

Sustainability Learning in Brazilian Organizations: A Six-Dimensional Framework

Fernanda de Paiva Duarte

University of Western Sydney, Parramatta, New South Wales, Australia
Telephone: 61-2-4759 3288, Fax 61-2-96787160; E-mail: f.duarte@uws.edu.au

KEYWORDS Organizational Learning. Learning Organization. Vision. Leadership. Systems Thinking

ABSTRACT Over the past few years there has been a growing interface between the fields of *sustainability studies* and *organizational learning*, resulting in a new field of inquiry underpinned by the assumption that the learning experiences of organizations in relation to sustainability have cumulatively generated new knowledge and skills to enhance social and environmental responsibility. This paper contributes to the emerging field of *sustainability learning* by reporting the findings of an exploratory study carried out in Brazil in 2012. Highlighting the critical role of organizational culture in sustainability learning, this study found that the participating organizations did not have formal strategies to promote learning about sustainability. Another contribution is a six-dimensional framework, used in the research, which can foster a better understanding of organizational learning on environmental and social issues.

INTRODUCTION

Over the past few years there has been a growing interface between *sustainability studies* and *organizational learning*, resulting in a new field of inquiry. A core assumption of works in this field is that, over the past two decades the cumulative learning experiences of business organizations in relation to sustainability have generated knowledge and skills that can contribute to ensure environmental and social responsibility in business. Organizations that have the capacity to develop corporate cultures aligned with social and environmental values, and the knowledge to integrate these values into business frameworks have been called “sustainability learning organizations” (Velazquez et al. 2011).

This paper reports the findings of an exploratory study carried out in Brazil in 2012, highlighting the role played by organizational culture in promoting sustainability learning. The broad research question addressed is: *To what extent do organizations that profess to be “sustainable” have a sustainability learning culture?* An analytic framework is proposed in the paper to provide a better understanding of organizational practices and processes that enhance sustainability learning.

For the purpose of this paper, sustainability is defined as a “values laden umbrella concept about how to manage the interface between business, the physical environment and society”, in order to ensure that productive activities will not

degrade the life supporting systems of human society. “Sustainability learning culture” is defined as a type of organizational culture informed by the vision of an environmentally and socially sustainable future which organizational members are committed to achieve.

As research is not immune to biases and pre-conceived ideas, the researcher acknowledges upfront her subjective positioning in relation to the study. Her research is informed by the view that, in addition to their economic roles, business organizations can (and should) play a role in ensuring environmental protection and social justice.

The first section of the paper provides a brief literature review of past works on organizational learning and more current works that link the concepts of organizational learning to sustainability; the second, describes the methodological approach used in the exploratory study; and the third presents and discusses the findings of the study.

Sustainability Learning

The trend of linking the notions of sustainability and organizational learning can be traced back to the work of Meppem and Gill who explored learning processes used in organizations to enhance sustainability planning. Around the same time, Nattrass and Altomare asserted that “the understanding and practice of the organizational learning disciplines will be the indispensable prerequisite of a successful transfor-

mation to sustainability". These authors contend that education and training are essential to enable employees to develop conceptual frameworks and shared mental models to "make it possible to explore what is sustainable and unsustainable behaviour" (1999: 25).

Since then, the sustainability learning debate has produced numerous texts, reflected in a comprehensive literature review by Velazquez et al. which explores various perspectives on these concepts. Describing sustainability itself as a "learning process in the shift toward sustainable development", Velazquez et al. express the view that a "sustainable learning organization is one that would endeavour to produce sustainability knowledge", and that can be considered "as a role model to prevent, eliminate and/or reduce the environmental and occupational risks associated with its operations".

Watson noted some time ago that in order to work effectively, organizational learning requires the combination of individual competence and organizational culture, an insight which is often considered by sustainability learning scholars. Molnar and Mulvihill, for example, propose the term "sustainability-focused organizational learning" to describe the experience of organizations that "are attempting to pursue sustainability ... while making substantial changes to their organizational cultures". These writers emphasize the importance of open-mindedness in this process, as the shift towards sustainability will involve the use of "experimental or unconventional learning techniques". Along the same lines, Jamali stresses that openness to change is "a basic ingredient in the transition to sustainability", as this involves significant cultural transformation. Echoing Senge, Jamali (2006) describes a learning culture as one based on "values of openness, experimentation and improvisation" (2006: 815); information sharing, reflection, collaboration, and communication at all levels. For her, the cultivation of a "learning culture" is one of the core characteristics of a sustainability learning organization. Jamali (2006: 818) also draws attention to the importance of systems thinking in the development of sustainability learning cultures. Indeed, the challenge of sustainability can only be addressed at the holistic level, as socio-environmental problems are quintessentially systemic issues.

