
STUDY OF THE INSTITUTIONAL ENVIRONMENT FOR THE INSERTION OF THE SUSTAINABILITY THEME IN UNDERGRADUATE ACCOUNTING SCIENCES COURSES IN PARANÁ: PRACTICAL RECOMMENDATIONS TO INSTITUTIONAL ACTORS

Anne Carolina dos Santos ¹

Marguit Neumann ²

Kerla Mattiello ³

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ABSTRACT

The general objective of this article was to investigate how the institutional environment contributes to the insertion of the sustainability theme in undergraduate Accounting Sciences courses at Paraná's public universities. The specific objective was to propose practical recommendations to institutional actors as to the inclusion of sustainability in said courses. Such objectives were achieved through interviews held with course coordinators; thus, 18 recommendations were developed for the main actors involved in the institutional environment of the courses, focusing on the insertion of the theme. For data processing, content analysis was used. The results indicate that the institutional environment contributes by having the theme valued by society and students, with interference from competition. Influential professors encourage the inclusion of the theme in the analyzed courses. The Pro-Rector of Education proved to be able to become independent of the institutional arrangement, and the transdisciplinary character detected in three courses exposes the absence of extension projects. Among other practical recommendations to the actors, there is a need to train professors and administration personnel (pro-rectories); to diversify the area of postgraduate courses taught by professors; to change the current guideline for the Accounting Sciences course, or set guidelines for the evaluation of courses with

¹ Doctoral student in Business Management in the Postgraduate Business Management Program at the State University of Maringá [*Universidade Estadual de Maringá*] (PPA-UEM). Address: Avenida Colombo, 5790, JD. Universitário, CEP 87020-600 - Maringá-PR, Brazil. Phone: (44) 99846-7916. E-mail: anne.carolinadossantos@gmail.com
<https://orcid.org/0000-0002-5214-1273>

² PhD in Economic Sciences from Pierre Mendès-France University [*Université Pierre-Mendès-France*]. Professor at the State University of Maringá (UEM). Postgraduate Program in Accounting Sciences (PCO-UEM). Address: Avenida Colombo, 5790, JD. Universitário, CEP [Postal code] 87020-600 - Maringá-PR, Brazil. Phone: (44) 3011-4909. E-mail: marguitn26@gmail.com
<https://orcid.org/0000-0003-1246-3769>

³ PhD from the Postgraduate Program in Public Administration and Government of Fundação Getúlio Vargas [*Getúlio Vargas Foundation*] (CEAPG-EAESP-FGV). Postgraduate Program in Accounting Sciences (PCO-UEM). Address: Avenida Colombo, 5790, JD. Universitário, CEP [Postal code] 87020-600 - Maringá-PR, Brazil. Phone: (44) 3011-4909. E-mail: m_kerla@yahoo.com.br
<https://orcid.org/0000-0002-1318-9792>

greater emphasis on sustainability. The pioneering characteristic of the research is to investigate the topic with coordinators from several institutions and provide practical recommendations to the Ministry of Education, Higher Education Institutions, as well as Accounting Sciences professors and students. Theoretical contributions include filling the gap on the inclusion of sustainability in undergraduate courses.

Keywords: Sustainability. Undergraduate courses. Accounting Sciences. Institutional Theory.

ESTUDO DO AMBIENTE INSTITUCIONAL PARA A INSERÇÃO DA TEMÁTICA SUSTENTABILIDADE EM CURSOS DE GRADUAÇÃO EM CIÊNCIAS CONTÁBEIS PARANAENSES: RECOMENDAÇÕES PRÁTICAS AOS ATORES INSTITUCIONAIS

RESUMO

O objetivo geral deste artigo foi investigar como o ambiente institucional contribui para a inserção da temática sustentabilidade em cursos de graduação em Ciências Contábeis de universidades públicas do Paraná. O objetivo específico foi propor recomendações práticas aos atores institucionais quanto a inserção da sustentabilidade nos cursos. Tais objetivos foram alcançados por meio de entrevistas realizadas junto a coordenadores de curso, assim foram desenvolvidas 18 recomendações aos principais atores envolvidos no ambiente institucional dos cursos, tendo como foco a inserção do tema. Para tratamento dos dados utilizou-se a análise de conteúdo. Os resultados apontam que o ambiente institucional contribui mediante valorização do tema pela sociedade e pelos acadêmicos, havendo interferência da concorrência. Docentes influentes incentivam a inserção da temática nos cursos analisados. A pró-reitoria de ensino demonstrou ser capaz de tornar-se independente do arranjo institucional, sendo que a transdisciplinaridade detectada em três cursos expõe a ausência de projetos de extensão. Dentre outras recomendações práticas aos atores, há a necessidade de capacitação de docentes e da administração (pró-reitorias); diversificar a área dos cursos de pós-graduação realizados pelos docentes; necessidade de alteração da diretriz vigente do curso de Ciências Contábeis ou estabelecer diretrizes de avaliação dos cursos com maior destaque na sustentabilidade. A característica pioneira da pesquisa é investigar o tema junto a coordenadores de de diversas instituições e disponibilizar recomendações práticas ao Ministério da Educação, Instituições de Ensino Superior, docentes e discentes do curso de Ciências Contábeis. Contribuições teóricas incluem o preenchimento da lacuna sobre a inserção da sustentabilidade em cursos de graduação.

Palavras-chave: Sustentabilidade. Graduação. Ciências Contábeis. Teoria Institucional.

1 INTRODUCTION

The search for Sustainable Development, that is, for meeting current needs without compromising the future, has spread across organizations, which means considering the relevance of economic and socioenvironmental aspects (Elkington, 2012; Sisaye, 2013). Sustainable business actions seek to counter criticisms about their role in society, with such criticisms being about exploration, production and consumption models (Barbieri, et al., 2010; Gray, 2010). Economic crises and scarcity of renewable resources are factors to confront the rationality of business, with a view to sustainability (Lessa, Souza & Lopes, 2019).

There are other factors that contribute to the embedding of sustainability in business, such as competitiveness (Barbieri et al., 2010), awareness and acquisition of knowledge on the subject by actors within the business environment (Dyllick, 2015; Lessa et al., 2019). Given this relevance, sustainability is an object of research and teaching in Business Schools, as it is responsible for training managers of public and private organizations (Lessa et al., 2019). Thus, the need for training professionals in the business field, in the sense of including discussions on sustainability, is highlighted (Dyllick, 2015; Gehlen, Reis & Favato, 2021; Lessa et al., 2019).

As part of the business field, accounting education must serve the public interest in the pursuit of Sustainable Development (Gehlen et al., 2021; Gray, 2010; Gray & Collison, 2002; Mannes et al., 2018). The attributions of an accounting professional involve: decision-making, interpretations, as well as participation in the preparation of socioenvironmental reports. Therefore, including sustainability in the Accounting Sciences course means, above all, approaching sustainable management methods (Sisaye, 2013). However, there is research (Benn & Dunphy, 2009; Cornuel & Hommel, 2015; Dyllick, 2015; Gehlen et al., 2021) that questions whether the education provided by business courses is really contributing to Sustainable Development.

At the national level, there is a legal framework to encourage sustainability in education, including in higher education (National Environmental Education Policy, *Política Nacional de Educação Ambiental* – PNEA, and National Curriculum Guidelines for Environmental Education, *Diretrizes Curriculares Nacionais para a Educação Ambiental* – DCNEA). At the educational level, specifically, the National Curriculum Guidelines for undergraduate Accounting Sciences courses (Ministry of Education, *Ministério da Educação* - MEC, 2004) provide an opportunity to approach sustainability through theoretical and practical training, such as complementary activities, independent studies and optional disciplines. However, Lessa et al. (2019) propose that it is the prominence of certain actors (such as professors) that allows the development of sustainable agendas in business education, to the detriment of State actions (laws). Consequently, the orientation of higher education programs depends on their institutional environments and on the construction of meanings among actors.

