

# Including the sustainability topic in the Accountancy program in the light of Institutional Theory: FEA/USP

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## Abstract

**Objective:** Understand the institutionalization process of the sustainability topic in the Accountancy program at the School of Economics, Business, and Accounting at the University of São Paulo (FEA/USP).

**Method:** Exploratory case study with semi-structured interviews held with 8 professors involved with the topic and/or who witnessed the inclusion of sustainability in the program. Content analysis was used, from which 6 categories emerged. Data were triangulated using the interviewees' responses and the Pedagogical Political Projects (PPP) from 2000, 2006, 2009, 2013, and 2016.

**Results:** The topic sustainability is semi-institutionalized, transitioning towards institutionalized. The nature of the sustainability concept adopted by the program has *status quo* maintenance and reformist characteristics. The conclusion is that the courses addressing sustainability has more holistic and interdisciplinary attributes than the accounting program as a whole.

**Contributions:** This study's practical contribution is to serve as a basis for other institutions to include sustainability in their pedagogical projects. Regarding its theoretical contribution, this study shows the empirical applicability of the Institutional theory beyond the organizational business level, entering the educational sphere.

**Keywords:** Institutional theory; Sustainability; Bachelor's degree in Accountancy.

## 1. Introduction

The commotion brought about by the book *Silent Spring* (Carson, 1962) was a milestone for environmental discussions. Subsequently, agendas and conferences motivated discussions involving government policy, business corporations, and society regarding sustainability challenges (Adams, Heijltjes, Jack, Marjoribanks & Powell, 2011). The need for a more sustainable world was even more evident in the face of the 2008 global crisis. Since then, sustainability has been established as a field that needs the attention of business leaders, governments, universities, and non-governmental organizations (Annan-Diab & Molinari, 2017).

Over the past decade, the United Nations (UN) has placed education at the center of its strategy to promote sustainable development, promoting strategies such as the Principles for Responsible Management Education (PRME), which is committed to leading transformational changes towards a more socially and environmentally responsible leadership (Assumpção & Monzoni Neto, 2020). Annan-Diab and Molinari (2017) and Figueiró and Raufflet (2015) corroborate that there is a push to incorporate sustainability in pedagogical projects considering that educational systems reflect the aspirations and challenges posed by society (Assumpção & Monzoni Neto, 2020). Additionally, universities significantly influence a number of the world's future leaders and have the responsibility to train leaders and change agents to support the development of a more sustainable society (Assumpção & Monzoni Neto, 2020, Adams et al., 2011; Jacobi, Raufflet, & Arruda, 2011; Adams, 2018).

The discussion became urgent in recent years, and sustainable and ethical practices are a growing concern for accounting professionals (Wyness & Dalton, 2018). Higher Education Institutions (HEI) face the challenge of facilitating and contributing to a sustainable society (Jacobi, 2003). Part of the universities includes the sustainability topic in various fields of knowledge, including programs in the business field, the impact of which in the corporative world is indisputable (Jacobi, Raufflet & Arruda, 2011; Gonçalves-Dias, Herrera & Cruz, 2013).

However, despite the various initiatives and a growing number of universities seeking to engage with sustainable development, most HEIs have a traditional approach and continue to employ reductionist and mechanistic paradigms (Lozano, Lukman, Lozano, Huisingsh & Lambrechts, 2013). Thus, we highlight Chulián's (2011) criticisms, which note that accounting schools continue to develop technical skills only, i.e., focusing merely on economic and financial management. Even more problematic is when these schools disregard the possibility of discussing sustainable contexts. Wyness and Dalton (2018) state that although the inclusion of sustainability in undergraduate accounting programs has been discussed in recent years, the extension with which it has been included in accounting schools varies considerably worldwide.

In this context, the teaching of accounting has to change to incorporate more current formats and include critical, trans-disciplinary, and communicative competencies to support a transformation in the discipline and protect the public interest (Gray & Collison, 2002) (Saravanamuthu, 2015). Institutional theory precepts (Dimaggio & Powell, 2005) favor these changes, considering that organizations are led to incorporate specific changes and procedures established by rationalized concepts (Meyer & Rowan, 1977). According to Berger and Luckmann (2011), human existence results from a context that involves order, direction, and stability.

Therefore, considering the relevance of accountants in the corporate world decision-making and how incipient the discussions within HEIs are regarding training leaders with a critical view of the business model from a sustainable perspective, the following study question emerges: **How does the process of institutionalization of the sustainability topic occur at FEA USP?** To answer this study question, the objective of this single case study was to understand the institutionalization of sustainability in the Accountancy program at FEA/USP.

The relevance of this topic lies in the fact that research addressing the institutionalization of the teaching of accounting considering sustainability is incipient. Discussing this topic promotes a reflection upon the need to include sustainability in undergraduate programs and consider the importance of training critical professionals aware of the social, economic, and environmental relationships.

The practical contribution of this study is to serve as a basis for other institutions to include sustainability in their pedagogical projects. The theoretical contribution shows the empirical applicability of the Institutional theory beyond the organizational business level, entering the educational sphere. Hence, an investigation on how sustainability is institutionalized in an Accountancy program is relevant for higher education. Accountancy is a discipline that trains professionals who will work as managers, and accounting information of an economic, social, or environmental nature supports decision-making and, therefore, is vital for society as a whole.