The process of sustainability learning is conceptualized in the literature from different per-

spectives. For example, authors such as Fenwick investigate learning-related issues within the specific context of "ecological sustainability practices", while other scholars conceptualize sustainability learning more broadly, taking into account the economic and social dimensions of the concept – or "triple bottom line (TBL) sustainability". Building on this broader conception of sustainability, Pourdehnad and Smith (2012) propose a "learning and adaptive system approach" to enhance the understanding, creation and delivery of TBL sustainability. This approach is used to transform organizational cultures through the creation of new internal processes, organizational learning patterns and employee "mindsets" to ensure that TBL sustainability is effectively implemented and monitored.

Another salient theme in works that highlight the importance of cultural change for sustainability learning is the importance of good leadership. In the particular context of sustainability studies, leadership refers to the ability of socially and environmentally aware individuals to articulate and enact a vision for a sustainable future. There is strong agreement in the literature that sustainability cannot be successfully implemented without the commitment and support of organizational leaders. As noted by Quinn and Dalton, "a critical basis for change toward sustainability is a leader's introduction and discussion of sustainability principles". The leader's vision for sustainability engenders the redesign of an organization's allocation of resources, decision making patterns, and production processes.

Formal and informal organizational practices are considered as important vehicles for cultural change and organizational learning. For example, Marsick and Watkins draw attention to the need to provide "continuous learning opportunities, so that employees can learn on the job". These researchers also emphasize the need to establish "systems to capture and share learning" (2003: 139) – a sound advice that can be used specifically to develop sustainability learning cultures (see Jamali 2006).

An example of an organizational practice that is believed to be effective in fostering sustainability learning cultures is team work, because as noted by Senge (1990: 236; *italics added*), teams are "a microcosm for *learning* throughout the organization". Through team work, insights are gained and put into action, and skills are devel-

oped and disseminated to other individuals and teams. In short, team accomplishments “can set the tone and establish a standard for learning together for the larger organization” (Senge 1990: 236). Team work encourages “inquiry and dialogue” among employees, so that they will be able to develop reasoning skills to express their views, and learn to listen to the views of others. Referring specifically to the process of sustainability learning, Wals and Schwarzin propose the notion of dialogic interaction, or a “reflexive conversation” that takes place in a heterogeneous group of people “in a mutually respectful, trusting and collaborative way” (2012: 15). Dialogic interaction, these authors contend, is “a key mechanism for supporting group learning processes” as it facilitates “shifts in mindset”. Dialogic interaction is particularly important in the development of a sustainability learning culture because dialogue generates “learningful conversations” where people express their ideas effectively and make their way of thinking “open to the influence of others”. Referring more specifically to sustainability learning, Dunphy et al. emphasize the need for employers to maintain meaningful dialogue with employees, as this produces “a sense of collective identity and purpose” which “can transform the existing culture of the organization”, and create new values and meanings.

Some authors share the view that a sustainability learning culture also engenders good relationships with external stakeholders. For example, Fenwick contends that dialogue and discussion with external stakeholders are vital because “the networks that emerge from these relationships help generate new ideas, questions, perspectives and organizational practices” (2007: 643). Resonating with this view, a study by Morsing and Oswald’s on Nordisk, support the hypothesis that dialogue with stakeholders stimulates new thinking and new goals for future sustainability initiatives.

