Goal 11	Make cities and human settlements inclusive, safe, resilient, and sustainable.
Goal 12	Ensure sustainable consumption and production patterns.
Goal 13	Take urgent action to combat climate change and its impacts.
Goal 14	Conserve and sustainably use the oceans, seas, and marine resources for sustainable development.
Goal 15	Protect, restore, and promote the sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.
Goal 16	Promote peaceful and inclusive societies for sustainable development, provide access to justice for all, and build effective, accountable, and inclusive institutions at all levels.
Goal 17	Strengthen the means of implementation and revitalize the global partnership for sustainable development.

**Source:** United Nations, 2015

The SDGs were launched in 2015 as a way to replace the Millennium Development Goals (MDGs). The MDGs were eight socio-economic targets that UN member countries committed to achieving by 2015, including: eradicating extreme poverty and hunger; achieving universal primary education; promoting gender equality and empowering

women; reducing child mortality; improving maternal health; combating HIV/AIDS, malaria, tuberculosis, and other diseases; ensuring environmental sustainability; and establishing a global partnership for development (UN, 2001; Brazil, 2013). Therefore, the SDGs represent the latest universal agenda for sustainable development (UN, 2015).

While universities have played a proactive role in supporting the SDGs, actively promoting and implementing these global goals, it is crucial to intensify efforts to integrate them, especially within the curricula of Accounting Courses, which require broader work (Ferrer-Estévez & Chalmeta, 2021; Weybrecht, 2022). Paradoxically, despite the growing awareness of the SDGs, it is notable that most HEIs have yet to incorporate these discussions into their curricula or create adequate learning environments for this purpose (Fang & O'Toole, 2023). Thus, the implementation of the SDGs in universities is still in its early stages (Leal Filho et al., 2021).

### **2.3 Similar Studies**

Within the realm of educational institutions, Bringezu et al. (2016) and Albareda-Tiana et al. (2018) indicate that higher education institutions (HEIs) play a crucial role in achieving the SDGs, mainly by creating means of implementation; developing knowledge and ways to support their implementation; and incorporating the SDG principles into governance and management, for example. In this area, Cottafava et al. (2019) and Annan-Diab and Molinari (2017) assert that there are three specific SDGs for compliance by HEIs: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all (Goal 4); Promote sustained, inclusive and sustainable economic growth, full and productive employment, and decent work for all (Goal 8); and Reduce inequality within and among countries (Goal 10). On the other hand, the United Nations' plan emphasizes that SDG 4, directly associated with all educational institutions, is present in all 17 SDGs, such as in target 3.7, SDG 3, 'Health and well-being'; target 5.6, SDG 5, 'Gender equality'; target 8.6, SDG 8, 'Decent work and economic growth'; target 12.8, SDG 12, 'Responsible consumption and production'; and target 13.3, SDG 13, 'Climate change mitigation' (UN, 2015).

In this sense, it is necessary to emphasize that Brazilian HEIs have been striving to mobilize efforts to include discussions about teaching the SDGs in their course syllabi, curricular components, and events. One example is the Federal University of Uberlândia, which, through a Circular Letter, guided undergraduate course coordinators to include the SDGs in the course syllabi (UFU, 2022); the University of São Paulo (USP), which created the component “EAC 561 – The 17 SDGs and Business Schools”; and the Federal University of Bahia (UFBA), which offers the curricular component “Accounting and the Sustainable Development Goals”, using gamification to promote playful activities for raising awareness and reflection on how the 2030 Agenda can be put into practice in companies and in the daily lives of Accounting and Business Administration students (Gomes et al., 2021).

In this discussion about teaching and learning in Brazil, Rocha (2021) analyzed sustainability education in Accounting programs located in the state of São Paulo, classified in Band 4 of the 2018 Preliminary Course Concept (CPC) of the National Student Performance Exam (NESP). Through qualitative and documentary research in 8 course syllabi, the results proved that these HEIs included the theme of sustainability in their pedagogical projects, and half of the syllabi were classified as having a “strong” level of engagement.

Paradoxically, when citing speeches by representatives of global companies about the new dynamics required by the business environment regarding sustainability and the potential benefits of the SDGs, Weybrecht (2015, p. 85) lists business schools as “closed doors”, “less engaged”, and “underestimated” in implementing the SDGs, despite being considered crucial in the process through education.

This was corroborated in Meireles’ (2021) research, which investigated how methodologies taught in the field of Environmental Sustainability (ES) are perceived and assimilated by students and to what extent these institutions are aligned with the 2030 Agenda at the New University of Lisbon (UNL) in Portugal and the Federal University of Minas Gerais (UFMG) in Brazil. The results showed that although both HEIs demonstrated the development of environmental behavior, the restructuring and adaptation of their curricula to socio-environmental challenges are in an early stage, but committed to achieving the 2030 Agenda.



The study by Cooray, Senaratne & Gunarathne (2022) goes further, presenting how a public accounting university in Sri Lanka engages with the SDGs. The results indicated a gradual introduction of sustainability concepts into the curriculum through external reporting, managerial accounting, governance and ethics, and research dimensions. Through these interventions, the university directly contributed to the achievement of several SDGs, such as SDG 4 (quality education), SDG 8 (decent work and economic growth), SDG 9 (industry and innovation), SDG 12 (sustainable consumption and production), SDG 13 (climate change), and SDG 16 (promotion of peaceful, just, and effective institutions).