## 2. Theoretical Framework

### 2.1 Including sustainability in higher education and in the teaching of accountancy

There are international agreements and declarations addressing sustainability in higher education (Wright, 2004), such as the Talloires Declaration (TD), Halifax Declaration (Canada, 1991), Kyoto Declaration (Japan, 1993), Swansea Declaration (Wales, 1993), Copernicus Charter (Barcelona, 1994), Declaration of Thessaloniki (Greece, 1997), and Lüneburg Declaration (Germany, 2001). In 2005, the United Nations General Assembly established the Decade of Education for Sustainable Development (ESD), a time when education was emphasized as an indispensable element for achieving sustainable development (UNESCO, 2005). After the ESD initiative, the UN Global Compact established an initiative to promote the Principles for Responsible Management Education (PRME). It was created in 2007 and launched at the UN Global Compact Leaders Summit, in a meeting attended by more than 1,000 business, society, and government leaders. PRME's primary objective is to develop competencies for students to promote sustainable value for a more inclusive global economy through education, research, and extension activities (Parkes, Buono & Howaidy, 2017).

By taking on professors as educating agents for subsequent generations and the current generation of business leaders, business schools are in a unique position to influence the mindset and actions of some of the largest and most influential organizations in the world (Parkes et al., 2017). Hence, the commitment to improving education addressing responsible management is indispensable. Gonçalves-Dias, Herrera, and Cruz (2013) conclude that changes in higher education go beyond the inclusion of new content in curricula as teaching-learning models should be reformulated and new skills should be included in the training of professors. However, academia may fail to propose this reformulation regarding the need for reformulations in the empirical sphere. Figueiró and Raufflet (2015) performed a literature review in the management field, and few studies address, from a philosophical and broader design of education, how this change could and would be achieved by the programs' design or through explicit educational paradigms.

Hahn and Reimsbach (2014) are concerned with the mere superficial integration of sustainability in the programs' curricula. Even though accountants do not directly work with sustainability practices, they communicate these practices; thus, sustainability should be part of management key courses, such as Accounting and Finances, considering that optional courses do not reach all students (Rasche et al., 2013; Hahn & Reimsbach, 2011).

Considering the information and concerns reported earlier, Silva Junior, Vasconcelos, Silva, and Campos (2019) addressed a sample of 1,882 undergraduate and graduate students attending business and accounting programs in Brazil and concluded that the respondents do not share the sustainability notion. The conclusions reveal that the economic dimension prevails above other dimensions, based on an opportunistic and utilitarian logic that permeates the training of accountants. Hence, there is a need to reflect upon educational training, especially the need to rethink the current educational model towards a sustainable logic.

The previous discussion shows that the teaching of sustainability among accounting students is incipient. Gray and Collison (2002) consider a series of problems related to the accounting profession, among which the fact that accounting is closely linked to modernity structures and environmental issues is marginal. The problem seems to be caused by the fact that accounting professionals do not receive “philosophical education”, but what the authors call technical “training”. They argue that sustainability should be central in all accounting programs to meet the interests of students, the profession, and society in general, to progress from a “welcome guest” (Gray, 2013) to a permanent resident in the accounting field (Wyness & Dalton, 2015).

## 2.2 Institutional Theory

DiMaggio and Powell (1983) talk of an isomorphic tendency among organizations, a tendency of organizations to resemble each other. An isomorphic institutional change occurs due to three mechanisms (Table 1).

Table 1

**Institutional isomorphism mechanisms**

Coercive isomorphism	Mimetic isomorphism	Normative isomorphism
<b>Results from formal and informal pressure exerted on organizations by other organizations. It results from a dependence relationship or society's cultural expectations toward organizations.</b>	Derives from complex situations, the solutions of which are not clear. Hence, organizations take other organizations as models and sources of organizational practices.	Results mainly from professionalization intended to define conditions, methods, and controls. Derives from formal education through legitimation based on cognition produced in college specialization and the growth of professional relationship networks responsible for disseminating new models.

Source: Based on DiMaggio and Powell (1983).

