

SUSTAINABILITY, ORGANIZATIONS AND TRAINING OF MANAGERS: AN EXPLORATORY RESEARCH ON BUSINESS ADMINISTRATION COURSES IN RIO GRANDE DO SUL

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ABSTRACT

Sustainability has imposed challenges to organizations. It increasingly requires organizations to consider in their strategies issues that go beyond the strictly economic focus. That way, in order that organizations can move towards sustainability-oriented strategies, they should go through a process of change. In this process, Business Administration Schools play a fundamental role, since many managers who lead organizations today, or will do it soon, are influenced and learn to acquire, in these schools, a particular vision in relation to human beings, organizations and their relationship with nature. Therefore, this article aims to identify whether Bachelor's degree courses in Business Administration in Rio Grande do Sul (RS), have proposed the inclusion of sustainability into their programs. The results demonstrated that the courses already have subjects related to the topic in their curricula, however sustainability does not seem to be a central issue in the courses.

Key-words: sustainability, business administration courses, organizations, sustainable strategies.

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1. INTRODUCTION

Sustainability is a widely discussed theme nowadays, and has imposed challenges to society, demanding a change of attitude in individuals and organizations. From organizations, particularly, it has increasingly demanded a concern with socio-environmental issues and the adoption of sustainable strategies (MARTINET e REYNAUD, 2004; WHITTINGTON, 2004; BARIN-CRUZ, PEDROZO, ESTIVALETE, 2006; BAUMGARTNER e KORHONEN, 2010). With regard to individuals, the arguments are that a change is needed that goes beyond the behavioral level, involving change in values, and, ultimately, a change of paradigm (STEAD e STEAD, 1994; STERLING, 2004; JACOBI, RAUFFLET e ARRUDA, 2011).

For that matter, Barin-Cruz, Pedrozo e Estivaleta (2006) state that, for companies to advance towards sustainability-oriented strategies, they must go through an evolutionary process. The authors suggest that the process of transition from a financial/economic logic to a sustainable logic can only happen through a learning process.

In this process, education and learning institutions, in general, and Business Administration schools, particularly, play an important role. As emphasized by Sterling (2004), politics and educational practice should leave fragmentation, objectivism and reductionism and achieve an integrated and holistic ecologism, along with an understanding of systems appropriate to a post-modern world.

Lozano (2010) states that universities have been, over the centuries, the main agents of social change, even while remaining traditional. In the last decade, a growing number of higher education institutions have endeavored to incorporate and institutionalize Sustainable Development in their curricula, research, operations, extension courses, assessments and reports. Despite the series of efforts by higher education institutions, Sustainable Development is an innovative idea in most universities, and is not present in all university subjects, courses and management, or their curricula.

However, the emergence of a significant number of international and national websites, networks and centers for sustainability and higher education in the last decade (e.g.: CSF, 2013; GVces, 2013; ULSF, 2013) is evidence that a significant innovation is taking place among smaller institutions, which are more flexible. Given that there are growing evidences that the sustainability paradigm influences the dominant thinking, policies and practice in sectors like economy, politics, agriculture, energy, management of resources, transports, health, production, wastes, engineering, construction, design, in addition to businesses and professions – all areas covered by higher education – a corresponding response by higher education is necessary and opportune (STERLING, 2004).

So, it is important to prepare managers to deal with sustainability and promote the required changes. However, one may ask: What is the role of Business Administration schools in this process? Are they working on the theme and seeking to qualify current and future managers to deal with issues associated to sustainability? How is sustainability being introduced in these schools?

This paper presents the results of an exploratory research that aimed at identifying whether Bachelor's degree courses in Business Administration in Rio Grande do Sul have proposed the introduction of sustainability in their programs. The research focused on Bachelor's degree courses in Business Administration because they are directly related to organizations and training of managers. Many managers leading organizations today or that will lead organizations in the future, are influenced and learn, in these schools, a certain view concerning knowledge,

man, organizations and their relation with nature. So, they are appropriate to promote transformation.

Next, the theoretical frame of reference of this paper is presented, addressing “Sustainability and Organizations” and “Administration, Education and Sustainability”. Soon after, the methodological procedures are presented, followed by results and analyses. Finally, some final considerations are presented.

2. SUSTAINABILITY AND ORGANIZATIONS

Sustainability has imposed challenges to organizations. It increasingly requires organizations to consider in their strategies issues that go beyond the strictly economic focus, be it to keep competitiveness in the market, or for understanding their broad role in society, it has been a demand which organizations have faced.

In this context, new approaches arose, over time, concerning organizational strategies. First, we have those associated to strategic planning and competitive advantage, focused chiefly on the external environment, the industry where the organization is inserted (PORTER, 1989; PORTER, 1991). Also concerned with competitive advantage, however with internal focus, there is the Resource-Based View (PENROSE, 1959; WERNERFELT, 1984; BARNEY, 1991; BARNEY, WRIGHT e KETCHEN, 2001). A third approach is the one that addresses cooperation and competition, incorporating the importance of partnerships to increase competitiveness (BENGTSSON e KOCK, 2000; BARNETT, 2006; PADULA E DAGNINO, 2007; BONEL e ROCCO, 2007; WALLEY, 2007). It is worth emphasizing that these three approaches, though presenting different aspects, follow the same logic: the search for a competitive differential to survive in the market. As state Barin-Cruz, Pedrozo e Estivaleta (2006), these strategic logics, in the management field, have the same main objective: maximization of shareholders’ gains.