Collier, Odell & Rosenbloom (2022) explored whether a business university that quickly introduced sustainable development, without a curriculum overhaul, was effective in engaging students with the UN SDGs and which factors were most important in deepening students' interest. The results suggested that including meaningful, SDG-focused learning activities in the business course increased students' learning and curiosity about the subject, as well as their perception of SDG learning skills after graduation. These achievements were possible, according to the authors, because faculty members at the HEI were highly skilled in the relationship between business and the SDGs.

Silva and Araújo (2022) sought to identify the presence of the SDGs in the syllabi of biology teacher training courses in the Amazon region of Pará. Through content analysis, it was found that, among the five educational institutions examined, SDGs 3, 4, 8, 15, and 16 were present in all syllabi. On the other hand, SDGs 5 and 11 were not found in any of the documents, and SDGs 10, 12, and 14 appeared in 80% of the analyzed documents.

In the Economics course, Guollo, Fabris & Watanabe (2021) sought to stimulate discussions about the SDGs, relating them to the subjects taught at UNESC. Through option analysis, the conclusions indicated that the subjects are related to SDG 4, SDG 8, and SDG 9, as they also serve as transversal tools.

## 3 METHODOLOGY

### 3.1 Sample

To define the scope of Brazilian HEIs for Accounting courses, only those that obtained the highest score (five) in the last NESP (National Student Performance Exam) in 2018 were selected. In the process of narrowing down the scope of HEIs based on the highest scores, the following assumptions were made: a) The evaluation criteria are standardized and provide a fair comparison between institutions, highlighting those with excellence; b) There is a diverse representation of HEIs that stand out across Brazilian geographical regions, whether public or private; and; c) These HEIs may adopt current methodologies and high-quality teaching resources, making them models for other HEIs.

It is worth noting that other studies have already used NESP scores as a way to limit the population, with the premise that these HEIs have a distinct concern for the student's education profile (FERREIRA et al., 2016; FERRARI, 2016).

To access information about the scores obtained in the 2018 NESP by HEIs offering the Accounting course, the E-MEC website was visited (<https://emec.mec.gov.br/>) in April 2022. We selected all HEIs in Accounting, whether in-person or distance learning, public or private, and regardless of any other characteristics, to gauge the number of operational HEIs and subsequently select only those with the highest NESP scores. The search resulted in a list of 1,105 Accounting courses in Brazil, with only 44 achieving the highest score (score 5).

It is reiterated that, after reviewing and analyzing the search results, it was found that some HEIs appeared in duplicate due to the Accounting course being offered in more than one shift, with both shifts being evaluated with the highest score. These included: Federal University of Bahia (BA), University of Brasília (DF), and Federal University of Juiz de Fora (MG), which reduced the sample to 41 HEIs. It was also found that the search result on the E-MEC website indicated the highest score for HEIs that

participated in NESP in years prior to 2018, such as the Federal Fluminense University (2009) and Doctum College of Guarapari (2015), which were removed from the analysis. These occurrences reduced the number of HEIs analyzed in this study to 39.

Next, the websites of the 39 HEIs were visited to search for their curriculum plans (PPC). Contacts were made by email, phone, and WhatsApp when no response was received, or negative responses were given, citing “no authorization to share the PPC by the HEIs.” Therefore, Table 2 indicates the final composition of the study sample, with a total of 11 HEIs. For the Federal University of Bahia (UFBA), IBEMEC College (RJ/BH), and University of Brasília (UNB), only one PPC was analyzed due to the similarity of the documents.

Table 2 – Sample characterization

COUNTY	HEIs	ACRONYM	YEAR OF PCC	CATEGORIE	MODALITY
BA	Universidade Federal da Bahia - daytime	UFBA	2006	Public	Presential
	Universidade Federal da Bahia - night time	UFBA	2008	Public	Presential
BH	Faculdade IBMEC	IBMEC	2016	Private	Presential
RJ		IBMEC	2016	Private	Presential
DF	Universidade De Brasília - fulltime	UNB	2019	Public	Presential
	Universidade De Brasília - night time	UNB	2019	Public	Presential
DF	Faculdades Integradas da UPIS	UPIS	2016	Private	Presential
MG	Universidade Federal de Juiz De Fora	UFJF	2015	Public	Presential
MG	Universidade Federal de Viçosa	UFV	2013	Public	Presential
PI	Universidade Federal do Piauí	UFPI	2014	Public	Presential
PR	Universidade Tecnológica Federal do Paraná	UTFPR	2019	Public	Presential
RJ	Faculdade Presbiteriana Mackenzie Rio	FPM	2020	Private	Presential
RN	Universidade Federal Rural Do Semiárido	UFERSA	2012	Public	Presential
RS	Universidade Federal do Rio Grande do Sul	UFRGS	2018	Public	Presential

Source: Research data 2023

To preserve the anonymity in the expression and discussion of results, even though the PPCs were made publicly available, the names of the institutions were randomly replaced with acronyms at the time of writing, such as IE1, IE2, IE3, IE4, IE5, IE6, IE7, IE8, IE9, IE10, and IE11.

### **3.2. Data Collection Method**

To understand how the SDGs are included in the PPCs of Accounting courses in Brazil that scored the highest in the last NESP 2018, a descriptive and documentary research was conducted. While descriptive research observes, records, correlates, and describes facts or phenomena of a certain reality without manipulating them, documentary research aims to analyze and interpret materials to introduce some meaning or value (GIL, 1999; BEUREN, 2003).