The theoretical perspective considered in this study takes into account the relevance of the actors inserted in the environment, that is, it refers to the New Institutional Sociology, when considering isomorphism, and Institutional Work, given that the individual interferes in the processes by creating, maintaining and disrupting institutions (Lawrence, Suddaby & Leca, 2009). To this end, undergraduate courses are part of Higher Education Institutions (HEIs), which

qualify themselves as organizations that are influenced by their environment, in the face of formal and/or informal pressures (Scott, 1995). Previous studies address sustainability in business courses (Barber et al., 2014; Beddewela et al., 2017; Benn & Dunphy, 2009; Cornuel & Hommel, 2015; Doh & Tashman, 2014; Dyllick, 2015; Mannes et al., 2018), including from the perspective of the Institutional Theory (Beltrame, Reis & Gehlen, 2018; Gehlen et al., 2021; Lima & Amâncio-Vieira, 2017; Lima, Amâncio-Vieira & Romagnolo, 2018; Silva, Campanario & Souza, 2013).

However, Santos, Neumann and Mattiello (2021) identified that the adoption of sustainability in undergraduate courses depends on individuals, despite the coercive aspect, and indicate the study of factors that influence the adoption of sustainability in undergraduate Accounting Sciences courses. In this regard, there is a lack of research on the theme, conducted with coordinators and professors of Accounting Sciences courses (Gehlen et al., 2021). The study by Gehlen et al. (2021) was the only one found addressing Institutional Theory in a national undergraduate course in Accounting Sciences. The present research differs by dealing with sustainability along with course coordinators from different HEIs, considering the institutional environment. Thus, it sought to answer the following question: how does the institutional environment contribute to the insertion of the sustainability theme in undergraduate Accounting Sciences courses at public HEIs in Paraná?

The general objective of this study is to investigate how the institutional environment contributes to the insertion of the sustainability theme in undergraduate Accounting Sciences courses at Paraná's public HEIs. Additionally, this study has a specific objective: to propose practical recommendations to institutional actors (MEC, HEIs, professors and students) regarding the inclusion of sustainability in undergraduate Accounting Sciences courses at public HEIs in Paraná. Content analysis (Bardin, 2016) was applied to interviews held with the coordinators of seven courses. The choice to interview coordinators was based on their responsibility of directing the course, being able to express their reality. The choice to investigate Accounting Sciences courses in the southern region was due to the fact that its states stand out for complying with the PNEA (Dallabona et al., 2012). Moreover, the State of Paraná has a greater number of Accounting Sciences courses in public HEIs than the other states in its region (MEC, 2018).

As theoretical contributions, this study: i) discusses the sustainability theme in undergraduate Accounting Sciences courses (there is a scarcity of studies). Its practical contributions come from: i) providing recommendations to MEC, HEIs, professors and students, aiming at compliance with the PNEA and DCNEA, in order to uncover factors, in addition to the coercive one, that influence the adoption of the theme in higher education (Santos et al., 2021); ii) discussing a topic that is of interest to students (teaching quality); and iii) considering the well-being of society, which, in turn, shares the negative externalities generated by organizations, of which accountants are part.

2 THEORETICAL FOUNDATION

2.1 Insertion of Sustainability in the Accounting Sciences Course

The relevance of the economic and socioenvironmental pillars (Triple Bottom Line – TBL Elkington, 2012) characterize the sustainability theme. Gray and Collison (2002) highlight the importance of including sustainability in accounting education, given that the course is associated with the economic pillar. Marques, Schultz and Hofer (2012) consider that professional experience in the accounting field does not influence an individual's level of knowledge about sustainability, so there is a need for the topic to be inserted in education. On the other hand, this type of knowledge is valued by employers, due to the development of critical character in the individual (Boyce et al., 2012; Demajorovic & Silva, 2012).

Nevertheless, accounting education already comprises the economic pillar, so addressing the TBL is a challenge in the face of the socioenvironmental pillar (Boyce et al., 2012; Demajorovic & Silva, 2012). For instance, education can promote the sustainable discourse by means of subjects such as: corporate reporting, practical initiatives to promote corporate sustainability, academic experiments designed to provide articulated views on the topic, etc. (Gray & Collison, 2002; Gray, 2010). However, given the current national guideline for undergraduate courses in Accounting Sciences (MEC 2004), Laffin (2012) asserts that the course leaves real-world problems aside.

In this way, subjects adjacent to the organization are not prioritized by the courses, being limited to technical training and mechanistic contents. By the way, there is no specific requirement in the course guidelines concerning the mandatory inclusion of sustainability, but there is an incentive to approach it through theoretical and practical training as complementary activities, independent studies and optional content. However, at the national level, there is a legally constituted environment that requires the insertion of sustainability in higher education courses (PNEA and DCNEA). The PNEA and the DCNEA propose that, in undergraduate courses, specific disciplines on the theme should not be present; instead, it should be approached in an integrated manner (Brasil, 1999; MEC, 2012).

Mannes et al. (2018) defend an investigation into the adoption of specific and isolated disciplines. However, the interdisciplinary and transversal adoption of sustainability in teaching is defended by the present study. This means including the economic and socioenvironmental pillars when considering teaching, research and extension (Santos et al., 2021). There are studies that deal with sustainability in courses in the business field, as shown in Table 1.

Table 1Studies that address sustainability in courses in the business field¹

Source*	Main findings
Barber <i>et al.</i> (2014)	They investigated a North American public business school; their findings indicate that the HEI faces shrinking budgets, and time is a limiting factor. Lack of communication is a barrier to interdisciplinary thinking, in addition to the need to step out of the comfort zone.
Beddewela <i>et al.</i> (2017)	They researched a UK business school and indicated that the lack of support from the school in administrative terms, lack of resources, and the HEI having no mission consistent with the theme interfere with the presence of sustainability.
Benn and Dunphy (2009)	Focusing on Australian Master of Business Management courses, they concluded that change can be achieved if the faculty is engaged and motivated. Integration between departments is another evident need.
Cornuel and Hommel (2015)	The theoretical discussion indicates barriers to the inclusion of the sustainability theme in business schools: i) students do not value the theme; ii) fragmentation of intellectual production, absence of interdisciplinarity, and iii) concern with performance indicators.
Doh and Tashman (2014)	They investigated North American business schools and indicate that lack of time, administrative support, departmental interest, usefulness in the job market, and the need to convince students about the importance of the theme are barriers to implementing the theme.
Dyllick (2015)	The theoretical discussion indicates a lack of integration between theory and practice, such as the absence of field projects. Even if professors are qualified, they lack work experience.
Mannes <i>et al.</i> (2018)	In view of the analysis carried out on the curricula of Brazilian Federal Universities, the study points out that the number of institutions that offer any discipline covering this topic, in the course, still falls short. In addition, the highest percentage among the universities that offer the course and the curriculum refer to elective disciplines.
Santos <i>et al.</i> (2021)	The Cross-disciplinary form of insertion was predominant in national accounting science courses, with greater coverage of the social aspect, indicating that the sustainability theme is inserted in a secondary manner (disconnection between the socioenvironmental and the economic pillars). A greater evolution of the theme in the courses was detected as of the year 2012, influenced by INEP and the MEC curriculum guidelines, which do not determine contents on the subject, but evidence its relevance through the accountant's profile, competences and skills field. Therefore, the adoption of the sustainability theme in the investigated courses is still in the maturing phase.

* Consulted databases: Capes and Google Scholar journals; search words: *sustentabilidade*, *ciências contábeis*, *negócios*, *ensino* / sustainability, accounting, business, education.
Source: Prepared by the authors (2021), based on the authors mentioned in the Table

The present research differs by dealing with sustainability along with course coordinators from different HEIs, considering the institutional environment. A point that divides opinions refers to the convergence of education with market requirements. On the one hand, Ott and Pires (2010) defend a connection between accounting education and the demands of the job market. On the other hand, Lousada and Martins (2005) understand that the courses should not submit to such market requirements. However, the autonomy of HEIs and their courses requires reflection on the knowledge needed to overcome professional challenges.