However, one can observe, in the most recent decades, the emergence of an approach that follows other logic, one that incorporates the idea that organizations, in addition to bringing gains to shareholders, should also be concerned with their stakeholders – groups or individuals that can affect or be affected by the organization’s actions (FREEMAN, 1984). So there are debates on sustainable strategies (e.g. MARTINET e REYNAUD, 2004; WHITTINGTON, 2004; BARIN-CRUZ, PEDROZO e ESTIVALETE, 2006; BAUMGARTNER e KORHONEN, 2010).

Thus, one can observe the need for organization to be prepared for this change, and managers should be prepared to manage organizations whose decision making occurs in an increasingly dynamic and complex environment, involving multiple interests and variables. In this way, Tenório (2006) states that we must understand that companies are inserted in complex environments, where their activities influence or impact on several social agents, communities and the society. Consequently, the business orientation that seeks to meet shareholders’ interests alone became insufficient, and the incorporation of social objectives in the business plan is necessary to integrate companies to the society. The author adds that the industrial society sought basically economic success; the post-industrial society, on the other hand, seeks to increase life quality, valorization of the human being, respect to the environment, corporate organization with multiple objectives and valorization of social actions, both by companies and individuals.

According to Starik e Rands (1995), the adoption of sustainable strategies is a fundamental step to reach and keep the status of an Ecologically Sustainable Organization. At the corporate strategy level, managers must understand what their organization mean and what their role in the society is, and then attempt to act on the results. So, entrepreneurial strategies drive

attention to political-economic, socio-cultural and ecological environments. Additionally, these authors emphasize the importance of analyzing companies using multi-level and multi-systemic bases.

Baumgartner e Korhonen (2010) also highlights the importance of the different contexts. They argue that, in the context of strategy, it is important to recognize the global environment at issue, which always includes the broader socio-economic environment, that is, the cultural context, the political context, the regulatory context and the market context. Reductionist policies and strategies fail to carefully consider this socio-economic context where all policies and strategies are inserted. This leads to “blind alleys” and results in suggestions that are not realistic or that do not survive in the long term.

Wals e Schwarzin (2012) alert to the fact that a sustainable organization does not refer to an organization that can keep, for example, profitability, but rather the one that, given what we know today, successfully balances people, prosperity and planet, seeking a dynamic balance among these 3Ps of sustainability. Ultimately, as an act of equilibrium, a full change can be required; instead of maximization of profit, something totally different, like maximization of meaning, corroborating the questioning brought by Starik e Rands (1995) about the meaning and role of organizations in the society.

In this regard, Whittington (2004) also emphasizes the social role of organizations. According to him, the management strategy should be understood as a social practice. It should get closer to Sociology’s recommendations, rather than Economy’s recommendations. That is, there should be a concern with the consequences of the strategic action, chiefly when it comes to its social and environmental impacts.

So, we can say that, in addition to the classical models of strategy, the company’s discourse and practice are today strongly influenced by two references: the financial and the sustainable, which are contrary to each other. The first is related to the agency theory – the agency relations are defined as a contract through which a leader engages an agent to fulfill an action on his/her behalf, which needs delegation of decision authority to the agent. The company is seen as a knot of contracts: a set of relations of the agency. So, the *Homo Economicus* rationality prevails. The second requires multiple rationalities; the company must be capable to reduce its partners’ uncertainty about its future behavior: it is necessary to create confidence; the strategy becomes multidimensional, because it must consider the different interest groups (MARTINET E REYNAUD, 2004).

Thus, it is necessary to prepare managers so that they will conduct organizations in this process or change required for sustainability, considering not only shareholders, but stakeholders as well. It is important to emphasize that the amount of stakeholders related to an organization can be large, including employees, shareholders, suppliers, distributors, clients, community, government, environmental and social organizations, covering the planet Earth, as well, as state Stead e Stead (2000). Chart 1 summarizes and relates the proposals of strategic positioning of the different authors presented.

AUTHORS	STRATEGIC POSITIONING	
Martinet e Reynaud (2004)	Financial logic	Sustainable logic
Whittington (2004)	Management strategy as economic practice (Economics)	Management strategy as social practice (Sociology)
Barin-Cruz, Pedrozo e Estivaleta (2006)	Competitive strategies	Sustainable strategies

Chart 1 – Relation of strategic positioning presented by different authors

Source: developed by the authors based on Martinet e Reynaud (2004); Whittington (2004) e Barin-Cruz, Pedrozo e Estivaleta (2006)

In this process of change in organizations managers play an important role, and Business Administration Schools could prepare such managers to broaden the organizations' scope, making them incorporate the stakeholders' objectives, in addition to those of shareholders. In this respect, education proves to play an important role. Through education it is possible to disseminate the concept of sustainability, instructing and encouraging actions accordingly and contributing to the training of critical, active subjects, who will transform the society. As stated by Nobre (2015), education is outstanding as fundamental process and agent of transformation that will provide changes in values and decisions of managers as well as in corporate strategies in order to contribute to the development of a sustainable future in terms of environmental, social and economic integrity in the organizational and industrial scenario.