With the PPCs in hand, the qualitative approach and the Content Analysis and Data Interpretation instrument proposed by Bardin (2011) were used. From this perspective, the phases of pre-analysis (organization of the material to be analyzed), analytical description (coding and categorization of the analysis), and inferential interpretation (reflection of the findings under the theoretical-conceptual framework and literature review) were considered.

Therefore, in the pre-analysis stage, a preliminary reading of the PPCs was conducted, and coding by frequency - repetition in content (Campos, 2004) was defined. It is reiterated that other studies using content analysis and the SDGs used the same categorization criterion for content analysis (Griebeler, 2019; Costa, 2019).

NVivo 12.2 software was used to identify frequent keywords for each SDG and their respective targets. It is worth noting that the adaptation of the SDGs and targets by the Institute of Applied Economic Research - IPEA (Brazil, 2019) to the Brazilian context was used, believing that they could indicate more reliable and representative results with the drafting of the Pedagogical Projects in Portuguese, such as target 4.2, where in the UN text, the term “primary/elementary education” corresponds in Brazil to “ensino

fundamental.” Then, it was defined in NVivo that the resulting keywords would have a minimum length of three characters, and the 15 most frequent keywords indicated by the results for each SDG and target were used. Additionally, generic connection keywords and out-of-context terms that each SDG reports were rejected as shown in Table 3.

Table 3 – List of keywords searched for each SDG

SDG	Keywords	Qty.	SDG	Keywords	Qty.
1	<u>poverty</u> ; poor; <u>vulnerability</u> ; dimensions; men; places;	6	10	institutions; reduce; costs; inequality; migration; policy.	6
2	Food; markets; agricultural(s); plants; productivity; <b>food</b> .	6	11	people; insurance; inclusive; resilient; settlements; cities; affordable; <b>urban</b>	8
3	<u>Health</u> ; illnesses; medicine; mortality; deaths; born; transmissible; vaccines; essentials; risks.	10	12	<u>consumption</u> ; production; foods; raise awareness (r) (action); <u>waste</u> ;	5
4	<u>Education</u> ; quality; learning; teaching; formation; fundamental.	6	13	Climate; changes; adaptation; mitigation; alert; catastrophes; climate; natural; <b>disaster</b>	9
5	<u>Women</u> ; girls; equality; conference; rights; empower; genre;	7	14	<u>marine</u> ; oceans; <u>fishing</u> ; scientific; sea; pollution; resources; fish.	8
6	<u>Water</u> ; <u>sanitation</u> ; to secure; equitable; scarcity; recycling;	6	15	<u>ecosystems</u> ; biodiversity; degradation; <u>species</u> ; forests; conservation; protect; desertification; Earth; terrestrial.	10
7	<u>Energy</u> ; energetic; clean; modern; efficiency; energies; renewable;	7	16	levels; responsible; <u>violence</u> ; combat; justice; abuse;	6
8	work; job; GDP; <u>growth</u> ; promote; economic; financial;	7	17	training; partnerships; mobilization; cooperation; Implementation; International.	6
9	<u>infrastructure</u> ; search; innovation; <u>industry</u> ; <u>technology</u> .	5			
TOTAL					118

Source: Research data 2023

The keywords underlined in Table 3 indicate those present as categories in the studies of Griebeler (2019) and Costa (2019); those in bold were included because they were not indicated by the methodological procedures used in this study but were a search criterion in the two studies mentioned above.

The latest version of QRS NVivo 12.2 was also used to analyze the codes due to its satisfactory performance in providing different resources for the identification and analysis of the studied theme. Additionally, the search tools were structured to present the keywords with the same roots, and their occurrence was then analyzed in relation to the context and association with the objectives and targets of the 2030 Agenda. The 118 keywords selected and presented in Table 3 among the 11 PPCs of the institutions that composed the final sample of this study resulted in 8,316 references, where, after analysis, 311 were related to the study's objectives as presented and discussed in the results and discussions.

## 4 RESULTS AND DISCUSSIONS

The presence of the SDGs in the 11 PPCs of the higher education institutions (HEIs) considered in this study was analyzed based on the search and investigation of the relationships of the keywords indicated in Table 3 with the context of the objectives and targets of the 2030 Agenda, as shown in Table 4.

Table 4 – Occurrence of the SDGs in the PPCs

	IE1	IE2	IE3	IE4	IE5	IE6	IE7	IE8	IE9	IE10	IE11	TOTAL
ODS 1				X		X	X		X	X		5
ODS 2	X	X	X	X	X	X	X		X	X		9
ODS 3				X		X	X					3
ODS 4	X	X	X	X	X	X	X	X	X	X	X	11
ODS 5			X				X			X		3
ODS 6									X	X		2
ODS 7	X									X		2
ODS 8	X		X		X	X			X	X		6
ODS 9	X	X	X	X	X	X	X	X	X	X	X	11
ODS 10			X	X		X	X	X	X	X	X	8
ODS 11						X	X		X	X	X	5
ODS 12	X					X	X	X				4
ODS 13	X		X	X		X	X					5
ODS 14												0
ODS 15												0
ODS 16						X			X	X		3
ODS 17												0
TOTAL	7	3	7	7	4	11	10	4	9	11	4	77

Source: research data 2023

It can be observed that SDG 4 (Quality Education) and SDG 9 (Innovation and Infrastructure) were found in all PPCs. SDG 2 (Zero Hunger), SDG 10 (Reduced Inequalities), and SDG 8 (Decent Work and Economic Growth) were found in 81.8%, 72.7%, and 54.5% of the PPCs, respectively. On the other hand, no results were found for SDG 14 (Life Below Water), SDG 15 (Life on Land), and SDG 17 (Partnerships for the Goals). These findings partially align with those found by Silva and Araújo (2022) in biology courses, as SDG 4 was common to all PPCs, and SDG 10 was present in more than half of the analyzed PPCs. The data are also similar to those found by Guollo, Fabris, and Watanabe (2021) when analyzing the programs of Economics courses, suggesting discussions on SDG 4 and SDG 9 due to the transversal nature of these goals, as the analysis of PPCs encompasses the objectives of the curricular components.