2.2 The New Institutional Sociology and Institutional Work

The New Institutional Sociology seeks to examine organizational practices in accordance with their environment (DiMaggio & Powell, 1983). The influence of institutional environments on the construction of meaning involves the frequent search for answers to guide organizations (Machado-da-Silva & Fonseca, 2018). In Zucker's view (1987), institutions are shared rules and typifications that identify categories of social actors, their activities and relationships. Therefore, institutions represent restrictions for actions and guide organizations in terms of collective purposes, and for this reason, there are variations in meaning continually (Astley & Van de Ven, 2005; Zucker, 1987). Order is based on shared social reality, so it is dependent on social interaction (Scott, 1987).

Professionals dominate social belief systems, as they exert control by creating ontological structures, typifications, principles and guidelines for action (Scott, 1987; 1995). The nomenclature that translates the process of homogenization of products, services, techniques, policies and programs is isomorphism (DiMaggio & Powell, 2005). This process indicates that units should resemble another already institutionalized, as long as they face the same environmental conditions, in the search for legitimacy (Czinkota, Kaufmann & Basile, 2014; Machado-da-Silva & Fonseca, 2018; Meyer & Rowan, 1977). DiMaggio and Powell (2005) describe three isomorphism processes (Table 2).

Table 2
Isomorphism processes²

Coercive isomorphism	It results from formal and informal pressures exerted by organizations (such as governmental or contractual requirements). Such pressures function as coercion or an invitation to join the collusion. However, these pressures can be of a ceremonial nature.
Mimetic isomorphism	When the environment creates symbolic uncertainties, organizations tend to follow the legitimized model. Such model can be transmitted involuntarily or even indirectly, in the face of a problem with ambiguous causes and unclear solutions.
Normative isomorphism	Professionalization is the main source of this type of isomorphism, as it represents the struggle of members to define working methods and conditions. It occurs through: i) formal education and the legitimation of a common base produced by specialists; ii) professional networks, by means of which models are disseminated.

Source: Prepared by the authors, based on DiMaggio and Powell (2005)

The isomorphic processes of DiMaggio and Powell (2005) do not always occur in isolation, that is, they may be interrelated. Furthermore, the voluntarist orientation refers to the conception that actors are creative and considered a source of change (Astley & Van De Ven, 1983), which means that there is interference of individuals' interpretation. The discussion of agency within the institutional environment is the Institutional Work. Its concept refers to the intentional actions of actors with the aim of creating, maintaining or disrupting institutions, avoiding portraying actors as dependent on institutional arrangements (Lawrence & Suddaby, 2006; Lawrence et al., 2009). In view of the voluntarist orientation, there are certain forms of Institutional Work (Table 3).

Table 3
Forms of Institutional Work³

Action	Forms	Definition
Creating an institution	Advocacy	Political or regulatory mobilization through direct techniques of social persuasion.
	Definition	Construction of systems of rules that confer status or identity to the institution, setting the limits of the actors' participation.
	Acquisition	It occurs when the government authority reallocates property rights by setting association limits.
	Construction of identities	To create or change the identity of actors. This has been associated with the development of new professions or the transformation of existing ones.
	Change of normative associations	To recreate connections between sets of practices and moral and cultural foundations. Thus, new institutions are parallel or complementary to existing institutions.
	Construction of normative networks	Establishment of inter-organizational connections through sanctioned practices, with the former being relevant to the monitoring and evaluation of said practices.
	Mimicry	Actors create new institutions with the potential to leverage existing sets, being able to associate the new with the old.
	Theorization	Development of abstract categories for establishing an institution. New concepts are named so that they can become one.
	Education	Actors with knowledge and skills support the new institution.
Maintaining an institution	Enabling work	Creation of rules that enable, complete and support institutions. This may include creating authorization agents or new required roles.
	Policing	To ensure the institution's compliance through inspection and monitoring.
	Detention, valorization and demonization	To create coercive barriers to institutional change and demonstrate through positive and negative examples that illustrate the institution's foundations.
	Myths	Actors work to preserve the normative foundations of institutions through myths about their history.
	Embedding and routinization	Institutions reproduced through repetitive routines and practices, such as training, education and hiring of specialized personnel.
Disrupting an institution	Disconnection of sanctions	Actors seek to disconnect rewards and sanctions associated with the institution. The State is an important agent in disrupting institutions.
	Disconnection from moral foundations	Dissociation of the relationship between the institution and moral foundations that were seen as appropriate within a specific cultural context.
	Attack on assumptions and beliefs	Reduction of perceived risks for innovation and differentiation, undermining the main beliefs and assumptions that support the institution.

Source: Prepared by the authors, based on Lawrence and Suddaby (2006)

It is understood that Lawrence and Suddaby (2006) complement the isomorphism of DiMaggio and Powell (2005) to understand the interference of the institutional environment in organizational practices. In addition to the precursors of both the New Institutional Sociology and Institutional Work, there are contemporary studies that deal with the sustainability theme in courses in the business field, from the perspective of the Theory considered (Table 4).

Table 4

Studies on Institutional Theory and sustainability in courses in the business field⁴

Source	Main findings
Silva <i>et al.</i> (2013)	Focusing on undergraduate courses in Business Management, they indicate that coercive isomorphic pressure, on the part of society, and normative isomorphic pressure, linked to professional practice, contribute to the institutionalization of the theme in the analyzed courses.
Beltrame <i>et al.</i> (2018)	Focusing on undergraduate courses in Business Management, they indicate that the choice of the theme derived from social requirements, rather than the legal one, so it occurred spontaneously, motivated by the search for broader training.
Lima and Amâncio-Vieira (2017)	They investigated a postgraduate program in Business Management. The embedding of the theme occurs gradually, so the decision to adhere to it had a strategic nature. There was even an influence of mimetic isomorphism with a focus on legitimacy.
Lima <i>et al.</i> (2018)	They investigated a postgraduate program in Business Management. Their results evidence that actors coming from other institutions were decisive in consolidating the theme. Mimetic isomorphism manifested itself due to the search for consolidation in the field. Professionals holding strategic positions at the HEI encouraged the embedding of the theme.
Gehlen <i>et al.</i> (2021)	They investigated an undergraduate course in Accounting Sciences. In the latter, sustainability is semi-institutionalized and in transition to institutionalization. The nature of the sustainability concept adopted by the course has characteristics of maintenance of the <i>status quo</i> and reformist aspects. The discipline that addresses sustainability has more holistic and interdisciplinary attributes than the course as a whole.

* Consulted databases: Capes and Google Scholar journals; search words: *sustentabilidade, ciências contábeis, negócios, ensino, teoria institucional* / sustainability, accounting, business, education, institutional theory.

Source: Prepared by the authors (2021), based on the authors mentioned in the Table

In light of the foregoing, the process of designing teaching programs requires elucidating the link between the course (and its members: coordinators and professors) and its environment. Lessa *et al.* (2019) indicate that, at the national level, the sustainability agenda has been considered, mostly, due to professors with a particular orientation, in the face of external pressures and dispositional choices.

3 METHODOLOGICAL PROCEDURES

The present study used a qualitative approach and data collection through interviews, due to the proposal to understand the nature of a social phenomenon. The scope chosen to define the data collection sources considered the relevance of investigating undergraduate courses in Accounting Sciences at Paraná's public HEIs. In addition, it was considered that undergraduate courses are responsible for training professionals for the market. Furthermore, the relevance of public HEIs comes from the balance between the involvement of professors and the interest of students, and Accounting Sciences courses in the southern region of Brazil were chosen for their outstanding compliance with the PNEA (Dallabona *et al.*, 2012). However, only the state of Paraná was considered, due to the greater number of courses, compared to the other states in the region (MEC, 2018).

The decision to interview coordinators was due to their responsibility of directing the course, thus being able to express their reality. That is, it is a role aimed at meeting an action plan. Attempts to contact the 19 HEI courses in Paraná (MEC,

2018) were made from March to June 2019. Data collection was carried out with 7 coordinators, after two contact attempts. However, 8 courses were covered, considering that UNICENTRO's coordinator is in charge of two campuses. Details about the data collection sources are presented in Table 5.