In summary, works that link sustainability, organizational learning and organizational culture offer a range of insights, concepts and frameworks that can contribute to a better understanding of how sustainability learning occurs in organizations. From the literature review, it is possible to extract six interconnected themes which are adopted in the current study as *core dimensions of sustainability learning cultures*:

1. Leadership vision of sustainability
2. Systems thinking
3. Broad conception of sustainability
4. Continuous opportunities for sustainability learning
5. Meaningful dialogue with stakeholders
6. Systems to capture and disseminate knowledge and learning¹

The relationship among these six dimensions can be explained as follows: sustainability learning cultures come into being through the vision of an environmentally and socially responsible society, promoted by leaders committed to such values. In order to flourish, this vision requires systems thinking, as this approach encourages a more holistic conceptualization of sustainability as the triple bottom line – “people, planet and profits”. Ideally, a sustainability learning culture is a culture that offers continuous opportunities for learning, and meaningful dialogue with internal and external stakeholders. Such a culture purposefully develops systems to capture and disseminate knowledge and skills which will be retained in the “organizational memory”. These core dimensions of sustainability learning culture generated the conceptual framework used in the current study to ascertain the extent to which the participating organizations could be considered sustainability learning organizations.

METHODOLOGY

The study in question is part of a broader ethnographic research project carried out in 2012, involving a six-week fieldwork in the city of Belo Horizonte Brazil² carried out to investigate issues emerging from organizations that professed to be committed to sustainability. The study presented in this paper is one of the four studies that emerged from this research project, and its specific aim is to apply the six-dimensional framework that emerged from the literature in order to ascertain the extent to which the participating organizations had sustainability learning cultures. A group of 16 staff working with sustainability in 12 organizations of different sizes (small, medium and large) were interviewed to canvass their views on each of the six dimensions of the framework.

The participating organizations were from the following sectors: mining; banking; utilities; renewable energy; printing; hospitality; and local

and state government (for further details refer to Table 1). The primary instrument for data collection was a 60 minute audio-recorded, semi-structured, face-to-face interview conducted with the participants. The above six-dimensional framework provided the basis for the interview questions, generating deductive categories for the analysis of the findings. Prior to posing the interview questions, the researcher ensured that the interviewees clearly understood the meaning of notions such as “sustainability vision”, “systems thinking”, and “team learning” by providing them with a plain-language working definition for each of these concepts.

Purposive sampling was used, which means that the specific population of “staff working in Brazilian organizations who professed commitment to sustainability” was targeted because of their potential to provide useful information to address the research question. The companies were recruited through the snow-balling technique with the assistance of the researcher’s own professional networks in Brazil. Following the data collection process, the interview recordings were transcribed and translated from Brazilian Portuguese into English. In the discussion below, the participants’ names have been replaced by pseudonyms to ensure anonymity and confidentiality.

The fact that the researcher herself is a native Brazilian facilitated the research process due to her privileged position as an “insider”. She therefore possessed emic knowledge of the cul-

ture under investigation, and at the same time, as an academic, she was able to etically investigate the phenomenon at hand. As noted by Grbich, an insider can interpret and give meaning to the experiences of others at the same time adding an extra level of richness to the data analysis. The insider status also enables the shared experience – or “knowing” – between the participant and researcher.

RESULTS

Leadership Vision for Sustainability

Participants seemed to take for granted that there was a sustainability leadership vision in their organizations informed by the leaders’ values and professed commitment to environmental and social responsibility. However, the views expressed in the interviews varied with regard to the scope of this sustainability vision. For example, some participants from the medium-sized and large organizations did not believe that the sustainability vision was widely shared in their workplaces. There was general agreement in the sample that, if this vision did exist in the organization, it tended to be confined to senior management levels – not permeating lower level positions.

In the local government institution, the sustainability vision was not seen as widely shared in the organisation for different reasons. Mateus, the general manager of that institution’s envi-

Table 1: Information on participants

<i>Organizations</i>	<i>Size</i>	<i>Interviewees’ positions</i>	<i>Pseudonyms</i>
1. Mining corporation	Large	Environmental manager	Roberto
2. Energy supply corporation	Large	Environmental manager	Marcus
		Environmental manager	Rodrigo
3. Industry federation (state-wide)	Large	Sustainability division manager	Angela
4. Small business support organization (state-wide)	Large	Sustainability manager	Miguel
5. Development bank	Medium	Sustainability manager	Wagner
6. Local government environmental division	Medium	Senior manager	Mateus
		Technical officer	Claudia
		Technical officer	Antonio
		Technical officer	Edison
7. Waste recycling organization (Gov)	Medium	Executive director	Julio
8. Aeolic energy business	Medium	Managing director	Renato
9. Dairy products business	Small	Owner/Manager	Mario
10. Printing business	Small	Owner/Manager	Gustavo
11. Organic restaurant	Small	Owner/Manager	Luciano
12. Bed and breakfast	Small	Owner/Manager	Patricia