However, according to Starik *et al* (2010), to date, most Business Administration courses are used to approach environmental concerns as a set of legal and ethical issues, little associated to economic performance, strategic decisions or daily business operations, except as cost factors. Therefore, advance is necessary with regard to the understanding of the relation involving organizational strategies and sustainability.

In this process, Business Administration courses play an important role, because that is where managers learn a certain view of the world and organizations. Working on themes associated to sustainability and the role of organizations in face of the challenges imposed by sustainability, these courses can be responsible for broadening the view of current and future decision makers in the organizations, expanding the organization scope, seeking more than the simple generation of financial return, and can be transformed into another agent seeking sustainability. Hence, education and sustainability are discussed in the next sections, with focus, in the end, on Business Administration courses.

3. ADMINISTRATION, EDUCATION AND SUSTAINABILITY

As discussed, new needs have been posed to organizations requiring transformations. That way, changes are also required in the individual ambit. Managers must be prepared to deal with these matters, and so education becomes important. Here, the focus is on Business Administration for being directly associated to organizations.

Some studies have demonstrated that a concern with sustainability has been observed in Business Administration courses and has led to changes (e.g.: KEARINS e SPRINGETT, 2003; JACOBI, RAUFFLET e ARRUDA, 2011; PALMA, OLIVEIRA e VIACAVA, 2011; DEMAJOROVIC E SILVA, 2012; BRUNSTEIN, GODOY e SILVA, 2014). As state Brunstein, Godoy e Silva (2014, p. 2), "we see

the strengthening of the academic reflection and practical experiences of education to sustainability in classrooms and in Business Administration courses, which gradually grow in amount and density". However, it is highlighted that though there is a movement going on in higher education schools worldwide, "the construction of more robust educational actions in terms of training a new generation of administrators prepared to respond to the demands of a sustainable logic" is still lacking (CARVALHO, BRUNSTEIN e GODOY, 2014, p.114).

So, though we can already identify some actions in that way, this process is still incipient. Many times it is limited to one subject along the course (sometimes optional) that addresses the subject or, mostly, themes related to it – like, for example, subjects with focus on Environmental Management and Corporate Social Responsibility – CSR). Such fact is demonstrated in a study involving 40 Brazilian federal universities, which shows that only 13 (around 33%) of undergraduate Business Administration courses present subjects related to sustainability (PALMA, OLIVEIRA e VIACAVA, 2011).

Jacobi, Raufflet e Arruda (2011), corroborate such idea while stating that the concept of sustainability has been disseminated in Business Administration schools in two ways: first by introducing new courses in programs such as CSR or Sustainability; second by promoting sustainability as an opportunity in a given subject. With regard to the first, they state that the prevailing thinking in Business Administration, in their definitions of the concept of sustainability in organizations, addresses mainly the social issue and the challenges posed by environmental issues as business opportunities, an option to reduce costs or a form of differentiated positioning of products and services. The social responsibility of companies proves to be only reactive, at least in practice, that is, a response to the demand of the society and to the need to keep an image and reputation of a socially responsible organization and, chiefly, a response to legal requirements. As to the second, the authors claim that introducing sustainability as focus in one single subject, like, for example, introduction of eco-efficiency in production and logistic areas, has potential to improve efficiency. However, such strategy will probably fail in its questioning and re-design of the whole process.

Jacobi, Raufflet e Arruda (2011) also highlight some challenges which the promotion of sustainability in higher education has faced: 1) most higher education institutions have provided a fragmented focus on sustainability; 2) the promotion of interdisciplinarity as condition to the education for sustainability has found a lot of resistance in institutions due to administrative issues and also due to a reluctance by the teaching staff; 3) the need of a deep and long lasting change in the organizational process within institutions – higher education should address sustainability in a more systemic way, involving the whole institution in the ongoing changes, in collaboration with learning strategies.

The discussion on sustainability and education is broad and involves several concepts that should be clarified for a better understanding of the theme. According to Sterling (2004), with the introduction of the four terms – environmental education (EE), education for sustainable development (ESD), education for sustainability (EfS) and sustainable education (SE) – since 'Cúpula da Terra' in Rio de Janeiro, varied points of view arose. Historically, the terms related to sustainability arose around 25 years later than those related to environmental education, reflecting a change of concern and perception of the society in general, of environmentalisms as single issue for a more holistic view of the inter-dependency of problems and, specifically, of the economic, social and environmental aspects. Sterling (2004, p. 50) suggests that these terms evolved, and the emergence of new terms indicates acknowledgement of the previous terms limits, while respecting their validity (Figure 1).