Table 5
Details about the interviews

HEI	Interviewee's title	Time of experience as a professor at the HEI/as a coordinator	Date (length of interview)	Form of interview	Number of pages transcribed in Word®
UEL	Master in Accounting Sciences	25 years / 1 year	04/04/2019 (57 min. and 38 sec.)	Video call (WhatsApp®)	12
UNIOESTE – Cascavel	PhD in Production Engineering	24 years / 12 years	12/04/2019 (39 min. and 35 sec.)	Video call (WhatsApp®)	7
UNIOESTE – Marechal Cândido Rondon	PhD in Accounting Sciences	22 years / 5 years	20/04/2019 (44 min. and 15 sec.)	Phone call	11
UTFPR	PhD in Production Engineering	16 years / 6 years	22/04/2019 (49 min. and 47 sec.)	Video call (WhatsApp®)	11
UNICENTRO – Irati and Prudentópolis	PhD in Public Policy	16 years / 2 years	07/05/2019 (32 min. and 13 sec.)	Video call (WhatsApp®)	7
UEM - Maringá	PhD in Public Administration	16 years / 7 years	23/07/2019 (23 min. and 34 sec.)	In person	7
UEM - Cianorte	PhD in Public Administration	24 years / 11 months	24/07/2019 (39 min. and 55 sec.)	In person	10
TOTAL	-	-	254 min. and 04 sec.	-	65

Source: Prepared by the authors (2019)

The semi-structured interview script (Table 6) was prepared from the literature review; its references are mentioned in Table 7 (in accordance with the covered category: CI, MI, NI and IW).

Table 6
Interview script6

Question	Covered category*
1. For how long have you been a coordinator/professor in the course? In how many processes for building Pedagogical Projects have you participated?	-
2. Do you consider that the sustainability theme is included in the course? How and for what reason?	-
3. Could you describe how the process of building the Pedagogical Projects of the course took place? Secondary: 3.1. What internal and external factors interfere in this process? Has there been any discussion about the importance of embedding the sustainability theme? Explain.	CI; MI; NI; IW
4. What has guaranteed or reinforced the (non) insertion of the sustainability theme in the course? (Depends on question 3).	IW
5. Do you consider that the way in which the sustainability theme is inserted in the course differs from the way it is inserted in courses at other HEIs? Explain (Depends on question 3).	MI
6. In your opinion, what kind of external and internal pressures encourage the (non) insertion of the sustainability theme in the course? Secondary: 6.1 In view of that, what coercive impositions encourage the (non) insertion of the sustainability theme in the course?	CI
7. In your opinion, how do such actors interfere in the (non) insertion of the sustainability theme in the course? (comment on each one): a) faculty; b) administrative staff; c) Administration of the HEI; d) Municipal administration; e) third-sector agencies.	NI
8. Are there initiatives on the part of the faculty for training involving the sustainability theme? If there are not, what inhibits such training, in your opinion?	NI
9. How does communication and knowledge exchange between departments take place? If there is none, what inhibits this, in your opinion?	NI
10. Is there any matter you would like to comment on that was not covered in the previous questions?	-

*Legend: CI - Coercive isomorphism; MI - Mimetic isomorphism; NI - Normative isomorphism.
Source: Prepared by the authors (2019), based on the references of each category (Table 7)

This data collection instrument was improved by validating its content together with judges: five researchers who investigate sustainability, and two other researchers. In addition, the interview script was pre-tested along with three researchers who investigate the topic. During the months of January and February 2019, the material was sent to the judges, and the pre-test was conducted. Content analysis (Bardin, 2016) was the technique used to treat the qualitative material arising from the interviews. Table 7 presents its stages, considering that the categories were based on the theory taken into account in this study, and the coding was based on previous studies.

Table 7
Content analysis stages7

i) PRE-ANALYSIS	
- Choice of content: The material subjected to analysis is the content of the semi-structured interviews.	
- Preparation of material: Transcription of the interviews.	
ii) CATEGORIZATION: Categories	iii) CODING: Units of Analysis (UA)
Coercive isomorphism (CI): courses are subject to formal and informal pressures, depending on society's expectations or government orders and contractual requirements.	1 - Assumptions that have been founding training for years (Boyce et al., 2012; Demajorovic & Silva, 2012); 2 - Budget (Barber et al., 2014; Beddewela et al., 2017); 3 - Time limitations due to pressures (Barber et al., 2014; Doh & Tashman, 2014); 4 - Valorization of the theme by students (Cornuel & Hommel, 2015; Doh & Tashman, 2014); 5 - Valorization of the theme by the market (Doh & Tashman, 2014; Ott & Pires, 2010); 6 - Valorization of the theme by society (Silva et al., 2013); 7 - Legal assumptions (Beltrame et al., 2018; DiMaggio and Powell, 2005; Meyer & Rowan, 1977); 8 - Professor evaluation, achievement of results (Cornuel & Hommel, 2015); 9 - Course performance indicators (Cornuel & Hommel, 2015).
Mimetic isomorphism (MI): courses tend to follow the model of others.	1 - Standardization of content in accordance with courses from other HEIs (DiMaggio & Powell, 2005; Lima & Amâncio-Viera, 2017); 2 - Standardization of teaching methodologies (Cornuel & Hommel, 2015; DiMaggio & Powell, 2005); 3 - Legitimacy of the course (DiMaggio & Powell, 1983; Lima et al., 2018; Meyer & Rowan, 1977).
Normative isomorphism (IN): professionalization interferes with the insertion of the theme.	1 - Communication between professors and departments (Barber et al., 2014; Benn & Dunphy, 2009; DiMaggio & Powell, 2005; Scott, 1987; Zucker, 1987); 2 - Exchange of professors between departments and/or HEIs (DiMaggio & Powell, 2005; Scott, 1987; Zucker, 1987); 3 - Administrative support (Beddewela et al., 2017; Doh & Tashman, 2014); 4 - Resistance to change, motivation to step out of the comfort zone (Barber et al., 2014; Benn & Dunphy, 2009; Lima & Amâncio-Viera, 2017; Scott, 1995); 5 - Professors' awareness (Scott, 1995); 6 - Professors' experience (Doh & Tashman, 2014; Dyllick, 2015); 7 - Knowledge about the theme on the part of professors (Dyllick, 2015; Lima et al., 2018); 8 - Influential professor (Lessa et al., 2019).
Institutional Work (IW): i) creating the sustainability institution, by making it different from the others; ii) maintaining it, fighting for the legitimized institution; iii) disrupting it, not adopting it.	<u>Create:</u> 1 – Advocacy; 2 – Definition; 3 – Acquisition; 4 - Construction of identities; 5 - Change of normative associations; 6 - Construction of normative networks; 7 – Mimicry; 8 – Theorization; 9 – Education; <u>Maintain:</u> 10 – Enabling work; 11 – Policing; 12 - Detention, valorization and demonization; 13 – Myths; 14 - Embedding and routinization; <u>Disrupt:</u> 15 - Disconnection of sanctions; 16 - Disconnection from moral foundations; 17 - Attack on assumptions and beliefs (Lawrence & Suddaby, 2006).
iv) INFERENCE	
- It refers to the interpretation of data from the previous steps.	

Source: Prepared by the authors (2019), based on the authors mentioned in the Table and Bardin (2016)

The units of analysis (UAs) described by the consulted literature can be expanded in view of the results. Bardin (2016) describes that this fact indicates that the researcher has carried out an exploratory analysis, in order to 'see what there is' in the established context.

4 PRESENTATION AND DISCUSSION OF RESULTS

4.1 Institutional Environment

The study by Santos et al. (2021) investigated the courses of the same HEIs covered by the present study and evidenced that the coercive aspect boosted the adhesion of a greater volume of content in the courses, as of 2012. This was due to the MEC and INEP determinations, showing that the adoption of sustainability in the investigated course is in a maturing phase and depends on individuals to implement its adoption, since the PNEA was established more than 20 years ago. By the way, the sustainability theme is inserted in a secondary manner (disconnection between the socioenvironmental and economic pillars), indicating the existence of deficiencies in the adoption of the theme by the courses (Santos et al., 2021).