Small: < 20 Medium: > 20-199 Large: > 200+ (Australian Bureau of Statistics’ classification)

ronmental division, confidently asserted that he had a sustainability vision; however, Mateus' staff did not believe that his vision was allowed to blossom in the organization due to political factors. Environmental accreditation officer Claudia recounted, for example, that in her 17 years of employment with this institution, she had seen "many well-meaning managers" being prevented from enacting their sustainability vision, due to "censorship from the top" (that is, by senior bureaucrats vested with decision-making power). Environmental education manager Edison was also skeptical with regard to the scope of the sustainability vision in that organization, for the same reason as Claudia. As he put it, "The sustainability vision depends on who is in control".

By contrast, the managers/owners of the small organizations were more confident that the sustainability vision was widely shared in their organizations. It can be suggested that this was due to the simpler design and structure of their organizations, which made communication with employees easier than in their larger counterparts.

Systems Thinking

While it was generally acknowledged by participants from small, medium and large organizations alike, that systems thinking is essential to create a sustainability learning culture, only two participants believed that their organizations enacted this approach. One of them was Rodrigo, environmental manager of a large energy supplier, who reported that his company had been "successfully using an integrated environmental management system...entirely based on systems thinking". The other was Julio (director of a medium-sized government-funded waste management organization) who explained that he had designed the integrated waste recycling program of his organization according to systems principles, taking into account the interconnections between economic, environmental and social dimensions.

Despite agreeing on the importance of systems thinking for sustainability learning, all local council employees (including senior manager Mateus) denied the existence of such a perspective in their organization. The general opinion among these participants was that the lack of a systemic vision was due to the excessive compartmentalization of work processes character-

istic of Brazilian government organizations. As confirmed by Edison, "The issues here get very compartmentalized. The environmental department doesn't talk to the transport department, who in turn doesn't talk with the department responsible for infrastructure for roads in BH".

Broad Conception of Sustainability

Most participants shared the view that their organization's sustainability initiatives were premised on the broader conception of sustainability as TBL. For example, Marcus, environmental officer of a large energy supplier, noted that over the past eight years his organization had been successfully participating in voluntary sustainability reporting systems premised on the TBL concept, including the Global Reporting Initiative and the Dow Jones Sustainability Index. Marcus' colleague Rodrigo drew attention to the necessity of taking into account social issues at their energy supply company, in view of the social impacts of their activities (air pollution; flooding for dams). Wagner, the sustainability manager of a medium-sized bank, spoke at length about initiatives that had been implemented in his organization to operationalize what he called the sustainability "*tripé* [tripod]". For example, loans were granted for environmental projects on the condition that the borrowers took into account the social and environmental impacts of their projects. Julio reported that he had developed a set of indicators based on the TBL perspective to monitor his waste recycling organization's initiatives.

Two respondents in the small business category claimed that they worked with a broader view of sustainability. Gustavo, the owner of an "ecological printing business" (his own description) stated that in addition to the environmental principles that underpinned his business (for example, use of "green technology"; utilization of recycled paper), he also considered social principles (for example, the creation of facilities for people with disability in his organization). Luciano, owner of an organic food restaurant, also reported that in addition to its environmentally related activities (for example, recycling, energy and water saving activities), his organization also supported social projects such as environmental education for children; workshops for people with disabilities.

By contrast, staff from local government did not believe that their institution practiced TBL

sustainability, in their opinion, due to lack of commitment to sustainability values by senior managers. They did stress nevertheless that their projects generally took into account the social dimension of sustainability. For example, social impact assessment prior to the implementation of projects that could potentially affect local communities was mandatory in their organization.

Continuous Opportunities for Sustainability Learning

All participants believed that their organizations provided continuous opportunities for sustainability learning, although these opportunities seemed to be mostly ad hoc and informal. For example, the four managers/owners of small organizations shared the view that they regularly offered sustainability learning opportunities to their employees. "My employees are constantly learning on-the-job about sustainability", stated Mario (owner of a small dairy products business). Similarly, the owner/manager of a "bed and breakfast", Patricia, stated that her cooks regularly exchanged sustainability-related information, as they got together to prepare local delicacies for the guests ("They often chat about things like wet waste recycling, composting and organic horticulture").