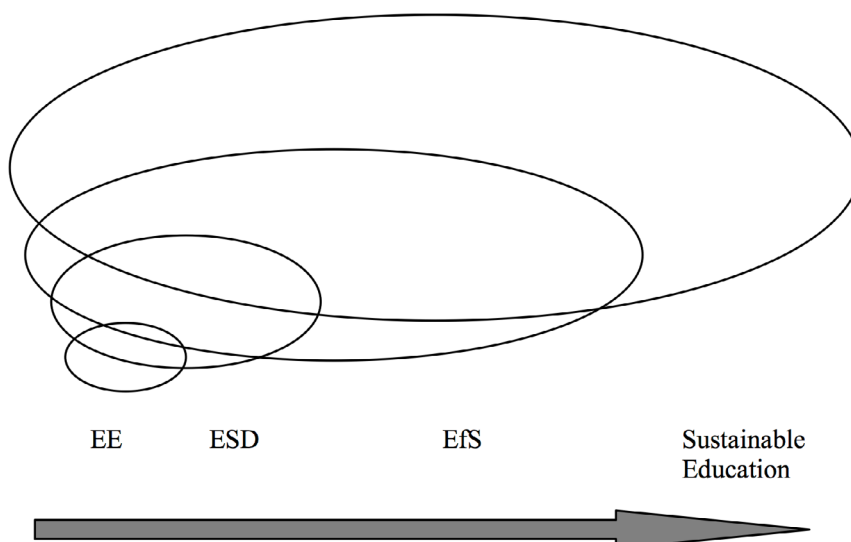


Figure 1 – The evolution of key terms – Environmental Education (EE), Education for Sustainable Development (ESD), Education for Sustainability (Efs) and Sustainable Education (SE)
 Source: Adapted from Sterling (2004, p. 50)

Bursztyn e Drummond (2009) emphasize that, just over 20 years since its launching, SD concept spread and rooted substantially in the institutional tissue (public and private), sensitized the media and shaped the universe of public decisions. They also highlight that, in the academy, after a initial estrangement, given the conservative nature of the university, it achieved impact and legitimacy, spreading in two ways: as theme of interest for different subjects, and as interdisciplinary field, the intersection of different fields.

For that matter, one can observe an increase in works turned to reflections on how an education based on sustainability would be. Buarque (1996), for example, states that environmental education qualifies for the understanding of the relations between man and nature while seeking alternatives for a balanced life, which becomes possible through the training of critical thought, while associating the critical science to reality.

In addition to environmental education, other proposed nomenclatures are found in the literature, like Efs and ESD, which complement the first concept. UNESCO adopted the term education for sustainable development (ESD), which comprises the concept of environmental education for having a set of broad objectives, based on critical values and thought, and should be integrated in other subjects rather than an independent subject. In the UN General Assembly, held in December 2002, the period from 2005 to 2014 was proclaimed as the Decade of Education for Sustainable Development (DESD) (UNESCO, 2005).

According to Ceulemans e De Prins (2010), the DESD has focused on SD integration in all educational environments. For higher education, SD integration may be situated, traditionally, at different levels, for example, education, research, university operations and external community.

As to the first level – SD integration in education and curricula – in general, two lines can be distinguished in the literature: horizontal or vertical integration. In the horizontal integration, SD is intertwined in different subjects of the curriculum, while the vertical integration can be understood as the organization of SD subjects, separated within the curriculum. Though both op-

tions have their own advantages and disadvantages, many authors and institutions clearly favor the horizontal integration. All of them focus on interdisciplinarity and the need of a systemic and holistic approach for SD (CEULEMANS E DE PRINS, 2010).

In this regard, Buarque (1991) argues that the organization of scientific subjects started to be influenced by the need to understand the global changes and the growing discussions around SD, which has demanded the vision of man no longer disconnected from nature. However, it is worth noting that it means rupture with specialization and the borders and barriers existing among the different fields of knowledge – introduced during the 20th century and still very present in the society and in higher education institutions.

Bartholo Jr. e Bursztyn (2001) state that, in the world of science and technology, in the 20th century, a progressive specialization begins, which requires professionals with increasingly specialized competence, in fields increasingly more strict and delimited. Along with this movement, there is also strong specialization in education. According to the authors,

from the universalist, classical and comprehensive teaching (...) we went towards segmentation and specialization, preparing youth for a compartmentalized and strict labor work. With that, we gained efficiency (as verified with measurable indicators). But we lost our way. The broader objectives and purposes of such effort are increasingly more opaque. We lost the overall view. And, more serious, the critical spirit and the consciousness of the need, utility and, chiefly, the implication of the use of each specific knowledge, while fitting in a broader mosaic of knowledge (BARTHOLO JR. e BURSZTYN, 2001, p.161) (translated).

Bursztyn (2008) highlights that interdisciplinarity plays an important role in the debate on the crisis and the future of higher education institutions, mainly the university. In the 20th century can be identified as a specialization age in the academy, there is now a tendency to add interdisciplinary spaces in the traditional disciplinary organization of investigation and training.

Expanding the debate, Sterling (2004) uses the term sustainable education (SE) as a broader term to include EE, ESD and EfS. In addition to these terms, SE is used to suggest a change in the educational paradigm, rather than a change in the existing paradigm.

In order to face the current conditions of unsustainable life styles, systemic complexity and uncertainty, Sterling (2004) argues that a change in the educational culture that is based on and goes beyond the “environmental education” traditions, and later expressions for education for sustainability is needed. This culture can be referred to as “sustainable education”, a wide term that suggests an holistic educational paradigm concerned with the quality of relations rather than the product, with emergences instead of predetermined results.

According to Sterling (2004), the lack of fundamental progress with the “reorientation” of education and the accommodation and contention of education for sustainability of the mainstream, underlines the need to articulate an alternative and ecologically grounded educational paradigm that can lead to a change of culture and provide a more integrative view of education. In order to help to respond to this challenge, the author suggests the concept of SE, no longer as part of EfS and ESD, but as the next logical step in the evolution of the field. By suggesting a change in the educational culture, the emphasis is no longer on the desired results as in the “education for sustainable development”, but on the qualities of the teaching itself, through which sustainability is expressed as an emerging property.