Through the content of the interviews held for the development of this study, it was identified that the courses adopt disciplines that are usually called environmental accounting, going against the PNEA and the DCNEA by including specific disciplines. However, in the cases of UNIOESTE (Cascavel), UNIOESTE (Marechal Cândido Rondon) and UTFPR, the transdisciplinary nature of sustainability is approached. The way in which this type of insertion is adopted in these three courses is not comprehensive, considering that transdisciplinarity involves teaching, research and extension; in this regard, none of the analyzed cases mentioned the occurrence of extension projects. Thus, transdisciplinarity occurs partially in the three courses mentioned.

Table 8 summarizes the results about the institutional environment, obtained through the interviews. The motivating character (+) of the UA indicates an incentive for the inclusion of the theme in each course. The demotivating character (-) indicates a factor that makes this insertion unfeasible or difficult. The absence of these symbols (blank space) indicates that the UA was not found during the interview.

Table 8
Findings on isomorphic pressures and Institutional Work⁸

Categories (C)	Units of Analysis (UAs)*	UEL	UNIOESTE (Cascavel)	UNIOESTE (Marechal Cândido R.)	UTFPR	UNICENTRO (Itati and Prudentópolis)	UEM (Maringá)	UEM (Cianorte)
Coercive isomorphism (CI)	1 - Assumptions that have been founding training for years	(-)	(+)	(-)	(-)	(+)	(-)	
	2 - Budget				(-)			(-)
	3 - Time limitations due to pressures		(-)		(-)	(-)	(-)	
	4 - Valorization of the theme by students						(+)	
	5 - Valorization of the theme by the market	(-)	(-)	(-)	(+)	(+)	(+)	
	6 - Valorization of the theme by society			(+)	(+)	(+)	(+)	(+)
	7 - Legal assumptions	(-)	(+)	(-)	(-)	(-)	(-)	(+)
	9 - Course performance indicators				(+)		(-)	
	10 - Competition**				(+)			(+)
Mimetic isomorphism (MI)	1 - Standardization of content in accordance with courses from other HEIs	(-)	(-)	(-)	(-)	N/A***	N/A***	(+)
	3 - Legitimacy of the course			(+)				
Normative isomorphism (NI)	1 - Communication between professors and departments		(+)	(-)	(-)			(-)
	2 - Exchange of professors between departments and/or HEIs	(-)				(-)	N/A***	
	3 - Administrative support	(-)	(+)	(-)	(-)			
	4 - Resistance to change, motivation to step out of the comfort zone	(-)						

	Units of Analysis (UAs)*	UEL	UNIOESTE (Cascavel)	UNIOESTE (Marechal Cândido R.)	UTFPR	UNICENTRO (Itati and Prudentópolis)	UEM (Maringá)	UEM (Cianorte)
	5 - Professors' awareness	(-)	(+)	(-)	(-)	(+)	(+)	
	7 - Knowledge about the theme on the part of professors	(-)	(-)	(-)	(+)	(-)	(+)	(+)
	8 - Influential professor	(-)	(+)	(+)				
Institutional Work (IW)	10 – Enabling work						(+)	(+)
	11 – Policing		(+)			(+)		
	12 - Detention, valorization and demonization		(+)					
	13 - Myths	(+)	(+)	(+)	(+)	(+)	(+)	(+)

Source: Prepared by the authors (2021) from the research data

Legend: Motivates: (+); Demotivates: (-) the insertion of sustainability in the course. The absence of these symbols (blank space) indicates that the UA was not found during the interview.

* Units of analysis not found were not shown in the Table.

** Unit of analysis not included in the consulted literature.

*** N/A (not applicable): it was not possible to fit it in, even in the presence of the UA during the interview.

The results regarding the assumptions that found the profession (CI 1) reveal that there was a predominance of opinions referring to the conception that the Accounting Sciences course is geared towards the economic pillar (Boyce et al., 2012; Demajorovic & Silva, 2012). As for CI 1, the interviewees commented on the relevance of the fiscal, financial and managerial field, showing the need for transdisciplinarity when including sustainability in the courses. By the way, the coordinators' view on the subject is fragmented, that is, they are not able to visualize the joint and integrated form of the TBL in the course.

Regarding the budget (CI 2), because the investigated courses are taught at public HEIs, there are pressures from the State in the search for results (educational indicators), in view of the investments made (Cornuel and Hommel, 2015). Since public HEIs rely on government resources, they must take on the challenge of training professionals in accordance with the market reality, by promoting competences aimed at sustainability (Doh & Tashman, 2014; Ott & Pires, 2010). However, it was not possible to identify whether the market values professionals trained in terms of sustainability (CI 5), as this UA divided opinions among the interviewees.

Contrarily to opinions about the market, society (CI 6) and students (CI 4) value the theme, according to the interviewees' view, in line with the statement that company stakeholders are becoming more aware (Bocken et al., 2014). Therefore, it is observed that stakeholders must demand from their organizations a stance focused on sustainability, in order to encourage the market to value it. Such a conception requires individuals to become more aware of the subject; because accountants are present in organizations, the need to integrate this into their

education is evident. That is, such findings serve as incentives for the adoption of the sustainability theme in undergraduate Accounting Sciences courses.

Time limitations (CI 3) (Barber et al., 2014; Doh & Tashman, 2014) evidence pressures due to work overload and concerns with respect to the employment contract of temporary professors, as there is no exclusive dedication to teaching. Thus, such limitations hinder departmental meetings and the provision of disciplines on the subject. As isomorphism suggests the acceptance of criteria established in the institutional context, in the face of legitimacy (Czinkota et al., 2014; DiMaggio & Powell, 2005), the results reveal that sustainability is present in the courses on a secondary basis, since there are other existing concerns. This is consistent with the findings of Gehlen et al. (2021), that sustainability is semi-institutionalized in Accounting Sciences courses.

Professors' awareness would be a way to consider the sustainability agenda in accounting education, due to its influence – NI 8 (Lessa et al., 2019), but legal coercive pressures also drive the insertion of the theme. Such a recommendation could be met through course performance indicators (CI 9), such as sufficiency tests and the National Student Performance Exam [*Exame Nacional de Desempenho dos Estudantes*] (ENADE), which in turn, do not consider the sustainability theme, according to the interviewees' view.

Different results were found regarding the legal assumptions (CI 7), so it was possible to observe that: i) there is a lack of knowledge about the legal framework (UEL; UNIOESTE – Marechal Cândido Rondon; UEM – Maringá); ii) there is knowledge about the legal framework, encouraging the course to include the sustainability theme (UNIOESTE – Cascavel); iii) there is knowledge about the legal framework, but practice does not occur efficiently (UTFPR); iv) there is knowledge about the existence of laws, but the interviewees are unaware of their content (UNICENTRO; UEM – Cianorte). Thus, there was a predominance of legal assumptions demotivating the inclusion of sustainability in the courses.

In addition, the need to change the current course guideline (MEC, 2004) was identified, due to the sustainability theme not being required in the field of curricular contents. The change in the current course guideline, which has been in force since 2004, breaks with traditional foundations. Because of this, MEC could establish guidelines for the valorization of courses with greater weight in sustainability.

Regardless of the existence of legal assumptions, it is not enough to demand this from courses, since faculty training is essential (normative isomorphism). Considering that training is responsible for knowledge about the legal framework (CI 7) and, consequently, for overcoming resistance to change (NI 4) (factors that demotivate), in this case, one factor influenced others. Professionalization represents the struggle of members of the same profession to define working methods and conditions (DiMaggio & Powell, 2005), so it is only up to professors to overcome this demotivating factor.

The present research revealed the UA - Competition (CI 10), since previous studies did not evidence such unit of analysis. The search for legitimacy occurs because of competition; according to the interviewees, this UA is reinforced by the convenience of distance learning, but competition represents a motivation for the embedding of the sustainability theme in the courses, considering that students look for the quality of education.

The results show several reasons related to mimicry (MI 1): i) mimicry occurs due to consultation to models of Accounting Sciences courses from other HEIs, which do not embed the sustainability theme, thus demotivating the courses (UEL and UTFPR); ii) adoption of limited content, due to absence in other courses (UNIOESTE – Cascavel); iii) the model of the course is different from that of others, and this difference comes from the absence of mimicry (UEM – Maringá), whereas in other courses sustainability is institutionalized (UNIOESTE – Marechal Cândido Rondon); and iv) no knowledge of it (UEM – Cianorte). Thus, mimetic isomorphism (MI) revealed that this type of pressure demotivates the embedding of sustainability. Such results are consistent with Lima et al. (2018), that is, mimicry influences the mold of the courses.