Informal opportunities for sustainability learning were also reported by staff from the medium- and large organizations. For example, Marcus noted that exchange of sustainability knowledge among staff often took place during lunch and coffee breaks. In his own words, "We have excellent conversations and debates [about sustainability issues] in the dining room!"

However, more formalised opportunities for sustainability learning were identified only in the medium-sized and large organizations. For example, Wagner recounted that he had implemented a "sustainability ideas" contest for staff from his organisation (a medium-sized development bank) where the employee who proposed the best idea for sustainability projects was awarded a prize. He added that sustainability-related training opportunities were also regularly offered to senior staff (he had just attended a "sustainability and innovation leadership" training course in Europe). Formal sustainability training was not offered to lower-level employees. This elitist pattern of training was also reported by Renato (manager/owner of a medium-sized alternative tech-

nology business), Rodrigo and Marcus (large energy supplier), and Roberto (environmental manager of a large multinational mining company).

According to Julio both informal and formal sustainability learning opportunities were available "for staff at all levels" at his waste recycling organization. He mentioned, for example, that he held weekly meetings with his 70 employees, which gave them an opportunity for a free exchange of ideas on issues related to waste recycling and waste management. They also discussed "ways of best catering for the needs of the *catadores de papel* [urban paper collectors]³ whom they supported. Resonating with the responses given by the small organizations' managers, Julio also noted that his staff were "constantly learning on-the-job".

Both Angela and Miguel, the sustainability managers of the two large business support organizations that participated in the study, reported a range of informal and formal opportunities for sustainability learning at their respective organizations, including: information exchange during coffee breaks; brainstorming sessions, workshops/seminars on environmental issues; and sustainability leadership training. These two participants admitted nevertheless that, while they themselves had benefited from formal sustainability training, these opportunities were mostly offered to their business clients (that is, managers of the business companies supported by their organization), and not to their organizations' own employees. Resonating with the elitist pattern of sustainability training reported by other respondents in the larger organization category, Angela and Miguel further noted that when formal training was offered in their company, the beneficiaries were consistently upper-level managers such as themselves; not lower-level employees.

There was unanimous agreement among the participants that team work was a valuable organizational practice to promote sustainability learning. All 16 interviewees reported the use of team work on a regular basis in their organizations. As commented by Edison, "Team work is the only way to work with sustainability, which is a naturally interdisciplinary field". In the same vein, Mario stated: "My employees learn from each other when they work in teams. I've heard them, more than once, exchanging hints on how to save electricity and how to recycle waste". "No doubt

team work helps retain sustainability knowledge”, said Miguel.

Meaningful Dialogue with Stakeholders

Participants unanimously agreed on the importance of meaningful dialogue about sustainability themes with their employees. Indeed, Julio, Angela, Miguel and Renato reported weekly staff meetings in their respective organizations for the specific purpose of reflecting and exchanging ideas with colleagues on environmental and social responsibility issues – what Wals and Schwarzin’s termed “reflexive conversations”. Managers of small organizations also viewed dialogue with employees as an effective sustainability learning tool. As stated by Mario, “I’m constantly chit-chatting with my staff about saving energy and water, about recycling; but I have to say that I also learn from them. It’s important to listen to employees”.

However, meaningful dialogue with *external* stakeholders was generally perceived by participants as problematic. This is because not always is it possible for managers to choose the stakeholders they work with. As recounted by Patricia:

I’d love to source my cheese only from local artisanal suppliers, who are aware of sustainable practices, but this is not always possible. I often have to supplement my stocks with commercially produced cheese – made by people who don’t have a clue about sustainability!

Similarly, Luciano stated that while he would like to have a strictly seasonal menu at his organic restaurant, “using only locally grown produce”, he had not been able to do so because his customers “demanded” tomatoes all year round. “So, to keep the customers happy, I import tomatoes from down south, which enlarges our ecological footprint in terms of the extra kilometers of transportation”. Angela recounted similar problems with the company that caters for her organization’s special events. She noted that she feels “somewhat embarrassed” to run *sustainability* training for her business clients whilst serving “unsustainable fatty, high carb, unhealthy snacks”. She said that although she had requested to her supplier that the unhealthy snacks be replaced by fresh fruit, they advised that it would be “too costly” to provide fresh fruit for their events. In local government, according to Edison, that there was simply no con-

trol over the choice of supplier: “The rule is to go with the cheapest supplier”, he said.