On the other hand, the lack of identification of SDGs 14 (Life Below Water), 15 (Life on Land), and 17 (Partnerships for the Goals) in the PPCs of the HEIs raises concerns. The absence of these SDGs may be explained by the prioritization of specific teaching focuses and the difficulty in establishing various partnerships. The lack of teaching around these topics could lead to fragmented training in sustainability for Accounting students, including hindering their ability to address complex issues in corporate environments, for example.

Considering that the analysis sought to relate the 17 SDGs and their 169 respective targets with the PPCs, it can be concluded that the Accounting courses of the HEIs considered by the study are able to project satisfactory perspectives to contribute to sustainable development and the SDGs, mainly through quality education; innovation and infrastructure; zero hunger; reduced inequalities; and decent work and economic growth. This consideration goes beyond the ideas of Cottafava et al. (2019) and Annan-Diab and Molinari (2017), who assure the existence of three specific SDGs for compliance by HEIs: ensuring inclusive and equitable quality education and promoting lifelong learning opportunities for all (Goal 4); promoting sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all (Goal 8); and reducing

inequality within and among countries (Goal 10); as SDG 2 (Zero Hunger) and SDG 9 (Innovation and Infrastructure) were also found in more than half of the Accounting PPCs.

On the other hand, there is concern regarding the UN's statement (UN, 2015) that SDG 4 (Quality Education), which is directly associated with HEIs, is present in all 17 SDGs, exemplified by targets 3.7, 5.6, 8.6, 12.8, and 13.3. However, except for SDG 8, this study's results pointed to the presence of SDG 3 (Good Health and Well-being), SDG 5 (Gender Equality), SDG 12 (Responsible Consumption and Production), and SDG 13 (Climate Action) in less than 37% of the PPCs. Therefore, it can be assumed that discussions on education in health and well-being, gender equality, responsible consumption and production, and climate change may have less prominence in HEIs. This supposition raises extreme concern since, among other factors, education around the discussion of climate change is a sine qua non condition for the idea of sustainable development as one that "meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED, 1987).

However, it is essential to consider that the PPCs analyzed may not accurately reflect the actions that the HEIs' structuring bodies adopt to promote sustainability education and the SDGs. This assumption is supported by the analysis of the PPC of the Federal University of Bahia (UFBA), which does not present evidence of education for the SDGs, and studies point to reports of students' experiences for learning the 17 Goals of the 2030 Agenda (Gomes et al., 2021). This assertion gains more robustness in the analysis of Table 1 in the "year of PPC" column and by verifying that the UFBA PPCs were updated only in 2006 and 2008 for the daytime and nighttime courses, respectively, which is before the launch of the 2030 Agenda. It is suggested that HEIs keep the course identity document (PPC) updated so that it accurately reflects their position and actions. Thus, it can also serve as a source for observatories monitoring HEIs' contributions to achieving the SDGs.

It should be noted that the need to update PPCs to reflect the institutions' position and actions in favor of the SDGs is already being understood and adopted by



some HEIs, such as the Federal University of Uberlândia (UFU). This university, through an internal Circular Letter (UFU, 2022), provided guidelines for course coordinators to include the SDGs in their respective Pedagogical Projects.

Next, the context of the occurrence of SDGs present in all PPCs (SDG 4 and SDG 9) was analyzed to understand what the PPCs say and to which targets they may contribute. The results of the identified targets in the context analysis are presented in Table 5.

Table 5 – SDG 4 and 9 and Targets Identified in All PPCs

SDG	TARGETS IDENTIFIED IN THE PPC
SDG 4 - Quality Education)	<p><b>4.3</b> “By 2030, ensure equal access for all men and women to quality technical and higher education at affordable prices, including university”</p> <p><b>4.4</b> “By 2030, substantially increase the number of young people and adults who have relevant skills, including technical and vocational skills, for employment, decent work and entrepreneurship”</p> <p><b>4.5</b> By 2030, eliminate gender disparities in education and ensure equal access to all levels of education training for the most vulnerable, including people with disabilities, indigenous people and children in vulnerable situations.</p> <p><b>4.7</b> “By 2030, ensure that all students acquire the knowledge and skills necessary to promote sustainable development...”;</p> <p><b>4.b</b> “By 2020, substantially expand the number of scholarships globally...”.</p>
SDG 9 - Innovation and Infrastructure)	<p><b>9.5</b> “Strengthen scientific research, improve technological capacities of industrial sectors in all countries, particularly developing countries, by 2030...”</p> <p><b>9.b</b> “Support national technological development, research and innovation in developing countries.”</p>

Source: Research data 2023

Table 5 reveals that when the PPCs mention SDG 9, the analyzed contexts are strongly associated with target 9.5 “Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, particularly developing countries, including by 2030...” and 9.b “Support domestic technology development, research, and innovation in developing countries,” as can be identified in the excerpts:

“... The teacher must have research as a daily attitude, not just becoming a repeater of other people’s ideas but must build new knowledge about what they teach...” (PPC IE10 p. 28).