The competition factor (CI 10), which proved to motivate the courses to integrate the theme, is congruent with the conception of the search for legitimacy (MI 3). As mimicry influences the model adopted by the courses in a negative way, they have been adopting sustainability in a secondary manner. It is recommended to courses that consulting models of others becomes harmful. In this regard, MEC can help courses by issuing curricular models that include the sustainability theme, in an attempt to establish guidelines for each teaching area.

The interviews evidenced that the courses address contents on the sustainability theme, but there is a deficiency in communication and exchange between departments (NI 1 and NI 2), so its insertion may occur in an inefficient way. Overcoming the communication barrier between departments should be a concern for those seeking to embed sustainability into courses. Furthermore, the results reveal that there is no administrative support from the HEIs (NI 3), except in the case of UNIOESTE (Cascavel), through the Pro-Rector of Education.

In the UNIOESTE (Marechal Cândido Rondon) case, as well as in the UTFPR case, the HEIs' policies are focused on the theme, which in turn are of a ceremonial nature, as the theme is not effectively demanded and put into practice in the courses (DiMaggio & Powell, 2005). Collective actions guide organizations towards collective purposes, but the actors do not accept rigid standards, since they can be continually changed through variations in meanings (Astley & Van de Ven, 2005).

Resistance to change (NI 4) is a factor close to professors' awareness (NI 5). In this regard, there was no consensus on the awareness factor. However, the detected lack of awareness is not in the sense of not considering the theme as relevant, but rather in a secondary manner. In the UNICENTRO case, since 2005, professors have sought to comply with the PNEA, even in the absence of MEC guidelines; consequently, the awareness factor brings positive results towards the consideration of sustainability (Scott, 1995). Because it was predominant, among the interviewees, that professors do not have knowledge about the subject (NI 7), this is a factor that demotivates its consideration in the courses. Table 9 presents the results regarding the training of professors in the investigated courses.

Table 9
Results on faculty training⁹

Training	Production engineering	Management	Business Management	Accounting Sciences	Regional Development	Economics	Education	Others
Frequency	26	12	22	90	11	7	8	12
Percentage	13.61%	6.28%	11.52%	47.12%	5.76%	3.66%	4.19%	7.85%

Specialist professors: 4

Master professors: 33

PhD professors: 50

Total number of permanent professors: 87

Source: Prepared by the authors (2019), based on the Transparency Portal-PR (2018) and Transparency Portal-GOV (2018)

There was no predominance of faculty training in the Accounting Sciences field, but a significant result was obtained (47.12%). Considering that order is based on social reality shared through interaction (Scott, 1987), teachers and professors are the result of their environment, that is, the conception of traditionalism (turning to the economic aspect) was present in the professors' training. This is in line with what the interviewee from UEL says, that his knowledge about the sustainability theme does not come from Accounting. Bearing in mind that business models must be developed considering the natural and social environment (Boyce et al., 2012; Elkington, 2012; Sisaye, 2013), a relevant recommendation would be to diversify the area of postgraduate courses taught by professors, turning to Business Management, for instance. In the interviewees' view, this course shows that it is more involved with the sustainability theme.

When it comes to the AU - Influential professor (NI 8), two views that complement each other were obtained: there is a need for awareness and influence from professors (proactivity) in the sphere of discussions for the construction of Pedagogical Projects, and conduction of research and extension projects. Furthermore, the results are congruent with Lessa et al. (2019), because the insertion of sustainability in courses is achieved through the proactivity of professors, to the detriment of the State and its legal requirements (such as the PNEA). Bearing in mind that the PNEA was established more than 20 years ago, and sustainable teaching is still deficient in the courses.

As for Institutional Work (IW), the results were positive, in the sense that the units of analysis described by the Theory influence and motivate the embedding of the sustainability theme. Thus, all of the investigated courses sought to maintain the institution's sustainability, revealing that the search for reaching the Myth (IW 13) predominated (Lawrence & Suddaby, 2006). What would explain this finding is the fact that society values the theme (finding of this research).

In addition to Myth, other Institutional Work units of analysis were revealed, such as Enabling work (IW 10); Policing (IW 11); Detention, Valorization and Demonization (IW 12). All are related to the idea of seeking to maintain the sustainability theme, based on the assumption of individual action. The Institutional Work theoretical line seeks to establish a broad view of agency in relation to institutions, avoiding portraying institutional actors as dependent on institutional arrangements (Lawrence et al., 2009). Paraphrasing Lawrence et al. (2009) and Lawrence and Suddaby (2006), the institutional environment is responsible for

shaping the behavior of actors, so institutions are not adopted without the interference of the interpretation by individuals.

The Pro-Rector of Education of the HEIs influenced by the legislation (UNIOESTE – Cascavel and UNICENTRO) police (IW 11) the compliance with the legal framework and the demands of society. This result shows a certain independence of the institutional arrangement, given that this was not identified in all of the studied cases. Thus, training on the theme is encouraged for all members of HEIs' administrative offices.

Facilitating the work of embedding the theme (IW 10) (UEM – Maringá and Cianorte) was possible because of the freedom that professors had to propose disciplines and monitor the interest in the theme on the part of the students in the course. This finding is specific, that is, it is an aspect of organizational culture.

Table 10 ranks how the institutional environment contributes (motivates) to the inclusion of sustainability in the undergraduate Accounting Sciences courses at the analyzed HEIs.

Table 10
Ranking of results by type of isomorphism and Institutional Work

Order of relevance*	Category / Unit of analysis
Coercive isomorphism (CI)	
1 st	Valorization of the theme by society
2 nd	Competition
3 rd	Valorization of the theme by students
Mimetic isomorphism (MI)	
1 st	Legitimacy of the course
Normative isomorphism (NI)	
1 st	Influential professor
Institutional Work (IW) – Maintain	
1 st	Myths
2 nd	Policing
	Enabling work
3 rd	Detention, valorization and demonization

Source: Prepared by the authors (2021) from the research data

*It was prepared using the frequencies of the motivating results (+) in Table 8

The interrelationship between formal and informal pressures makes the process of reaching interdisciplinarity and transdisciplinarity (defended by the legislation and by the present study) complex. However, the purpose of this research was to seek answers to this issue, even if the institutional environment is far-reaching. To this end, some practical recommendations were developed to the main actors that compose the institutional environment of accounting education.

4.2 Recommendations to the Actors Present in the Institutional Environment

Table 11 presents some practical recommendations as to the insertion of the sustainability theme in accounting higher education, aimed at the main institutional actors involved with undergraduate courses. It is important to emphasize that the research showed that each course has its own individuality, despite being located in the same state. Thus, it would not be feasible to think of

specific action protocols, so the recommendations in Table 11 allow each HEI to decide on how to apply them in accordance with their reality.

Table 11

Practical recommendations to the actors inserted in the institutional environment of accounting education

ACTORS	PRACTICAL RECOMMENDATIONS
Ministry of Education (MEC)	<ol style="list-style-type: none"> 1. Assign greater weight to the sustainability theme in the objects of evaluation of the courses – authorization and renewal; 2. Update the curricular guideline of the Accounting Sciences course to place greater emphasis on sustainability; 3. Promote discussions on curricular models for the courses, together with sustainability specialists;
Higher Education Institutions (HEIs)	<ol style="list-style-type: none"> 4. Promote and support events in the sustainability field; 5. Promote and support extension projects in the sustainability field; 6. Promote education in the sustainability field for the staff of Pro-Rectories of Education and course professors; 7. Promote a closer relationship between the academy and the job market, by means of events, partnerships and research projects in the sustainability field; 8. Promote exchange of knowledge between HEI departments, such as joint events and projects, in order to promote the transversality of the theme;
Course professors	<ol style="list-style-type: none"> 9. Seek to acquire more knowledge about the theme; 10. Diversify the training field in postgraduate courses; 11. Seek to know the legally constituted environment on the theme (PNEA and DCNEA); 12. Adapt the curriculum of the courses, in accordance with the regional reality, to the detriment of searching for models in pioneer HEIs; 13. Promote research in the sustainability field; 14. Show the results of the research to market actors (such as companies that are the focus of the studies), in order to contribute to practice; 15. Promote transversal disciplines on sustainability;
Course students	<ol style="list-style-type: none"> 16. Promote and support research in the sustainability field developed within the scope of the course; 17. Support events promoted by the HEI on the theme (participate and engage); 18. Take disciplines focused on the theme (if they are elective).