Wals e Jickling (2002) also contests the instrumental interpretation of “education for sustainability” or “to sustainable development”. According to the authors, it is necessary to differentiate higher education to beyond training and conditioning, because the prescription of par-

ticular life styles or (codes of) behavior is problematic, since it suffocates creativity, homogenizes thought, reduces choices and limits of autonomous thinking and levels of self-determination. They suggest that sustainability integration in higher education is closely linked to the development of emancipating qualities, and therefore, it will have to provide students with a way to understand and transform the complex world of which they are part.

According to Wals e Jickling (2002), the integration of aspects of sustainability can't be made without critically considering the re-structuring of didactic arrangements. This re-orientation requires many opportunities for team members and students to engage in new forms of teaching and learning. For that to happen, they must have the opportunity to re-learn their way of teaching and learning and re-thing and re-shape their mutual relationships. These new didactic arrangements presuppose an orientation to the problem, experiential learning and teaching along life. In this regard, the following changes in educational orientation are suggested (WALS E JICKLING, 2002):

from consumption learning to learning through Discovery and creative solution of problems;

from arrangements focused on the teacher to arrangements focused on the student;

from individual learning to collaborative learning;

from learning dominated by theory to learning oriented to praxis;

from pure accumulation of knowledge to problem orientation;

from content-oriented learning to self-regulated learning;

from learning based on institutional personnel to learning with external people;

from low level of cognitive learning to higher level of cognitive learning;

from emphasis only on cognitive objective to emphasis on affective objectives and related skills.

Thus, SE (STERLING, 2004):

implies a fundamental change of purpose or, at least, an additional fundamental objective for education;

implies the incorporation and exploitation of sustainability nature as intrinsic to the learning process. This is education as sustainability – feeding critical, reflexive and systemic thinking; creativity; self-organization and adaptive management – instead of education “on” sustainability or education “for” certain results of sustainable development;

it is not prescriptive, but rather indicative and purposeful;

affirms liberal humanist traditions in education, but goes beyond them through synergy with core values, systemic and sustainable concepts and methodologies;

challenges the limiting effects of the characteristics of the prevailing mechanist paradigm, like top-down control, centralization, managerialism, instrumentalism and devaluation of humanities and arts;

it is based on “systemic” rather than “systematic” – that is, the emphasis is on systemic learning as change, instead of systematic control as response to change.

Sterling (2004) highlights that this change in educational culture requires a deep learning process by educational players – political decision makers, managers, theorists, researchers and professionals. If higher education institutions are playing a complete and constructive role in the transition to sustainability (if intended to provide transforming learning experiences to students) then – like organizations that learn – these institutions and their players need to go through some kind of transforming learning experience.

However, one can observe that the advances in higher education institutions and, par-

ticularly, in Business Administration schools, with regard to insertion of sustainability have been few (JACOBI, RAUFFLET e ARRUDA, 2011; CARVALHO, BRUNSTEIN e GODOY, 2014). According to Rands e Starik (2009), sustainability in management education is a relatively recent phenomenon. Starik *et al* (2010) add that, particularly in the last decade, the attention to sustainability of businesses has significantly expanded. However, most of this attention must be integrated at any level of subjects and course of Business Administration schools.

One way to identify whether there is integration of sustainability in Business Administration courses is through search on courses' websites and curricula. Studies of this kind were already developed in Brazil and worldwide (e.g.: CHRISTENSEN *et al*, 2007; WU *et al*, 2010; PALMA, OLIVEIRA e VIACAVA, 2011) and indicate that it is necessary to advance the insertion of sustainability in these courses. The present study intends to make such analysis in Rio Grande do Sul Business Administration courses.

4. METHOD

The present work can be considered an exploratory study that sought to identify whether classroom Bachelor's degree courses in Business Administration in Rio Grande do Sul have proposed insertion of sustainability in their programs. Exploratory surveys, according to Gil (2007), have as main purpose to develop, enlighten and change concepts and ideas in order to formulate more accurate problems for later studies – developed in order to provide a general view of a given fact. Malhotra (2006) adds that they are commonly used in the initial organization of relevant information on the problem to be investigated, providing ground for later more detailed researches.

In this exploratory phase, information on websites of classroom Bachelor's degree courses in Business Administration in Rio Grande do Sul (RS) was surveyed from August to September, 2013. Initially, a screening was made on the e-MEC of Business Administration courses that obtained better qualification by MEC (Ministry of Education) in RS state – and only those with the best grade were considered (4 and 5).

The e-MEC was created to provide electronic proceedings of regulatory processes. Through the Internet, higher education institutions obtain accreditation and re-accreditation; seek authorization, acknowledgement and renewal of acknowledgement of courses. Operational since January 2007, the system makes possible the opening and follow-up of processes by institutions in a simplified and transparent way. There, it is possible to access information from all higher education institutions registered (e-MEC, 2013).