“... In this context, the Accounting Course is aligned: ... Encouraging scientific research aimed at the development of science and technology...” (PPC IE8 p. 28).

These findings corroborate the indications of the International Federation of Accountants (IFAC, 2016) that Accounting can contribute, among others, to achieving SDG 9, including strengthening scientific research and innovation for companies. In this context, historically, Accounting has contributed to society through research that promotes the identification, measurement, and recognition of entities' assets, especially in the Environmental area (Schio et al., 2019; Lopes & Eugénio, 2020; Da Silva et al., 2021; Romão & Câmara, 2022; Santa et al., 2022).

SDG 4 refers to the very reason for the existence of HEIs, including goals that directly refer to Higher Education, which, deductively, were the most frequent in the findings of the analysis, such as: 4.3 "By 2030, ensure equal access for all men and women to affordable and quality technical, vocational, and tertiary education, including university"; 4.4 "By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs, and entrepreneurship"; 4.5 "By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples, and children in vulnerable situations"; 4.7 "By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development..."; and 4.b "By 2020, substantially expand globally the number of scholarships...".

The excerpts below exemplify how SDG 4 was identified in the PPC content:

"We also seek to align the curricular content and the desired profile for the labor market inclusion of students with disabilities, reduced mobility, or special educational needs and the characteristics given by the specificity of the disability situation or other situations." (PPC IE1 p. 138).

"The course's concern with environmental issues is also highlighted, complying with specific legislation... integrating concepts and values about education and environmental responsibility in the course curriculum at this institution." (PPC IE6 p. 37).

"It is worth mentioning that graduates have... experience with information technology through accounting software..." (PPC IE2 p. 12).

"The institution joined the University for All Program (PROUNI) as soon as it was announced by the Ministry of Education." (PPC IE5 p. 25).

Thus, it is observed that the PPCs have been related to SDG 4 through an inclusive policy of student access and retention, promoting skills for the labor market, empowering diversity, providing scholarships, and education for sustainability. The importance of accounting education to promote knowledge and skills for sustainability (Hazelton & Haigh, 2010) and to address the current demands of contemporary issues (SDGs) is emphasized, as the labor market continues to demand accountants with sustainability skills (Botes, Low & Chapman, 2014), and society needs agents who can change reality and ensure a more responsible future (Galbraith, 1972; Tilbury, 1995; Jacobi, 2005; Sterling, 2011; Cars & West, 2014).

On the other hand, the search for the SDGs in PPCs did not find relationships associated with SDG 17 “Partnerships for the Goals: Strengthen the means of implementation and revitalize the global partnership for sustainable development”; SDG 14 “Life Below Water: Conserve and sustainably use the oceans, seas, and marine resources for sustainable development”; and SDG 15 “Life on Land: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, halt and reverse land degradation, and halt biodiversity loss.” Although these SDGs were not indicated as specific for HEIs (Cottafava et al., 2019; Annan-Diab & Molinari, 2017), and conversely, Silva and Araújo (2022) did not find SDG 5 (Gender Equality) and SDG 11 (Sustainable Cities and Communities) in the five PPCs analyzed in the biology course, it is emphasized that education is the SDG that permeates all others (UN, 2015). Therefore, it is possible to develop them through education. It is also reinforced that HEIs play an essential role in creating mechanisms for implementation, development, and support for incorporating the SDGs (Bringezu et al., 2016; Albareda-Tiana et al., 2018).

## 5 CONCLUSION

This study aimed to analyze the integration of the Sustainable Development Goals (SDGs) in 11 Pedagogical Course Projects (PPCs) of Accounting courses from Brazilian

Higher Education Institutions (HEIs) with the highest scores in the last NESP conducted in 2018. This objective was achieved using innovative and still under-explored methods in accounting research: the qualitative approach and content analysis with the support of NVIVO software. The findings show that the analyzed courses can project satisfactory perspectives to contribute to sustainable development and the SDGs.

The results allowed us to identify that there is full integration of two out of the seventeen SDGs in the PPCs: SDG 4 (Quality Education) and SDG 9 (Innovation and Infrastructure). The finding of SDG 4 in all analyzed PPCs is not surprising, as even with some limitations, it is the objective of all HEIs to provide quality education; likewise, it is believed that the identification of SDG 9 is associated with the emphasis of the Accounting course being aimed at adding value to companies, also through innovations. Additionally, it was partially found in the institutional document: SDG 2 (Zero Hunger) in 81.8%; SDG 10 (Reduced Inequalities) in 72.7%; and SDG 8 (Decent Work and Economic Growth) in 54.5% of PPCs. The absence of discourses related to SDGs 14 (Life Below Water), 15 (Life on Land), and 17 (Partnerships for the Goals) was an unexpected finding, considering that these are fundamental themes for environmental preservation and climate change mitigation.

Despite the possibility that the Pedagogical Projects do not reflect the HEIs' commitment to the SDGs due to the lack of updates, there is a possibility that some courses did not understand the need and urgency to prepare Accounting students to deal with current sustainability issues, considering the growing demand from society and companies for accounting professionals with these skills, whether to incorporate the 2030 Agenda into the company's activities or to describe actions in favor of the SDGs in Sustainability Reports.