### 2.2.1 Institutionalization Processes

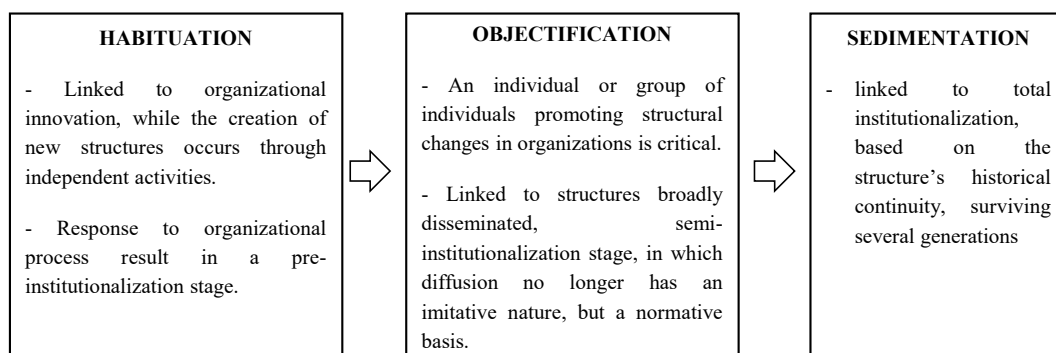
This subsection is based on the study by Tolbert and Zucker (1999) that specifically addresses institutionalization processes. The authors adopted definitions provided by Schutz for habitual actions and typification. The first is characterized by behaviors developed empirically and adopted by actors to solve routine problems. Typification involves the reciprocity of definitions or shared meanings linked to habitual behavior. The institutional coercive power of institutions influences individuals, and typifications have their own and external reality. According to Zucker (1977), exteriority is related to the historical continuity of typifications and transmission to new members. “Every institution has a body of knowledge transmitted as a recipe, that is, knowledge that provides institutionally adequate rules of conduct” (Berger; Luckmann, 2011, p. 90).

Tolbert and Zucker (1999) note that when actions acquire the quality of exteriority, they are called sedimentation. In this sense, with emphasis on externality in a set of behaviors, the transmission increases the degree of institutionalization of behaviors, which interferes with future transmissions (Tolbert & Zucker, 1999). Thus, the set of processes that are sequential (habituation, objectification, and sedimentation) suggests the variation in institutionalization levels concerning the degree of depth of connection with the social system, stability, and power to determine behaviors. The process starts with innovation, which arises through technological change, market forces, or legislation. From this, habituation begins, which, by having inter-organizational monitoring and theorization, moves on to the next stage, objectification. By analyzing the positive impacts, the level of resistance, and defense on the part of the interest group, it is possible to verify whether the process reached the level of sedimentation.

Hence, habituation is a response to organizational problems or a formalization of arrangements into policies and procedures, which may occur in one or more organizations facing similar problems. Therefore, these processes result in a pre-institutionalization stage. According to Dimaggio and Powell (2005, p. 84), in fields with a high degree of uncertainty, entrants “who could serve as sources of innovation and variation will seek to overcome mandatory innovation by imitating practices established in the field.” In this context, in the pre-institutionalization stage, similar organizations may adopt a structure according to their correlated circumstances.

In this sense, the movement that would lead to a more permanent status is the process of objectification (Tolbert & Zucker, 1999; Zucker, 1977). Objectification may have a crucial element called *champion*, or the individual or group of individuals who fight for and defend a cause, promoting structural changes in organizations. For champions to be successful, they need to identify the organizational problem and then develop theories that will serve to diagnose the sources of dissatisfaction or failure, thus presenting a solution for the problem (Tolbert & Zucker, 1999, p. 209). Therefore, the structures that were objectified and widely disseminated are in the semi-institutionalization stage, in which diffusion ceases to acquire an imitative nature, starting to have a normative basis, reflecting the implicit or explicit theorization of structures, and a higher survival rate than in the pre-institutional phase, although these do not last.

Sedimentation is characterized by the propagation of its structures throughout the group of actors theorized as suitable adopters and by the perpetuation of structures over a considerably long time (Tolbert & Zucker, 1999, p. 209). Therefore, the understanding of the sedimentation process is the identification of factors regarding the scope of the diffusion process and the conservation of the structure in the long term. Figure 1 presents a summary of the institutionalization processes’ characteristics.



**Figure 1.** Institutionalization Processes

Source: Based on Tolbert & Zucker, 1999; Zucker, 1977.

A structure's full institutionalization will depend on a few factors: low resistance from opposition groups, continued support is provided and promoted by the defender groups, and there is a positive relationship with the results achieved (as shown in Table 2)

Table 2

**Institutionalization stages and comparative dimensions**

Dimension	Pre-institutional stage	Semi-institutional stage	Total institutionalization stage
Processes	Habituation	Objectification	Sedimentation
Adopters' characteristics	Homogeneous	Heterogeneous	Heterogeneous
Impetus for diffusion	Imitation	Imitative/normative	Normative
Theorizing activity	None	High	Low
Variance in implementation	High	Moderate	Low
Structure failure rate	High	Moderate	Low

Source: Tolbert and Zucker (1999, p. 201).

Thus, this work has great value for empirical tests and is directly linked to this study's purposes. Through the processes presented here, we will seek to identify in which institutionalization stage the case analyzed here is included.

### 3. Methodological Procedures

This is a qualitative study with a single case study (YIN, 2010). Public institutions were considered to be the object of study because they do not restrict the disclosure of documents necessary for analysis. The second criterion was that the HEIs had Accountancy programs addressing sustainability in their pedagogical projects, and the third criterion was having a center of studies directed to sustainability within the program.

Two teaching institutions were found with these characteristics, FEA/USP and another HEI. After contacting both institutions, only the first authorized the study.

The institution chosen for this study was FEA/USP. This choice is justified considering that USP ranks first in the Webometrics ranking, classifying universities in Latin America. Its faculty body includes professors who are opinion leaders in the field of accounting and sustainability in Brazil. For instance, the first dissertation addressing environmental accounting was advised by Dr. Eliseu Martins. The professors are aligned with important movements, such as the participation of Dr. Nelson Carvalho in the International Integrated Reporting Council (IIRC) and Dr. Eduardo Flores as a board member in IIRC, and Dr. José Roberto Kassai's participation in the Brazilian Integrated Reporting Committee (CBARI). FEA/USP is a PRME signatory member and seeks to provide responsible executive education aligned with Unesco.