Systems to Record and Disseminate Sustainability Learning

Most participants did not believe that their organizations had *formal* systems to record and disseminate sustainability-related knowledge. The general opinion was that sustainability learning occurred mostly on an informal basis through daily routines – a point already made earlier, when discussing Dimension Four. A slightly different perspective on this issue was presented by Angela and Miguel, who contended that their organization’s library operated as a system that formally recorded and disseminated knowledge — in general, and also knowledge specifically related to sustainability. However, according to these managers, the users of the library were mainly their external business clients and “researchers such as yourself”, as pointed out by Angela. The employees of these two business support organizations did not seem to have an interest in using their library.

For Rodrigo and Marcus, the company’s annual sustainability report operated as a system of knowledge which recorded and disseminated sustainability learning. However, both managers pointed out that despite being publicly available, these documents were not widely read in the organization. “Only senior management staff bother reading our sustainability reports”, said Rodrigo.

DISCUSSION

In terms of the six-dimensional framework used in this research, the above findings provide only patchy support for the existence of a cohesive sustainability learning culture in the participating organizations. While all interviewees seemed convinced that their leaders had a sustainability vision – supporting previous research on the pivotal role of leadership in sustainability learning – perceptions about the nature and scope of this vision varied considerably in the sample. For example, in the case of local government the enactment of the sustainability vision was said to be hampered by political factors, in particular lack of support by top bureaucrats who were often not committed to sustainability values. This is consistent with

Doppelt's contention that the ability of government institutions to establish their own mission and goals can be compromised by interests groups who monitor the organization's operations and shape the public agenda. The conclusion to draw at this point is that if sustainability is not a priority of these interest groups, it is unlikely that there will be support for sustainability projects.

Systems thinking did not seem a common practice in the sample, with only two managers (Rodrigo and Julio) stating that they adopted this approach. Staff from the local government institution appeared particularly sceptical about the enactment of systems thinking in their environmental division, because of the compartmentalization characteristic of government organizations in Brazil.

With regard to the enactment of a broader conception of sustainability as TBL, only two participants (Julio and Wagner) believed that their organizations incorporated such an approach. The general impression conveyed by the managers was that there was a significant bias in their organizations toward the narrow conception of sustainability as environmental protection, disregarding the social dimension.

In line with previous research in the field, many participants shared the view that their organization offered opportunities for sustainability learning. However, it was pointed out these opportunities generally occurred on an *ad hoc*, informal basis, often in the form of "chats" about sustainability issues during coffee and lunch breaks. Formal training was offered more frequently in large organizations, targeting specifically senior managers.

Although the interviewees generally agreed on the importance of dialogue with employees to promote sustainability learning, it was clear from the findings that not always were it possible to engage in meaningful dialogue with *external* stakeholders. The problem stemmed from the impossibility to ensure that a company's external stakeholders such as suppliers and customers were committed to sustainability; in many cases they were not. This finding is at odds with the optimistic views about the role played by external stakeholders in enhancing sustainability learning expressed by authors such as Fenwick (2007), Dunphy et al. (2007); Morsing and Oswald (2009); Quinn and Dalton (2009) and Ja-

mali (2006). In real life, these relationships are far more complex and hard to manage.

In general, participants did not believe that their organizations had formal systems to record and disseminate sustainability learning – although from the perspective of two managers, the company library and the annual sustainability report fulfilled this role.

From a business anthropological perspective, organizational learning can be seen as a process of culture delivering, a process of shaping ideas and cultural patterns. Intervention in organizational culture change is important as it works as a double loop learning process, aiming at systematically changing organizational culture and improving organizational performance (Tian and Wang 2014). Implementing sustainability in an organization thus necessitates organizational learning, which functions as the key element in any effort to effectively implement sustainable development (Opoku and Fortune 2011).