The results also indicated that regarding the SDGs present in all PPCs, SDGs 4 and 9 were associated with strengthening scientific research and innovation; inclusive policy for student access and retention, promoting skills for the labor market, empowering diversity, providing scholarships, and education for sustainability, corresponding to targets 9.5; 9.b; 4.3; 4.4; 4.5; and 4.7 of the SDGs.

Based on the data from this study and the growing demand for accounting education that goes beyond technical skills, focusing on developing competencies specific to sustainability and contemporary challenges represented by the SDGs, it is recommended that policymakers establish minimum and mandatory guidelines for including sustainability and the SDGs in accounting education. Additionally, it is suggested that Higher Education Institutions (HEIs) reformulate their Pedagogical Course Projects (PPCs) to deepen the discussion on sustainability and the SDGs, ensuring that these themes are treated as mandatory curricular components.

It is essential to acknowledge the limitation of this research, as the sampling criteria did not include HEIs that have also implemented the SDGs in their PPCs. This limitation may result in restricted results. Furthermore, the method of selecting categories for research and analyzing the occurrence of SDGs in PPCs may not reflect all possibilities of associations with the 2030 Agenda. The analysis of the Institutional Development Plan (PDI) of the Institutional Pedagogical Project (PPI) alongside the Pedagogical Course Project (PPC) of Accounting at an HEI and a comprehensive reading of the documents, for example, could provide a more complete understanding of the 2030 Agenda challenge. Therefore, it is recommended that future research delve into analyses considering these limitations to provide a better understanding of the analyzed phenomenon.

## REFERENCES

- Albareda-Tiana, S., Vidal-Ramentol, S., Fernandez-Morilla, M., (2018). Implementação dos objetivos de desenvolvimento sustentável a nível universitário. *Int. J. Sustentar. Alta Educ*, 19(3), 473-497.
- Annan-Diab, F., Molinari, C. (2017). Interdisciplinaridade: abordagem prática para o avanço da educação para a sustentabilidade e para os objetivos de desenvolvimento sustentável. *Int J Manag Rev Ed* 15, 73-83.
- Barbieri, J. C. & Silva D. (2011). Desenvolvimento sustentável e educação ambiental: uma trajetória comum com muitos desafios. *Revista Adm. Mackenzie*, 12(3), 51-82.
- Botes, V., Low, M. & Chapman, J. (2014). Is accounting education sufficiently sustainable?. *Sustainability Accounting, Management and Policy Journal*, 5(1), 95-124.

- Constituição da República Federativa do Brasil: promulgado em 5 de outubro de 1988.* (1988). Brasília: Senado Federal, Coordenação de Edições Técnicas.
- Bringezu, S., Potocnik, J., Schandl, H., Lu, Y., Ramaswami, A., Swilling, M., Suh, S., (2016). Governança multiescalar de recursos naturais sustentáveis usados desafios e oportunidades para monitoramento e desenvolvimento institucional em nível nacional e global. *Sustentabilidade*, 8(8).
- Campos, C.J.G. (2004). Método de análise de conteúdo: ferramenta para a análise de dados qualitativos no campo da saúde. Revisão. *Rev. Bras. Enferm.* 57 (5).
- Cars, M. & West, E. E. (2014). Education for sustainable society: attainments and good practices in Sweden during the United Nations Decade for Education for Sustainable Development (UNDESD). *Environment, Development and Sustainability*.
- Collier, E., Odell, K.E. & Rosenbloom, A. (2022). Teaching sustainable development: an approach to rapidly introducing the UN sustainable development goals into an undergraduate business curriculum. *Journal of Global Responsibility*, 13 (4), 361-379.
- Cooray, T., Senaratne, S., Gunarathne, N. (2022). Engagement with Sustainable Development Goals in Accounting Education: The Case of a Public University in Sri Lanka. In Özturk, M. (eds). *Engagement with Sustainable Development in Higher Education*. Springer, Cham. (Sustainable Development Goals Series)
- Cottafava, D., Cavagli A. G., Corazza, L. (2019). Educação de metas de desenvolvimento sustentável por meio do envolvimento ativo dos alunos. *Sustentar. Conta. Gerenciar Pol. J* 10 (3), 521-544.
- Crespo, S. (2018). Educar para a sustentabilidade: a educação ambiental no programa da agenda 21. In: Noal, F. O.; Reigota, M.; Barcelos, V. H. L. (Orgs.). *Tendências da Educação ambiental brasileira*. Santa Cruz do Sul: EDUNISC.
- Da Silva, B. S., de Queiroz, J. N., da Silva, R. C., & Francisco, J. R. de S. (2021). Ações adotadas pelas empresas da b3 alinhadas com os 17 objetivos de desenvolvimento sustentável (ODS): uma análise dos relatórios de sustentabilidade. *Revista Mineira De Contabilidade*, 22(2), 37-50. doi: <https://doi.org/10.51320/rmc.v22i2.1217>
- Elkington, J. (2012). *Sustentabilidade, canibais com garfo e faca*. São Paulo: M. Books do Brasil Editora Ltda.
- Fang, J., & O'Toole, J. (2023). Embedding sustainable development goals (SDGs) in an undergraduate business capstone subject using an experiential learning approach: A qualitative analysis. *The International Journal of Management Education*, 21(1), 100-749.
- Ferrer-Estévez, M. & Chalmeta, R. (2021). Integrating Sustainable Development Goals in educational institutions. *The International Journal of Management Education*, 19(2), 100-494, ISSN 1472-8117.