Data were collected using semi-structured interviews and by consulting educational laws and standards and PPPs available at the institution regarding 2000, 2006, 2009, 2013, and 2016 currently in place. This process is necessary to identify when the courses linked to sustainability were included in the program, to compare with the literature, and establish the historical context.

As for the interviews, open-ended questions, even when guided by a script, collect the respondents' implicit assumptions (Flick, 2004, p. 106). In the beginning, it became established that there would be five interviewees as they were involved with the topic or witnessed its inclusion in the program. During the interviews, another three participants were included to contribute to the study, and eight people participated.

Data were analyzed through content analysis according to the stages proposed by Moraes (1999), namely: preparation (pre-reading the materials), unitization (dividing the topic into units of analysis), categorization, description, and interpretation. The categories and subcategories (Table 3) were developed according to the theoretical framework, that is, pre-established. Based on this theoretical construction, the categories were defined in two ways. The categories concerning the institutionalization process were taken from Beltrame (2015), while new categories emerged from the theoretical framework on sustainability, education for sustainability, and accounting.

The pedagogical, political projects of the Accountancy program from the institution selected were analyzed from 2000. The reason is that the institutional theory requires the study to involve many years to verify when the sustainability subject was officially included in the program. Other documents involve laws (Law No. 9.597/1999) on Environmental Education (EE), FEA/USP Resolution No. 4097, from June 1994 (consolidated version with changes), National Curriculum Guidelines for the Undergraduate Program in Accountancy, standards for registration in international certification, in addition to the institutional website, and access to the courses offered through the Moodle platform. Triangulation was conducted using the interviewees' responses, the content of which was organized according to the pre-established categorization and documents collected in the institution. Table 3 presents a synthesis of the study's methodological procedure, showing a connection between this study's objectives, categories of analysis, the questions, and the authors adopted in data analysis. We verified whether sustainability applied to the program was intended to keep the *status quo* (understood here as incremental changes in the current social organization), reform, or radical social transformation based on the work of Hopwood, Mellor, and O'Brien (2005). This classification was performed together with the divisions of institutionalization processes (habituation, objectification, and sedimentation).

Table 3

**Synthesis of the methodological procedure**

Analysis roadmap (section 4)	Categories	Subcategories	Questions script	References
To verify how the sustainability topic was included in the Accountancy program.			How did you come up with the idea to include sustainability in the AS program? Who are the main actors involved? Was there any resistance?	PPPs (2000, 2006, 2009, 2013, 2016)
To identify what type of isomorphism occurred in the case studied here.	Isomorphism	Mimetic Coercive Normative	Was there any type of internal or external pressure to include sustainability in the program? Was there inspiration from any other institution?	Dimaggio and Powell (1983, 2005)
To analyze the level of institutionalization of the sustainability topic in the program	Habituation	Innovation; Structure; Policies; procedures	Is there any kind of consensus on the value of this new structure within USP and with other FEA programs? Is there institutional support?	Tobert and Zucker (1999); Law 9,9795/99; National Curriculum Guidelines for the Undergraduate Program in Accountancy (2004).
	Objectification	Social consensus; Structure diffusion; Presence of champions	Has the presence of sustainability in the AS program brought positive results? Internal or external?	
	Sedimentation	Positive results; Continuity of structure; Low resistance	Do the professors have difficulty in inserting sustainability into their courses? Do they receive support? Do you currently face resistance against teaching sustainability in the program?	
To present the nature of the concept of sustainability adopted by the program.	Sustainability	Concept nature	What is the concept of Sustainability adopted by the FEA/USP AS program? Is more than one concept adopted? According to the concept adopted, is any type of social change expected? What type? Incremental, reformist, or radical?	Gray Collison (2002); Hopwood, Mellor, and O'Brien (2005); Chulián (2011); Rasche et al. (2013); Hahn and Reimsbach (2014); Costa and Loureiro (2013); Jocobi (2003); Gonçalves and Martendal et al. (2013);
	Education for sustainability in accounting	Holistic thinking Interdisciplinary Results for society	Is there a dialogue with other fields of knowledge concerning sustainability? The topic's central idea is to present content in a broad way or with a focus on accounting?	



## 4. Data analysis

### 4.1 Origin and inclusion of sustainability in the program

ESD or EE is not mentioned in the program's pedagogical projects from 2000 to 2008. In 2009, the pedagogical project included the Social Balance optional course, which had Environmental Balance Sheet included in its content. This course remained in 2003.

In 2016, another two optional courses involving environmental issues within the Accountancy were included, namely: *Relato Integrado e Sustentabilidade* [Integrated Reporting] and *Estudos Complementares* [Complementary Studies] (every semester a new topic is addressed). In the second semester of 2016, the topic was "The 17 Sustainable Development Goals and Business Schools." The program of the Integrated Report and Sustainability course includes video presentations of speeches of the CEOs of large companies engaged in the theme of sustainability, lectures and workshops, educational programs, books, and the *Idea Sustentável* magazine. There are also suggestions regarding the most diverse topics related to environmental issues, consumption, politics, and economics.