CPC (Preliminary Course Concept) was used as indicator. It is formed based on Enade results and by factors that consider professors' titles, percentage of professors who are under partial or full time regime (not paid by hour), didactic-pedagogical resources, infrastructure and physical facilities. The concept, which goes from 1 to 5 (5 as the maximum), is a preliminary indicator of undergraduate courses' situation in the country (e-MEC, 2013).

After this first screening, information on these courses' websites was searched to identify whether they address sustainability or related themes in the course presentation and other information. The main results are presented next.

5. PRESENTATION AND DISCUSSION OF RESULTS

According to e-MEC data, in Rio Grande do Sul there are classroom courses in Business Administration in 94 municipalities of the state, offered by 86 higher education institutions. Of these, two obtained concept 5 and thirteen obtained concept 4. Chart 2 presents the higher education institutions, the cities where they serve and their respective concepts (only for those with CPC equal to 4 and 5). Parts of the texts found on the courses' websites are also presented, associated to sustainability and subjects offered by the courses that are related to the theme. Since few courses presented the word sustainability directly, correlated themes like environment, environmental management, social responsibility and ethics were also considered. The work also details in which part of the text the theme was found (if in the general presentation of the course, in the egress profile, etc.) and whether the subjects offered are mandatory or optional, informing their workload as well.

HEI name	City	CPC	Sustainability and related themes	Sustainability-related subjects
Universidade Federal do Rio Grande Do Sul – UFRGS	Porto Alegre	5	In the course presentation: <i>“(...) graduates administration professionals with conceptual, technical and human competences, capable of articulating the systematized knowledge with the professional action, aiming at building an efficient organizational context and its transformation into entrepreneurial opportunities, grounded on social responsibility, justice and ethics.”</i>	Compulsory: - Philosophy and ethics in administration (60h) - Socio-environmental management in companies (60h) - Social management and development (60h)
Universidade Federal de Santa Maria – UFSM	Santa Maria	5	In the course objective: <i>“(...) the objective is to form qualified administrators to efficiently manage organizations, considering the need to transform a technocratic society into a more human society, seeking balance between economic development and life quality. (...) By means of management strategies the administrator can promote citizenship and its values. (...) The administration professional can transform companies into socially responsible companies, concerned with providing answers to the society, contributing to its development.”</i>	Compulsory: Ethics in administration (60 h) Optional: - People management and socio-environmental responsibility (30h) - Environmental management and sustainability (60h)

HEI name	City	CPC	Sustainability and related themes	Sustainability-related subjects
Universidade Federal do Rio Grande – FURG	Rio Grande	4	-	Optional: - Administration and sustainability: environment and economics (30h)
Universidade de Caxias Do Sul - UCS	Bento Gonçalves	4	-	Compulsory: - Ethics (30h) - Organizational ethics (60h)
	Canela	4		
	Caxias do Sul	4		
	Guaporé	4		
	Vacaria	4		
Universidade do Vale do Rio Dos Sinos – UNISINOS	São Leopoldo		<p>In the course presentation: <i>“(…) With a solid knowledge base, the undergraduate course prepares you to be differentiated by ethical and critical attitude, concern with sustainability, innovation and entrepreneurial spirit.</i> <i>As administrator, you will be the professional responsible for planning and execution of actions that aim better use of resources – financial, human, material – to maximize the organizations’ results, with positive impact on the society and the environment.”</i></p>	<p>Compulsory: - Ethics and Businesses (60h) - Latin America, Development, Sustainability (60h) Optional: - Social Project I (60 h) - Social Project II (60 h)</p>
Pontifícia Universidade Católica do Rio Grande do Sul – PUCRS	Porto Alegre	4	<p>In the course presentation: <i>“Understand the concept of quality and the importance of its application (...) develop innovation and environmental consciousness; administrate and prepare projects; understand the Brazilian model of public management”.</i> In the egress profile: <i>“Ethical attitude and social responsibility”</i></p>	<p>Compulsory: - Philosophy and general ethics (60h) - Environmental management, Social Responsibility and Corporate Ethics (30h)</p>

HEI name	City	CPC	Sustainability and related themes	Sustainability-related subjects
Universidade de Santa Cruz do Sul - UNISC	Santa Cruz do Sul	4	<p>In the course presentation: <i>"(...) aims at forming graduates with conditions to perform the most different activities that outline the administration professional performance, emphasizing the generalist line and producing results with ethics and consciousness of their social responsibility."</i></p> <p>In objectives: <i>"Qualify professionals so that they can contribute to the regional development, forming an administrator capable of following, proposing and participating in changes that occur in organizations, with competence, ethical consciousness and social responsibility.(...) Provide to the student understanding of social, political, environmental and economic dynamics, as well as the ethical and social implications of the profession."</i></p>	<p>Compulsory: - Ethics and professional legislation of the administrator (30h) - Socio-environmental management (60h)</p>
Universidade Regional Integrada do Alto Uruguai e das Missões – URI	Frederico Westphalen	4	<p>Egress profile: <i>"(...) Internalization of social responsibility, justice and professional ethics values."</i></p> <p>Emerging topics: <i>"(...) approaches that should permeate the whole curriculum of the course, not just as a subject matter to be addressed in its different subjects, but also in complementary activities, like seminars, lectures, research and extension projects, among many other forms of curriculum enrichment. They should not necessarily be organized under the form of specific subject, exempting the others from its approach. They necessarily involve: Ethics; Globalization; Quality; Ecology and Environment."</i></p>	<p>Optional: - Environmental management</p>
Universidade Luterana do Brasil – ULBRA	Torres	4	<p>In the course presentation: <i>"The course promotes the development of competences that qualify the administrator in the exercise of corporate processes and in decision making, using knowledge, techniques and innovative strategies of management in the conduction of business, and following precepts of ethical, citizen and social responsibility formation."</i></p>	<p>Compulsory: - Administration and environment (68h)</p>