Source: Prepared by the authors (2021) from the research data

The recommendations in the Table above are subjective, but were based on the content of the interviews, considering the scope of the insertion of sustainability in accounting education, with a view to developing interdisciplinarity and transdisciplinarity. However, these recommendations are not expected to be exhaustive.

5 FURTHER CONSIDERATIONS

This research aimed to investigate how the institutional environment contributes to the insertion of the sustainability theme in undergraduate Accounting Sciences courses at public HEIs in Paraná and, thus, to propose practical recommendations to institutional actors (MEC, HEIs, professors and students). These objectives were achieved through interviews held with course coordinators.

The institutional environment contributes by having the theme valued by society and students, with interference from the competition factor. By the way,

influential professors, who research on the topic, encourage its insertion in the analyzed courses. Thus, there was a search for the sustainability myth, and the Pro-Rectorate of Education proved to be able to become independent of the institutional arrangement. Even if the courses adopt sustainability through disciplines, this has not proved to be enough, since the insertion of the theme must be based on transdisciplinarity. Inferences point to the reasons why transdisciplinarity is not fulfilled, namely: assumptions that have been founding training for years, budget, time limitations due to pressures, valorization of the theme by the market, legal assumptions without weight, standardization of contents in accordance with other HEIs, lack of communication between professors and departments, lack of exchange of professors between departments and/or HEIs, lack of administrative support, resistance to change, and lack of knowledge about the theme on the part of professors.

Therefore, the actors who are interested in the addressed subject (MEC, HEIs, and professors and students) must work in an attempt to overcome the factors that demotivate the insertion of the theme in education (evidenced by the research), based on the 18 practical recommendations present in Table 11. In addition, the possibility of the coercive character actually leading to a change in the courses is questioned, due to the adoption of a ceremonial form. Such conceptions were confirmed, because the PNEA has been in force since 1999, that is, it was established more than 20 years ago, and even so, the courses have not minded adopting the theme through transdisciplinarity. It is understood that the role of a course coordinator as a leader and manager of teaching becomes necessary. Which does not mean that the election of influential professors (who research on the subject) for such a position would solve the problem of inserting the sustainability theme. Nevertheless, course coordinators proved to be an abundant source of information that helps in the development of research in the field.

Finally, a question arises in view of the inferences made: is it possible to reach transdisciplinarity in the teaching of the sustainability theme in accounting education? As shown by the present research, there are several demotivating factors that outnumber the motivating ones. Despite this, the efforts made to prepare this research are intended to advance the discussions on the subject. In the future, researchers will be able to answer this question, based on scientific research that goes beyond the investigation of the adoption of specific and isolated disciplines.

This research theoretically contributes to the literature, given the lack of studies. The practical contributions come from: i) the theme, which is a challenge, since the research indicated that its adoption occurs in a secondary manner; ii) recommendations to MEC, HEIs, professors and students; iii) discussing a topic that is of interest to students (a finding of this research); and iv) considering the well-being of society, in view of the externalities generated by organizations made up of accountants.

Suggestions for future studies refer to: i) investigating the life story of influential professors in order to verify if it is professionalization or personal aspects that induce their proactivity when encouraging sustainability in courses; ii) the presence of the theme in postgraduate Accounting Sciences courses (*Stricto sensu*), due to the influence of professionalization; iii) what pressures encourage research in the sustainability field: line of research of advisors, as it is a current topic, personal interest, influence of the media, and/or others; iv) investigating details

about extension projects focused on the theme, due to the detected lack, so the focus would be on providing contributions to encourage their presence; and v) whether the market really deems sustainability relevant, when indicating the accountant's role on this matter.

Qualitative research has its limitations; in the present study, they are the following: i) not being able to generalize results, although this can be defended theoretically and methodologically; ii) the investigated topic, since it was little explored and limited to comparisons.

REFERENCES

- Astley, W. G., & Van de Ven, A. H. (2005). Debates e perspectivas centrais na teoria das organizações. *Revista de Administração de Empresas*, 45(2), 52-73. Recuperado de: <https://rae.fgv.br/rae/vol45-num2-2005/debates-perspectivas-centrais-na-teoria-organizacoes>
- Barber, N. A., Wilson, F., Venkatachalam, V., M. Cleaves, S., & Garnham, J. (2014). Integrating sustainability into business curricula: University of New Hampshire case study. *International Journal of Sustainability in Higher Education*, 15(4), 473-493. doi: <https://doi.org/10.1108/IJSHE-06-2013-0068>
- Barbieri, J. C., Vasconcelos, I. F. G. D., Andreassi, T., & Vasconcelos, F. C. D. (2010). Inovação e Sustentabilidade: Novos Modelos e Proposições. *Revista de Administração de Empresas*, 50(2), 146-154. doi: <https://doi.org/10.1590/S0034-75902010000200002>
- Bardin, L. (2016). *Análise de Conteúdo*. Tradução Luís Antero Reto e Augusto Pinheiro. São Paulo: Edições 70.
- Beddewela, E., Warin, C., Hesselden, F., & Coslet, A. (2017). Embedding responsible management education—Staff, student and institutional perspectives. *The International Journal of Management Education*, 15(2), 263-279. doi: <https://doi.org/10.1016/j.ijme.2017.03.013>
- Beltrame, I., Reis, L. G., & Gehlen, K. R. H. (2018). A institucionalização do tema sustentabilidade no curso de graduação em Administração. *Revista Gestão Universitária na América Latina*, 11(1), 300-320. doi: <https://doi.org/10.5007/1983-4535.2018v11n1p300>
- Benn, S., & Dunphy, D. (2009). Action research as an approach to integrating sustainability into MBA programs: An exploratory study. *Journal of Management Education*, 33(3), 276-295. doi: <https://doi.org/10.1177/1052562908323189>
- Bocken, N. M., Short, S. W., Rana, P., & Evans, S. (2014). A literature and practice review to develop sustainable business model archetypes. *Journal of Cleaner Production*, 65(1), 42-56. doi: <https://doi.org/10.1016/j.jclepro.2013.11.039>
- Boyce, G., Greer, S., Blair, B., & Davids, C. (2012). Expanding the horizons of accounting education: Incorporating social and critical perspectives. *Accounting Education*, 21(1), 47-74. doi: <https://doi.org/10.1080/09639284.2011.586771>