The study's first phase was to identify why sustainability was included in the Accountancy program at USP. In this sense, interviewees A and B were the professors who promoted this process the most. Interviewee A started teaching the topic within the Complementary Studies course, and interviewee B was one of the IIRC's members, which was the precursor of the Integrated Reporting international body.

Interviewee B points out two origins of the topic within accounting. The first was when he came across the triple bottom line concept, i.e., the idea that one should not privilege the bottom line only, i.e., net profit, but that people and the planet were also important. The second was when B took part in the IIRC, in which the Prince of Wales questioned the role of accountants in a context that had already been taken over by environmentalists, engineers, lawyers, and economists.

IntB. It landed here because I ended up being part of the council (IIRC), [...] so I proposed this course and IntA was enchanted by the idea, [...] he developed a course we administer in partnership. He is teaching all the classes, sensitizing students and this course has been a success [...].

Interviewee G corroborates this statement, as the following excerpt shows:

IntG. The way IntA teaches the course, as IntB says, it attracts many students from other programs, in the same way as accounting attracts many professionals from other fields [...] basically financial managers interested in accounting, [...] you would not have students from other fields interested in the concept of environmental accounting, sustainable accounting.

IntE. So, we started offering this course with some regularity, it was more or less when IntA started investing in this topic, started to specialize in it [...].

Note that champions were first identified. According to Tolbert and Zucker (1999), champions are those responsible for promoting innovations and defending ideas together with the other group members. In this case, the champions are IntA and IntB. Another point is that the topic's inclusion in the program was based on social changes and not necessarily on coercion through norms or laws.

## 4.2 Isomorphism identification

Regarding isomorphism in Brazil, there is no specific norm that demands Accountancy programs to include sustainability in their curricula. Furthermore, even though Law No. 9,795/1999 regulates that Environmental Education should be at all levels of the educational process, this is not clearly stated by the National Council of Education resolution, establishing the National Curriculum Guidelines for the undergraduate program in Accountancy. In this sense, teaching institutions may or may not include EE or ESD in their curricula, revealing an apparent dissonance between law and the resolution directed to the program. Hence, coercive isomorphism, which according to Dimaggio and Powell (1983) is characterized as formal pressure exerted on organizations, possibly deriving from governmental orders, does not apply to this study.

As for mimetic isomorphism, the interviewees were asked whether other teaching institutions served as inspiration:

IntA. If I'm not mistaken, this is the first course in the world. Actually, we were inspired by the market's needs.

IntB. Our inspiration came from what I just told you, both from the triple bottom line concept, and my participation in the IIRC.

IntE. Not that I recall. I remember we discussed the topic, of developing research, and it was a natural thing to do.

IntG. I do not know this process, but USP is certainly a reference in Brazil, about universities' experiences.

In this context, normative isomorphism is related to formal education based on cognition produced in university specialization and professional relationship networks for disseminating new models. According to Dimaggio and Powell (1983), one of the mechanisms that encourage isomorphism is the selection of personnel, which may occur through personnel recruiting, with high performance among restrict groups of institutions, such as high-level executives who work in the financial and/or legal departments. IntB and IntG discuss the process of job succession:

IntB. [...] well, I have to recruit and keep the talents the management model will help produce results, which was responsible for past success.

IntG. The profile of the accounting student at FEA is different from some other universities that train students to work in small accounting offices. Here, most of our students are hired by large companies.

Regarding this select pool of companies, IntD notes that it is part of IntB's universe, who is one of those responsible for including the topic in the AS program.

IntD. [...] B has a very strong leadership capacity, so he brought many people to this Integrated Reporting course, for instance[...] so he noticed it at the level of the market, where he is.

Hence, these aspects highlighted here show the normative type of isomorphism linked to professional specialization and the succession of positions within a company. Additionally, according to the excerpts reported here, the interviewees associate an accountant's knowledge regarding sustainability and skills to produce reports that address these issues to high-level executives within institutions with a higher aggregate value.

It shows that the students who access such knowledge are more likely to stand out in the job market. However, this type of educational behavior may result in an unequal hiring process among companies. The reason is that not all higher education institutions address the topic in their accountancy programs so that students do not have the same opportunities to occupy top positions in large corporations, given a deficiency in their background. Here we highlight a point in the theory of Dimaggio and Powell (2005, p. 129): “the organizational fields that comprise a professionally trained workforce will be primarily driven by status completion.”

### 4.3 Habituation, objectification, and sedimentation

Regarding the first stage in the institutionalization process, habituation, involving innovation, structure, and policies and procedures, is not present in the case under study. According to Tolbert and Zucker, habituation or pre-institutionalization is linked to uncertainties that permeate an economic activity and demand companies to seek competitive strategies. In this case, we address an educational institution that saw social changes, both environmental and market nature, and the need to include the topic in the program.