At this point, some methodological limitations in the research presented here must be acknowledged. One of them is the highly heterogeneous character of the sample, in terms of organizational sectors and size, which made the data analysis particularly challenging. It is recommended that future studies use a larger sample of organizations focusing perhaps on one single size category for a tighter data analysis. It would also be interesting to carry out a study more specifically focused on companies which historically have had significant environmental and social impacts (for example, extractive companies operating in host communities). In this case, the research question could concentrate more narrowly on sustainability learning arising from the companies' corporate social responsibility programs (CSR). Organizations that embrace CSR tend to have dedicated resources and personnel to implement comprehensive social and environmental responsibility frameworks, and the financial means to provide sustainability-based training programs for staff. Therefore, targeting organizations in this category would enable a more focused and systematic analysis of organizational learning in these areas.

Another methodological limitation in the research is the absence of cross verification from more than one data source. In addition to in-depth interviews, another method of data collection such as a focus group or a survey should have been used, enabling the investigation of points of convergence and divergence in the dif-

ferent data sets; ensuring the confidence that different methods lead to similar results .

CONCLUSION

The findings indicate that none of the participating organizations met all the criteria for sustainability learning culture, expressed in the six dimensions of the proposed framework. Although a “sustainability vision” was believed to exist in all these organizations, none of them had systems specifically designed to ensure that sustainability knowledge was retained in the organizational memory. Overall, the learning experience about sustainability issues in these organizations remained informal and ad hoc.

In view of this, the answer to the research question “To what extent do organizations that profess to be ‘sustainable’ have a sustainability learning culture?” would be “Only to a small extent”. If we regard sustainability as a *process*, it can be said that the organizations examined in this research are still in the early stages of the long and complex journey towards sustainability learning. Perhaps the most serious obstacle to the fulfillment of sustainability goals – and this theme indeed emerged in the above study – is the impossibility to hold external stakeholders, such as suppliers and customers, accountable with regard to sustainable practices. While companies might be able to choose their first tier suppliers – and indeed demand that they meet certain sustainability standards – it is impossible to have control over the whole network of interconnected organizations that provide products and services for the focal company.

The data suggested, nevertheless, that through their employees the participating organizations had the necessary commitment and capacity to develop corporate values aligned with environmental and social responsibility. The larger organizations, in particular, seemed to have the potential to successfully integrate these values into their business frameworks. It can be said, therefore, that the study reveals some evidence of “sustainability-focused organizational learning”, which is a characteristic of open-minded organizations that embrace the sustainability concept and are committed to make substantial changes to their organizational cultures to enact it effectively. This can be seen as a good start, as

it can potentially lead to a more conscious and systematic development of mature sustainability learning cultures. In other words, cultures informed by systems thinking and regular offerings of formal sustainability learning opportunities to all employees; cultures containing systems designed to capture and disseminate sustainability learning inside and beyond organizational boundaries.

The study has contributed to knowledge in the emergent field of sustainability learning in two ways: first, it qualitatively tested a conceptual framework based on themes commonly discussed in the field; second, it generated knowledge on sustainability learning processes within the specific context of an emergent economy such as Brazil (thus the first study of this kind). This country has experienced unprecedented economic growth over the past few years, which no doubt poses unique challenges to the enactment of sustainability. As commented by participant Angela, the sustainability manager of the industry federation, the greatest challenge to a long-term commitment to sustainability in Brazil is the widespread “consumer mentality” which characterizes that society, and which creates formidable paradoxes in the implementation of sustainable development. Angela’s comments raise the quintessentially important question as to whether sustainability will ever be a priority in emergent economies such as Brazil, given the fundamental incompatibility between sustainability and economic growth. While pursuing this line of inquiry is beyond the scope of this paper, it remains a thought provoking proposition to be considered in future research in the field of business anthropology.

NOTES

1. Dimensions Two and Six are borrowed from the work of Marsick and Watkins (2003) who developed the “Dimensions of the Learning Organization” questionnaire to demonstrate the core features of an “organization’s learning culture”.
2. Belo Horizonte is the third largest city in Brazil, after Sao Paulo and Rio de Janeiro. It is the capital of the state of Minas Gerais and an important economic axis in the Brazilian economy. This city has significantly contributed to Brazil’s current status as an “emergent economy”.
3. *Catadores de papel* are urban workers whose livelihood is earned through the collection of solid recyclable wastes such cardboard, glass and metallic objects.

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