HEI name	City	CPC	Sustainability and related themes	Sustainability-related subjects
Universidade Regional do Noroeste do Estado do Rio Grande do Sul – UNIJUI	Santa Rosa	4	-	Compulsory: - Technology and environment (60h) Optional: - Environmental management and Social responsibility (60h) - Social and environmental responsibility (60h)
Centro Universitário Univates – UNIVATES	Lajeado	4	Mission, Vision, Values and Principles of the Business Administration Course: “(…) Citizenship: Encourage citizenship and social responsibility among students.”	Compulsory: - Sustainability and development (60h)
Escola Superior de Propaganda e Marketing de Porto Alegre - ESPM - POA	Porto Alegre	4	-	Compulsory: - Ethics and corporate responsibility (36h)
Faculdade Anhanguera de Pelotas	Pelotas	4	In the course presentation: “The set of subjects assists in the formation of ethical and socially responsible administrators , ready to make decisions and deal with the constant changes in national and international scenarios”.	Compulsory: - Social responsibility and environment
Faculdade de Desenvolvimento do Rio Grande Do Sul – FADERGS	Porto Alegre	4	-	Compulsory: - Social responsibility (60h)
Faculdade Ibgem - Instituto Brasileiro de Gestão de Negócios – IBGEN	Porto Alegre	4	In the course presentation: “(…) qualify the egress with competences that will make him fit to identify and serve, in a systemic way, organizational demands, proposing and implementing effective and coherent solutions, considering human, technological, financial, marketing, operational and social dimensions related to the business.”	Compulsory: - General and applied ethics Optional: - Environmental management

Chart 2 – Classroom Bachelor’s degree courses in Business Administration in RS state with Preliminary Course Concept equal to 4 or 5, the cities where they serve, excerpts present on these courses’ websites related to sustainability and subjects offered by the courses related to the theme, with their respective workloads.

Source: prepared by the authors

Based on Chart 2, one can observe that, of the 15 courses surveyed, 5 do not present on their websites anything referring to sustainability, or even related aspects like ethics, social and/or environmental responsibility. Besides, the word sustainability was only found on the website of one of the courses surveyed. This same course is also one of those that mention the environmental issue, in addition to other 3 courses. The correlated themes found more frequently are related to citizenship, ethics and social responsibility. It is worth emphasizing that one university mentions Emerging Topics, referring to approaches that should permeate the whole curriculum of the course, including ethics, ecology and environment.

With regard to the subjects, all courses offer subjects that may be related to sustainability. Subjects that address the theme 'ethics' were the most frequent. They are offered as compulsory subjects by more than half of the courses (8 of the 15 courses analyzed). However, it is important to highlight that such subjects may not directly address the discussion on sustainability.

With regard to the other subjects, 6 courses (40%) offer compulsory subjects directly related to sustainability and/or socio-environmental management, while 3 offer optional subjects related to these same themes.

These results seem positive when compared to similar studies in the country. In the study developed by Palma, Oliveira e Viacava (2011) involving Business Administration courses in 40 federal universities, for example, the authors observed that 21 universities (which represent approximately 53% of the total sample) do not offer subjects related to sustainability. That is, more than half of Business Administration courses in Brazilian federal universities do not present a subject with focus on Sustainability or other related theme, like Environmental Management or Corporate Social Responsibility. The authors also observed that 6 universities (around 15%) offered optional subjects related to the theme. By adding courses that address such theme only in optional subjects and the courses that do not offer them, they reached a total of 27 universities (68%) that could be training administrators without including important aspects related to environment and society.

An approximate percentage was observed in the present study. Except for ethics – as proposed in Palma, Oliveira e Viacava (2011) research – it was observed that 60% of the Business Administration courses offered in RS may be forming administrators without including important aspects related to sustainability. Chart 2 also shows that only 4 courses offer more than one option of subjects related to the themes explored (sustainability, social and/or environmental responsibility), disregarding ethic subjects.

Moreover, it was identified, in some courses, the still existing fragmentation with regard to the social and environmental issue. In Chart 2 one can observe that 3 courses offer subjects related only to the environmental issue while other course offers only subjects related to the social issue, demonstrating that segmentation and specialization is still very present, even leading to the fragmentation of social and environmental aspects, as if they could be addressed separately. Such data seem to point to a direction opposite to interdisciplinarity, even when identified in few courses.

It is also worth emphasizing that the analysis of subjects offered by 5 courses that do not present anything in their websites referring to sustainability, shows that these two courses offer only subjects related to social/organizational responsibility. This theme can be addressed under the view of competitive strategies, and is not necessarily related to sustainable strategies. That is, it is probable that these courses (which represent one third of the universities surveyed) in fact do not address sustainability, given that they don't present elements pointing directly to it in the information published.