There is no high degree of uncertainty at this level, which was not identified in any of the interviewees' statements. Some issues will present the level of institutionalization based on objectification and sedimentation. One of the main points for this analysis is whether a group of people resists the new proposal. Regarding this aspect, the respondents report:

IntA. No, there was no resistance. [...]. No difficulties at all.

IntB. None, because it is not about sustainability only, whenever a professor proposes a new course, people always support the idea.

IntC. On the contrary, people end up seeing it as an alternative for you to do conduct new studies.

The interviewees' reports show there was no resistance against the teaching of sustainability. The fact that another course was implemented over time also reinforces it among other faculty members. In this sense, there are no opposing groups, which, according to Tolbert and Zucker, characterize the level of sedimentation in which defender groups provide support, and there is a positive relationship with the results achieved.

Regarding institutional support, note that the interviewees have different views, which is attributed to the fact that a teaching institution has certain autonomy regarding institutional hierarchical arrangements. Concerning positive results accruing from having included the topic in the program, the interviewees focused on how students can work with this subject in companies, though some also mentioned scientific production.

Regarding the structure, the interviewees were asked about the relationships established with other departments or other fields of knowledge.

IntA. Our research center [...] comprises approximately 50 people [...]. It is multidisciplinary.

IntB. It is very close, we have students from the biology, communication, and economics programs [...].

IntC. Very little, you don't have any, unfortunately, it is something we complain of, there is a physical issue that usually people mention within the university, an inter-institutional issue [...].

IntD. Our structure is very verticalized into departments, the departments don't talk much [...] it's sort of every man for himself.

Hence, opinions are quite divergent on the inter-institutional relationship and regarding other fields of knowledge. It seems that those involved with sustainability, even if indirectly, admit that there is a need for other fields of knowledge to get involved, while those not directly involved have a more skeptical involvement regarding this exchange of knowledge.

In this sense, it is possible to identify the topic's institutionalization phase. Table 4, based on the theory proposed by Tobert and Zucker (1999), shows the stages of institutionalization and the comparative dimensions, whereas, in this new version, we highlight the stages of the Accountancy program at FEA/USP.

Table 4

**Identification of the institutionalization's stages and comparative dimensions**

Dimension	Pre-institutional stage	Semi- institutional stage	Total institutional stage
<b>Processes</b>	Habituation	Objectification	Sedimentation
<b>Adopters' characteristics</b>	Homogeneous	<b>Heterogeneous</b>	<b>Heterogeneous</b>
<b>Impetus for diffusion</b>	Imitation	<b>Imitative/normative</b>	<b>Normative</b>
<b>Theorizing activity</b>	None	<b>High</b>	Low
<b>Variance in implementation</b>	High	Moderate	Low
<b>Structure failure rate</b>	High	Moderate	<b>Low</b>

Sources: Tobert and Zucker (1999, p. 201).

The table shows the stages (in bold) of the topic sustainability, that is, between the semi-institutionalized (objectification) and institutionalization stage (sedimentation). The characteristics of the adopters are heterogeneous, even those who do not use the topic as a research topic. One example is IntC and IntE, who already taught the Social Balance course and were invited to give speeches in the Integrated Report course, including IntD.

Based on what was observed during the study, the structural failure rate is low due to each department's autonomy in including courses or themes related to accounting content without any impediment.

The dimension concerning the variance in implementation does not apply to the case under study, considering it is related to the number of organizations that start a given structure and how it varies. There is no way to identify this variance at USP because a more comprehensive survey would be needed involving the remaining teaching institutions, which would not be feasible in a single case study.

In this context, the theory is applied to a certain point, considering that the characteristics of an academic organization differ at various levels from a business organization regarding profit-seeking, market permanence, strategic levels, and competition.

#### 4.4 Sustainability in Accounting Education

After analyzing the sustainability's level of institutionalization, it is possible to identify the views of the actors involved in sustainability teaching.

Gray and Collison (2002) note that the professors may not be able or not want to learn/teach the topic. The interviewees consider this issue when asked about the barriers to teaching sustainability:

IntD. It depends on the professor, I guess it depends on almost a personal view, whether the person believes in it, or thinks it exists or that it is important.

IntG. So, the greatest difficulty to teaching these subjects is not necessarily the existence of an opposing group. But it is the existence of professors qualified in something as multidisciplinary as the concept.

Other interviewees mentioned the difficulty of including the topic transversally with other disciplines. According to Rasche et al. (2013), sustainability should integrate key disciplines such as Finances. Chulián (2011) notes that the role of a professor-researcher positively contributed to the change of values in the future generation of accountants. However, as observed, this is not an easy task. First, professors would have to incorporate sustainability concepts within their field of knowledge and research, even within key and advanced courses such as Fiscal Accounting, Corporate, Costs, and Management.

Superficiality may lie in the fact of not delving into the subject, mainly due to a difficulty of the professors themselves to be able to dialogue with environmental and social issues within their disciplines and, on the other hand, according to Rasche et al. (2013), the inclusion of optional courses not reaching all students.

A discussion involving Law No. 9,795/1999 is necessary at this point. It shows that EE, as an integrated educational practice, should not be implemented in a specific course within the curriculum. Additionally, it should be included in the professors' training at all levels and in all the courses, whereas the professors should receive complementary training.