- Gadotti, M. (2008). Educar para a sustentabilidade. *Inclusão Social*, 3,(1). <<http://hdl.handle.net/20.500.11959/brapci/101000>>.
- Galbraith, K. (1972). *The New Industrial State* (2a ed). London: Penguin Group.
- Garcia, S; Procópio de Araujo, A; Bôto, G. (2019). O ensino de Contabilidade Ambiental e Sustentabilidade nos cursos de Ciências Contábeis. *VI Conference: CSCA South America Conference*, 1-18.
- Gomes, S.M.S.; Aguiar, J.H.S.; Santiago, Y.S.; Ribeiro, V.G.S.A. (2021). A concepção da Gamificação no fomento do conhecimento sobre os ODS. *Anais do 21º USP International Conference in Accounting*. São Paulo, SP, Brasil.
- Gray, R.H., Bebbington, J. & McPhail, K. (1994). Teaching ethics in accounting and the ethics of accounting teaching: educating for immorality and a possible case for social and environmental accounting education. *Accounting Education*, 3 (1), 51-75.
- Guollo, P.; Fabris, T.R.; Watanabe, M. (2021). A matriz curricular do curso de ciências econômicas da UNESCO sob a ótica dos objetivos de desenvolvimento sustentável (ODS). *Anais Seminário de Ciências Sociais Aplicadas*.
- Hazelton, J. & Haigh, M. (2010). Incorporating sustainability into accounting curricula: lessons learnt from an action research study. *Accounting Education: An International Journal*, 19 (1/2),159-178.
- Hopwood, A.G. (1990). Ambiguity, knowledge and territorial claims: some observations on the doctrine of substance over form – a review essay. *British Accounting Review*, 22 (1), 79-88.
- International Federation of Accountants – IFAC (2016). The 2030 Agenda for Sustainable Development: A Snapshot of the Accountancy Profession’s Contribution. *International Federation of Accountants*.
- Jacobi, P. (2003). Educação ambiental, cidadania e sustentabilidade. *Cadernos de Pesquisa*, (118), p.189-205.
- Jacobi, P. R. (2005). Educação ambiental: o desafio da construção de um pensamento crítico, complexo e reflexivo. *Educ. Pesqui.*,31 (2), 233-250.
- Leal Filho, W., Frankenberger, F., Salvia, A.L., Azeiteiro, U., Alves, F., Castro, P., Will, M., Platje, J., Lovren, V. O., Brandli, L., Price, E., Doni, F., Mifsud, M. and Ávila, L.V. (2021). A framework for the implementation of the Sustainable Development Goals in university programmes *Journal of Cleaner Production*, 299, 126915.
- Lopes, S. & Eugénio, T. (2020). Relato não financeiro no setor das águas minerais naturais: relação ODS e métricas. *Jornal de Contabilidade*, 44(472/3), 4-21. ISSN 0870-8789.

- Meireles, A.F. (2021). *As Instituições de Ensino Superior enquanto agentes formadores para uma sociedade ambientalmente sustentável* (Dissertação de mestrado). Repositório Científico do Instituto Politécnico de Lisboa, Escola Superior de Comunicação Social, Lisboa, Portugal.
- Rocha, R. C. (2021). Sustentabilidade nos cursos de graduação em ciências contábeis do estado de São Paulo: uma análise a partir de projetos pedagógicos. (Dissertação de mestrado, Programa de Pós-Graduação em Sustentabilidade, Centro de Economia e Administração). Pontifícia Universidade Católica de Campinas, Campinas, SP, Brasil.
- Romão, B. J. P.; Câmara, R. P. de B. (2022). Relações entre Sustentabilidade Corporativa e Desempenho Organizacional sob a Ótica dos Objetivos do Desenvolvimento Sustentável. *RC&C - Revista Contabilidade e Controladoria*, Curitiba, 14, (2), p.43-58.
- Santa, S.L.B.; Souza e Silva, R.S.M. de; Neiva, S.S.; Guerra, J.B.S.O.A. (2022). Cidades e comunidades sustentáveis: como a controladoria socioambiental pode contribuir para os objetivos do desenvolvimento sustentável até 2030. In: *Editora e-Publicar - Variantes do Meio Ambiente: Atuação, interdisciplinaridade e Sustentabilidade*.
- Schio, N.S.; Mazzioni, S.; Moura, G.D.De; Magro, C.B.D. (2019). Objetivos de Desenvolvimento Sustentável e as Empresas Participantes do Mercado Acionário Brasileiro. *Anais do 19º USP International Conference in Accounting*. São Paulo, SP, Brasil.
- SDSN Australia/Pacific (2017). *Getting Started with the SDGs in Universities: A Guide for Universities, Higher Education Institutions, and the Academic Sector, Australia, New Zealand and Pacific Edition*. Sustainable Development Solutions Network – Australia/Pacific, Melbourne.
- Segovia, V.M. and Galang, A.P. (2002). Sustainable development in higher education in the Phillipines: the case of Miriam College. *International Journal of Sustainability in Higher Education*, 3 (3), 288-296.
- Sherren, K. (2008). A history of the future of higher education for sustainable development. *Environmental Education Research*, 14 (3), 238-256.
- Silva, N. C. da, & Araújo, M. F. F. de. (2022). The SDG and the perspective of education for sustainability in the PPC's of undergraduate biology courses in the Amazon region of Pará. *Sustainability in Debate*, 13(2), 32-66.
- Sterling, S. (2011). Transformative Learning and Sustainability: sketching the conceptual ground. *Learning and Teaching in Higher Education*,(5).
- Tilbury, D. (1995). Environmental Education for Sustainability: defining the new focus of environmental education in the 1990s, *Environmental Education Research*, 1(2), 195-212. <doi: 10.1080/1350462950010206>