Nevertheless, the study results seem positive when compared to similar studies made worldwide. Wu *et al* (2010), for example, have made an investigation based on the web content of Business Administration schools accredited in the European Quality Improvement System (EQUIS) and Association to Advance Collegiate Schools of Business (AACSB). They observed that only 6% of them counted on specific subjects or subjects with some topics related to sustainability and correlated themes. Of these, 44.6% are in undergraduation courses and 55.4% in post-graduation courses. The results also revealed that in only 57% of these schools the subjects related to sustainability are compulsory.

However, as we can observe in the present study, though all courses offer at least one subject where subjects correlated to sustainability can be addressed, most of them compulsory, the large majority of them does not demonstrate sustainability as core concern. This is observed because the theme is not included directly in most websites of the courses, only indirectly in some of them.

The research also identifies the prevalence of words like efficacy, efficiency, market, competitiveness in the course presentation texts, which demonstrates that they seem to focus chiefly on competitive strategies, turned to meet shareholders' interests, rather than stakeholders, as highlighted by Martinet e Reynaud (2004), Whittington (2004) e Barin-Cruz, Pedrozo e Estivaleta (2006). It is worth emphasizing, however, that several courses highlight that it should be done with responsibility. The large majority brings the possibility of the administrator work in several types of organizations, however the main focus are companies, encouraging, frequently, entrepreneurship.

So, it is observed that Business Administration courses in RS seem to be far from what is proposed by sustainable education and training of administrators prepared to deal with sustainable strategies. They have worked on the vertical integration of the theme, promoting sustainability as an opportunity in a given subject. This corroborates what Jacobi, Raufflet e Arruda (2011) state, that the concept has been disseminated in Business Administration schools. If the objective were horizontal integration of the theme, mention to it should be made in at least some information existing in the courses websites, like, for example, in the presentation and/or in the course objectives.

Such results also corroborate Carvalho (2011) conclusions while studying the models of insertion of sustainability in 18 Brazilian Business Administration higher education institutions. According to the author, the prevailing option of sustainability insertion in these institutions has been through the introduction of the theme in one or more specific subjects.

Thus, this study results demonstrate that RS course researched seem to be in accordance with the preparation of youth for a compartmentalized and strict labor market, focused on efficiency, as criticized Bartholo Jr. e Bursztyn (2001). Therefore, they work on a fragmented focus on sustainability, giving secondary importance to this subject, which shows that they are far from a more integrative and holistic view, as required by sustainability.

For that matter, one can observe that Business Administration courses are still in an initial stage with regard to the insertion of aspects related to sustainability, corroborating the conclusions already indicated by other studies (e.g.: WU *et al*, 2010; JACOBI, RAUFFLET e ARRUDA, 2011; PALMA, OLIVEIRA e VIACAVAL, 2011; CARVALHO, BRUNSTEIN e GODOY, 2014). According to Carvalho, Brunstein e Godoy (2014) the movement for integration of sustainability in higher education courses of Administration is still incipient, though there are initiatives in this direction. While tracing a panorama of discussion on education for sustainability in higher education in Administration courses, the authors conclude that there is a scenario that is worrying, because it

there is no indication of construction of more robust educational actions with regard to training a new generation of administrators prepared to respond to the requirements of a sustainable logic, and, at the same time, challenging, given that there is a movement in higher education schools worldwide. They also add that researches indicate a world concern in this direction, and that the difficulties are not exclusive to the Brazilian context or that of any other specific country.

So, one can notice that if Administration courses what to prepare managers that will conduct organizations in the process of change required for sustainability, expanding their scope to include the insertion and the achievement of stakeholders objectives, in addition to shareholders, they must advance and innovate in educational policies and practices. Innovations in this direction can be seen as an opportunity for Administration courses in RS to outstand both in Brazil and in the world.

6. FINAL CONSIDERATIONS

As emphasized, higher education institutions, in general, and Administration schools, particularly, play a fundamental role in the process of insertion of sustainability in the organizational environment. Administration schools influence the way administrators understand the organizations and their objectives, and can expand their understanding of them and lead to the development of sustainable strategies that seek to meet stakeholders' objectives. Thus, this paper sought to identify whether classroom Bachelor's degree courses in Business Administration in Rio Grande do Sul state have proposed the insertion of sustainability in their programs.

The results demonstrated that all courses surveyed already have subjects that can be related to the theme inserted in their curricula, however, sustainability does not seem to be a core theme in these courses, and is separately addressed in some subjects. In this regard, new studies can be made seeking to deepen the investigations in these courses, chiefly in those that presented themes related to sustainability in the information publicly made available.

This is one of the limitations of the present study, because it presents a survey on the courses' websites, without in loco verification. However, it presents interesting data, showing that the reality of Administration courses in RS, with regard to insertion of sustainability, is not far from that present in Brazil and in the world. This points to the urgent need to expand discussions and actions intended to insert sustainability in Administration courses and in higher education institutions, given that, as emphasize Starik et al (2010), not even the "business-as-usual", of approaches of incrementalist reform that most individuals, organizations and societies have adopted to address critical issues of global sustainability are, apparently, sufficient to avoid crises. The authors add that we, education professionals in management, have the opportunity to help conduct our stakeholders, be them students, colleagues, former students, or other collaborators in the direction of a significant and sustainable change.

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