Gray and Collison (2002) also address issues involving the students. According to the authors, the students opt for the accounting program considering satisfaction, anticipated success, interest, and preference. Considering that students opt for studying these courses, they tend to relate this knowledge to personal opinions rather than the career's future.

However, one of the reasons sustainability was included in the program was because the market needed to absorb accountants with knowledge on the subject, considering that accountants are responsible for reporting business practices. According to information provided by the program's coordinator, corroborated by the documents, 513 students enrolled in optional courses involving Sustainability, Social Balance, Environment, and ESD, with 227 students taking the Integrated Reporting and Sustainability courses since 2013. It is worth noting that the Integrated Reporting guidelines began discussions with the IIRC in 2010, and it was implemented in 2013. Therefore, the institution is in line with market practices.

### 4.5 Sustainability Concept

To establish the nature of EE or ESD present in the program under study based on an analysis of the courses and reports, we sought to identify the concept adopted by the program and where it would be placed within the mapping proposed by Hoopwood et al. (2005) in which approaches are divided between *status quo* maintenance, reformist, or radical changes in society.

Even though the content of the courses indicates texts and videos with an evident *status quo* approach, such as the UN videos and others with economic characteristics, the interviewees report that they do not adopt only one concept to teach sustainability in the program.

The interviewees presented various views regarding the type of change promoted by the inclusion of sustainability in the program and its nature concerns *status quo* maintenance. Hence, to classify the Accountancy program at FEA/USP, Table 5 summarizes the theory identifying the *status quo* and reformist characteristics, considering that there is no evidence that the accounting program presents characteristics of a radical reform of society. The characteristics of the two trends are presented, and those marked in bold refer to the program's nature.

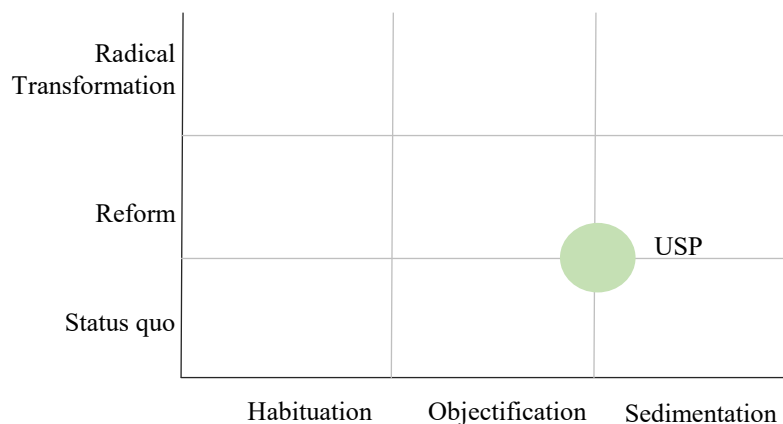
Table 5

**Definition of the nature of the program's sustainability concept**

Corrente Status Quo	Corrente Reformista
<b>Economic growth is the solution;</b> <b>Reduce the state's power;</b> <b>Technological development through information management.</b>	<b>Accept the problem</b> and criticism toward current business and government policies; <b>Changes may occur within the structures over time;</b> Market changes and government reform.

Source: adapted from Hoppwood et al. (2005)

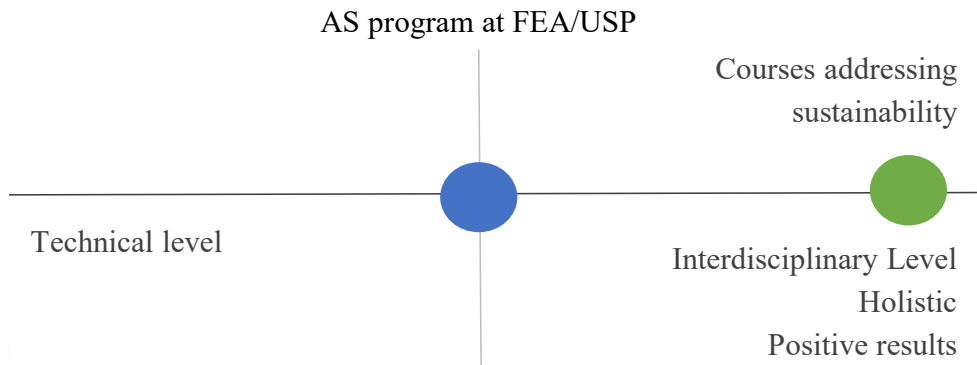
The characteristics highlighted in the table refer to what the interviewees' reports and an analysis of the courses revealed. It appears that the Accountancy program by itself is undeniably a *status quo* element, but an attempt to include discussions that remain marginalized within the program and the perception that these practices should change indicate an intention towards reform. In this sense, Figure 2 places the program in a quadrant divided between EE or ESD focused on *status quo*, reform, and radical transformation and, together, whether this is at the level of habituation, objectification, or sedimentation.



**Figure 2.** Map of the sustainability topic within the Accountancy program at FEA/USP regarding its level of institutionalization and the EE or EDS nature.

Source: developed by the authors.