- Brasil (1999). *Lei nº 9.795, de 27 de abril de 1999*. Recuperado de <<http://www.mma.gov.br/port/conama/legiabre.cfm?codlegi=321>> em 09 maio de 2018.
- Cornuel, E., & Hommel, U. (2015). Moving beyond the rhetoric of responsible management education. *Journal of Management Development*, 34(1), 2-15. doi: <https://doi.org/10.1108/jmd-06-2014-0059>
- Czinkota, M., Kaufmann, H. R., & Basile, G. (2014). The relationship between legitimacy, reputation, sustainability and branding for companies and their supply chains. *Industrial Marketing Management*, 43(1), 91-101. doi: <https://doi.org/10.1016/j.indmarman.2013.10.005>
- Dallabona, L. F., Cunha, P. R., & Rausch, R. B. (2012). Inserção da área ambiental na matriz curricular do curso de Ciências Contábeis: um estudo das IES da região Sul do Brasil. *Enfoque: Reflexão Contábil*, 31(3), 7-22. doi: <https://doi.org/10.4025/enfoque.v31i3.15302>
- Demajorovic, J., & Silva, H. C. O. (2012). Formação interdisciplinar e sustentabilidade em cursos de Administração: desafios e perspectivas. *Revista de Administração Mackenzie*, 13(5), 39-64. doi: <https://doi.org/10.1590/S1678-69712012000500003>
- DiMaggio, P. J. & Powell, W. W., (1983). *The Role Of Institutionalization in Cultural Persistence*. In *The new institutionalism in organizational analysis*. University of Chicago Press (Chapter 1, pp. 1-41).
- DiMaggio, P. J., & Powell, W. W. (2005). A gaiola de ferro revisitada: isomorfismo institucional e racionalidade coletiva nos campos organizacionais. *Revista de Administração de Empresas*, 45(2), 74-89. Recuperado de: <https://rae.fgv.br/rae/vol45-num2-2005/gaiola-ferro-revisitada-isomorfismo-institucional-razionalidade-coletiva-nos>
- Doh, J. P., & Tashman, P. (2014). Half a world away: The integration and assimilation of corporate social responsibility, sustainability, and sustainable development in business school curricula. *Corporate Social Responsibility and Environmental Management*, 21(3), 131-142. doi: <https://doi.org/10.1002/csr.1315>
- Dyllick, T. (2015). Responsible management education for a sustainable world: The challenges for business schools. *Journal of Management Development*, 34(1), 16-33. doi: <https://doi.org/10.1108/jmd-02-2013-0022>
- Elkington, J. (2012). *Sustentabilidade: canibais com garfo e faca*. M. Books. do Brasil Editora.
- Gehlen, K. R. H., Reis, L. G., & Favato, K. J. (2021). Inserção do tema sustentabilidade no curso de Ciências Contábeis à luz da teoria Institucional: FEA/USP. *Revista de Educação e Pesquisa em Contabilidade*, 15(2), 225-242. doi: <https://doi.org/10.17524/repec.v15i2.2666>.
- Gray, R. (2010). Is accounting for sustainability actually accounting for sustainability... and how would we know? An exploration of narratives of

- organisations and the planet. *Accounting, Organizations and Society*, 35(1), 47-62. doi: <https://doi.org/10.1016/j.aos.2009.04.006>
- Gray, R., & Collison, D. (2002). Can't see the wood for the trees, can't see the trees for the numbers? Accounting education, sustainability and the public interest. *Critical Perspectives on Accounting*, 13(5), 797-836. doi: <https://doi.org/10.1006/cpac.2002.0554>
- Laffin, M. (2012). Currículo e trabalho docente no curso de Ciências Contábeis. *Revista de Contabilidade da UFBA*, 6(3), 66-77. Recuperado de: <https://rigs.ufba.br/index.php/rcontabilidade/article/view/6979/4835>
- Lawrence, T. B., & Suddaby, R. (2006). Institutions and institutional work. In Clegg, S.; Hardy, C.; Lawrence, T. B.; Nord, W. R. (eds.), *Handbook of Organization Studies*, 2 ed., 215–254. London: Sage.
- Lawrence, T. B., Suddaby, R., & Leca, B. (Eds.). (2009). *Institutional work: Actors and agency in institutional studies of organizations*. Cambridge University Press, New York.
- Lessa, B. D. S., Souza, A. C. D., & Lopes, F. D. (2019). Why has sustainability advanced in management schools? A sociological explanation. *Educação e Pesquisa*, 45(1), 1-16. doi: <http://dx.doi.org/10.1590/S1678-4634201945206670>
- Lima, C. E., & Amancio-Vieira, S. F. (2017). A institucionalização da temática da sustentabilidade no Programa de Pós-Graduação em Administração da Universidade Estadual de Londrina. *Revista Pensamento Contemporâneo em Administração*, 11(5), 20-36. doi: <http://dx.doi.org/10.12712/rpca.v11i5.1049>
- Lima, C. E., Amancio-Vieira, S. F., & Romagnolo, D. F. (2018). A inserção da temática sustentabilidade em um programa privado stricto sensu em Administração: o isomorfismo institucional como potencializador da mudança organizacional. *Revista Gestão e Desenvolvimento*, 15(1), 104-126. doi: <https://doi.org/10.25112/rgd.v15i1.1295>
- Lousada, A. C. Z., & Martins, G. D. A. (2005). Egressos como fonte de informação à gestão dos cursos de Ciências Contábeis. *Revista Contabilidade & Finanças*, 16(37), 73-84. doi: <https://doi.org/10.1590/S1519-70772005000100006>
- Machado-da-Silva, C. L., & da Fonseca, V. S. (2018). Estruturação da estrutura organizacional: o caso de uma empresa familiar. *Revista de Administração Contemporânea*, 14(spe), 11-32. doi: <https://doi.org/10.1590/S1415-65552010000600002>
- Mannes, S., Ferreira, D. D. M., Ferreira, L. F., & Rover, S. Panorama da Temática Sustentabilidade no Curso de Ciências Contábeis das Universidades Federais Brasileiras. *Sociedade, Contabilidade e Gestão*, 13(3), 1-18. doi: http://dx.doi.org/10.21446/scg_ufrj.v13i3.14657
- Marques, T. O., Schultz, C. A., & Hofer, E. (2012). Contabilidade ambiental: uma análise do conhecimento dos alunos de dois cursos de Ciências Contábeis. *Ciências Sociais em Perspectiva*, 11(20), 1-23. doi: <https://doi.org/10.5935/rcsp.v11i20.6140>

- MEC (2004). *Resolução CNE/CES 10, de 16 de dezembro de 2004*. Recuperado de <http://portal.mec.gov.br/cne/arquivos/pdf/rces10_04.pdf> em 30 de junho de 2018.
- MEC (2012). *Resolução nº 2, de 15 de Junho de 2012: Diretrizes Curriculares Nacionais para a Educação Ambiental*. Recuperado de <http://portal.mec.gov.br/index.php?option=com_docman&view=download&alias=10988-rcp002-12-pdf&category_slug=maio-2012-pdf&Itemid=30192> em 12 de abril de 2018.
- MEC (2018). *Instituições de Educação Superior e Cursos Cadastrados*. Recuperado de <<http://emec.mec.gov.br/emec/nova>> em 19 de Julho de 2018.
- Meyer, J. W. & Rowan, B. (1977). Institutionalized Organizations: Formal Structure as Myth and Ceremony. *American Journal of Sociology*, 8(2), 340-363. doi: <https://doi.org/10.1086/226550>
- Ott, E., & Pires, C. B. (2010). Estrutura curricular do curso de Ciências Contábeis no Brasil versus Estruturas curriculares propostas por organismos internacionais: uma análise comparativa. *Revista Universo Contábil*, 6(1), 28-45. doi: [10.4270/ruc.2010102](https://doi.org/10.4270/ruc.2010102)
- Santos, A. C. dos, Neumann, M., & Mattiello, K. (2021). Inserção curricular da temática sustentabilidade em cursos de graduação em ciências contábeis de universidades públicas paranaenses. *Contabilidade Vista & Revista*, 32(3), 73-97. doi: <https://doi.org/10.22561/cvr.v32i3.6659>
- Scott, W. R. (1987). The adolescence of institutional theory. *Administrative Science Quarterly*, 32(4), 493-511. doi: <https://doi.org/10.2307/2392880>
- Scott, W. R. (1995). *Institutional Effects on Societal Systems, Organizational Fields, and Organizational Populations: Empirical Research*. In: *Institutions and organizations*. Thousand Oaks: Sage Publications.
- Silva, H. H. M., Campanario, M., & Souza, M. T. S. (2013). O isomorfismo na educação ambiental como tema transversal em programas de graduação em administração. *Ciencias da Administracao*, 15(37), 170-186. doi: <http://dx.doi.org/10.5007/2175-8077.2013v15n37p170>
- Sisaye, S. (2013). The development of sustainable practices in complex organizations: Implications and potentials for integration into the accounting curriculum. *World Journal of Entrepreneurship, Management and Sustainable Development*, 9(4), 223-245. doi: <https://doi.org/10.1108/wjemdsd-01-2013-0010>
- Zucker, L. G. (1987). Institutional Theories of Organization. *Annual Review of Sociology*, 13(1), 443-464. doi: <https://doi.org/10.1146/annurev.so.13.080187.002303>