- UFU. Universidade Federal de Uberlândia. (2022). *Ofício Circular N° 1/2022/CGODS/REITO-UFU*. Uberlândia, MG: UFU. Recuperado de: <[https://ufu.br/sites/ufu.br/files/media/documento/oficio\\_circular\\_no\\_1\\_2022\\_cgods\\_reito\\_ufu.pdf](https://ufu.br/sites/ufu.br/files/media/documento/oficio_circular_no_1_2022_cgods_reito_ufu.pdf)>.
- UN. United Nations(2015). *Transforming our world: the 2030 Agenda for Sustainable Development*. Nova Iorque. Recuperado de: <[www.un.org/ga/search/view\\_doc.asp?symbol=A/RES/70/1&Lang=E](http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/70/1&Lang=E)>.
- Unesco. (2010) *Climate Change Education for Sustainable Development: the UNESCO Climate Change Initiative*. Recuperado de < <https://www.gcedclearinghouse.org/node/511?language=fr>>. Referência não encontrada no texto com o ano citado
- Vieira, D. (2022). *Aplicação dos Objetivos de Desenvolvimento Sustentável (ODS) no Centro Socioeconômico (CSE) da UFSC*. (Trabalho de Conclusão do Curso graduação em Administração) – Universidade Federal de Santa Catarina, Centro Socioeconômico, Florianópolis, 2022.
- WCED, 1987. *Comissão Mundial sobre Meio Ambiente e Desenvolvimento: Nosso Futuro Comum*. Oxford: Oxford University Press. <[https://idl-bnc-idrc.dspacedirect.org/bitstream/handle/10625/152/WCED\\_v17\\_doc149.pdf?sequence](https://idl-bnc-idrc.dspacedirect.org/bitstream/handle/10625/152/WCED_v17_doc149.pdf?sequence)>
- Weybrecht, G. (2015). *Management Education and the Sustainable Development Goals e Get Engaged*. AACSB International. Retirado de <<http://www.aacsb.edu/blog/2015/october/management-education-and-the-sustainable-development-goals-get-engaged>>
- Weybrecht, G. (2022). Business schools are embracing the SDGs – But is it enough? – How business schools are reporting on their engagement in the SDGs. *The International Journal of Management Education*, 20(1), 100589. <https://doi.org/10.1016/j.ijme.2021.100589>
- Wu, Y.-C.J. and Shen, J.-P. (2016). Higher education for sustainable development: a systematic review. *International Journal of Sustainability in Higher Education*, 17(5), 633-651.

## AUTHORS

### 1 – José Hilton Santos Aguiar

Institution: Federal University of Bahia, Salvador – Bahia, Brazil

Master in Accounting from Federal University of Bahia

Orcid: <https://orcid.org/0000-0002-2642-8342>

Email: [hton87@gmail.com](mailto:hton87@gmail.com)

## 2 – Sonia Maria da Silva Gomes

Institution: Federal University of Bahia, Salvador – Bahia, Brazil

PhD in Production Engineering from the Federal University of Santa Catarina

Orcid: <https://orcid.org/0000-0003-2024-4419>

Email: soniagomes3@gmail.com

## 3 – Sónia Maria da Silva Monteiro

Institution: Instituto Politécnico do Cávado e Ave – Barcelos, Portugal

PhD in Management Sciences (Accounting) at the University of Santiago de Compostela (Spain)

Orcid: <https://orcid.org/0000-0003-2149-4962>

Email: smonteiro@ipca.pt

## 4 – Fátima de Souza Freire

Institution: University of Brasília; Brasília – Federal District, Brazil

Post-doctorate in Socio-environmental Accounting from the University of Saint Andrews, Scotland

Orcid: <https://orcid.org/0000-0003-1133-5087>

Email: ffreire51@gmail.com

## Contribution of authors

Contribution	[Author 1]	[Author 2]	[Author 3]	[Author 4]
1. Definition of research problem	✓	✓		
2. Development of hypotheses or research questions (empirical studies)	✓	✓		
3. Development of theoretical propositions (theoretical work)	✓	✓		
4. Theoretical foundation / Literature review	✓	✓	✓	✓
5. Definition of methodological procedures	✓	✓	✓	✓
6. Data collection	✓	✓		
7. Statistical analysis	✓	✓	✓	✓
8. Analysis and interpretation of data	✓	✓	✓	✓
9. Critical revision of the manuscript	✓	✓	✓	✓
10. Manuscript writing	✓	✓	✓	✓
11. Other (please specify)				

**Conflict of Interest**

*The authors have stated that there is no conflict of interest.*

**Copyrights**

*Authors of articles published by ReA/UFSM retain the copyright of their works.*

**Plagiarism Check**

*The ReA/UFSM maintains the practice of submitting all documents approved for publication to the plagiarism check, using specific tools, e.g.: Turnitin.*

**Edited by**

*Jordana Marques Kneipp*