As figure 2 shows, the level of sustainability institutionalization at the Accountancy program at FEA/USP is migrating towards sedimentation or institutionalization, whereas its nature is going from *status quo* towards reformist. Figure 3 presents the characteristic of courses that go from the technical to interdisciplinary level, holistic and positive results for society.



**Figure 3.** Level of sustainability teaching within the Accountancy program at FEA/USP.

Source: developed by the authors.

The program and the courses addressing sustainability had to be divided to develop figure 3. This division occurred because the interviewees diverged regarding the topic and on how it is inserted in the program. Because these are optional courses, they have characteristics that differ from the mandatory courses.

Because of its nature, the teaching of sustainability in the program tends to be holistic and interdisciplinary. On the other hand, as reported in the interviews, sustainability itself ends up isolated within the department, open only to the mandatory courses that integrate other programs, such as Law, Statistics, Mathematics, etc. From this perspective, the teaching of accounting within the program is at the technical and holistic/interdisciplinary level, while the teaching of sustainability is interconnected with other fields of knowledge. However, both present positive results given the course's relevance and quality: relevance of academic production and quality of the training provided to students who are hired by large companies.

#### 4.6 Discussion of results

The first aspect observed was that the Institutional theory was used to analyze the level of institutionalization of sustainability within the program. We identified that it is between semi-institutionalized (objectification) and institutionalization (sedimentation). Various factors explain this level of institutionalization, such as how long the courses addressing the topic are in the program, more than one course addresses the topic, relevant academic production, former students work with the topic, presence of champions (idea defenders), and lack of resistant on the part of the institution or other professors.

Therefore, the Accountancy program at FEA/USP was mapped regarding the type of EE or ESD offered to the students, between *status quo* maintenance and a reformist view of society. Another mapping was between the level of knowledge addressed within the institution, varying from technical knowledge to more holistic/interdisciplinary knowledge, with positive results. Finally, the study showed a need to separate the course from the discipline addressing sustainability.

The Accountancy program does not have a holistic or disciplinary approach beyond what is demanded by law. Due to the nature of the discipline addressing sustainability, a dialogue has to be established with other fields of knowledge. This was observed both on the profile of the students seeking the discipline, i.e., students from fields other than Accountancy, and the speakers who belong to the most diverse professions.

Normative isomorphism was identified, which is related to the education of workers, academic specialization, and job succession. It is an important aspect, considering that students who have access to sustainability concepts within the accounting profession have a knowledge differential.

This strategy is also presented in companies seeking to establish a transparent relationship with stakeholders by adopting sustainability reports. Hence, there is a need for a qualified workforce to develop and disclose these reports. Large corporations are the first to adhere to the new model; how will it apply to small and medium-sized companies?

Therefore, there is a structural problem considering that future accountants will work in these corporations. How will they support decision-making if they do not have proper knowledge concerning sustainability? Another aspect to consider is that if environmental and social disclosure is voluntary, companies will likely disclose positive information.

These issues need to be discussed, and teaching institutions need to reflect upon: to what extent the knowledge provided by colleges and universities is accounted for the type of result obtained in the corporate world? Or, can an accountant directly influence his/her work environment based on know-how obtained in a teaching institution?

Another problem identified is that faculty members need to participate for sustainability to be taught holistically (BRASIL, 1999). The most traditional fields of the accounting discipline do not identify with sustainability. According to Law No. 9.795/1999, sustainability should be addressed by all fields of knowledge, rather than be restricted to one course, but what was observed here is that the subject is addressed by just a portion of the faculty members.

In this sense, a course addressing sustainability in-depth, rather than only a few topics (within a generic course), would be an essential step among teaching institutions. Students would have the opportunity to access its concepts and decide whether to adopt them in their workplaces or not.

## 5. Final Considerations

This study's general objective was to understand the process of institutionalization of the sustainability topic in the Accountancy program of a higher education institution. Various factors beyond its sedimentation stage were identified, involving the role of accountants in the current social context, the difficulties in including a topic that is still considered marginal within the profession, and the type of teaching provided to accounting students.

The example of the Accountancy program at FEA/USP can be followed by other HEIs, to support the growth of the sustainability subject, which is currently a worldwide concern. Therefore, this study contributes to filling in the gap of academic studies addressing the topic and supporting coordinators and professors of Accountancy programs by broadening the discussions on sustainability and presenting a syllabus in the institutionalization stage, even though the topic is still incipient in the field.



Addressing sustainability means dealing with survival in all its aspects: the survival of the planet and humanity, reaching the companies and job opportunities. That said, this study contributes to society by evidencing a pre-institutionalized stage of the topic within a program, the institution of which is the largest in Latin America. Evidencing this stage means that the graduate students of this program are qualified to deal with a sustainable perspective in organizational business models, meeting international demand.

This study's limitations include the fact that this study presents an analysis based on the professors involved and documents. The students' perceptions regarding the topic could not be addressed. A questionnaire was sent to the students, but a low rate of adherence impeded any analysis.

Future studies are suggested to develop a model of institutionalization process and isomorphism directly focused on the academic environment, the nature of which is different from business organizations. Another suggestion is to conduct a quantitative survey at the national level to verify the teaching of sustainability within accounting programs and map the topic among teaching institutions in general at a national level.

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