

Curricular environmentalization in the training of receptive tourism professionals

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Abstract

The article aimed to analyze the degree of curricular environmentalization of training courses for receptive tourism professionals in the state of Sergipe, Brazil. The objectives of the study were defined from the problematization of the importance of including environmental issues in professional training processes. The problem is addressed using as main theoretical references studies from the fields of environmental education, sustainable tourism, technical training, and curriculum environmentalization. The research corpus, submitted to content analysis, consisted of syllabuses from training courses for receptive tourism offered in Aracaju. The results show that the courses that have the highest degree of curricular environmentalization form far less professionals, while the courses that have the lowest degree of curricular environmentalization are those that form the vast majority of professionals.

Keywords: curriculum; environmental education; technical education; tourism; environment.

Ambientalização curricular na formação de profissionais do turismo receptivo

Resumo

O artigo teve como objetivo analisar o grau de ambientalização curricular dos cursos de treinamento para profissionais do receptivo do turismo no estado de Sergipe, Brasil. O objetivo se desenvolve a partir da problematização da importância da inserção das questões ambientais em processos de formação profissional. Tal problematização é abordada, especialmente, a partir dos referenciais teóricos da educação ambiental, do turismo sustentável, da formação técnica e da ambientalização curricular. O corpus da pesquisa, submetido à análise de conteúdo, foi constituído por ementas de cursos de formação para o turismo receptivo oferecidos em Aracaju. Os resultados mostram que os cursos que têm maior grau de ambientalização curricular formam significativamente menos profissionais enquanto os cursos que têm o menor grau de ambientalização curricular formam a vasta maioria de profissionais.

Palavras-chave: currículo; educação ambiental; educação técnica; turismo; meio ambiente.

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La ambientalización del currículum en la formación de profesionales en el turismo receptivo

Resumen

El artículo tuvo como objetivo analizar el grado de ambientalización curricular de los cursos de formación de profesionales de turismo receptivo en el estado de Sergipe, Brasil. El objetivo se desarrolla a partir de la problematización de la importancia de incluir la temática ambiental en los procesos de formación profesional. Tal problematización se aborda, especialmente, desde los referentes teóricos de la educación ambiental, del turismo sostenible, de la formación técnica y de la ambientalización curricular. El corpus de investigación, sometido al análisis de contenido, consistió en programas de cursos de formación para turismo receptivo ofrecidos en Aracaju. Los resultados muestran que las carreras que tienen mayor grado de ambientalización curricular forman significativamente menos profesionales mientras que las carreras que tienen menor grado de ambientalización curricular forman la gran mayoría de profesionales.

Palabras clave: *currículum; educación ambiental; educación técnica; turismo; medio ambiente.*

1 INTRODUCTION

A study prepared by the British consultancy Oxford Economics for the World Travel and Tourism Council, published in 2019, presents data that confirm that the contribution of the tourism sector to Brazilian GDP grew 3.1% in 2018, totaling 8.1% of the national GDP (Brasil, 2019a). The projection is that the impact of tourism on the Brazilian economy is expected to reach about R\$ 739 billion by the year 2027, employing 8.91 million people in the country (Brasil, 2017a). The figures indicate growth, both in the offer of jobs and in the need for vocational training. In Sergipe, state in the Northeast of Brazil, 21 municipalities were added to the tourist map of the state in 2017, including 26 new destinations with tourism potential (Brasil, 2017d). Beyond the local motivations for this study (the growth of tourism in the state of Sergipe), the research presented in this article is justified by issues related to the global increase in tourism: (1) the potential impact of tourism on the environment and (2) the need for training in relation to environmental issues of professionals working in tourism, both quantitatively and qualitatively. Both issues become even more significant in the relationship with tourist activities that integrate people with natural resources, focusing on sectors such as nature tourism, environmental tourism, and ecotourism.

Among the factors that influence the increase in the search for nature tourism in modern societies, Rodrigues (2010) highlights the increase in available time (time not linked to work or other social commitments), technological advances (e.g., communication and

transportation), government incentives, and, in accordance with Sampaio (2006), the creation of an imaginary of modernity and health associated with experiences in nature. However, it is important to highlight that the environmental perspective is not restricted to tourism with a focus on visiting natural areas, being broadly encompassed by the tourism sector through the concept of sustainable tourism. In this context, we agree with the precept already described in the academy (Ceballos-Lascuráin, 1995; Blengini et al., 2019; Blengini; Rodrigues, 2019; Khanra et al., 2021¹) that tourism needs to be studied, planned, and marketed according to the ideals of environmental conservation, preserving natural and cultural resources, and ensuring the development of local communities. We also agree with authors who affirm that sustainable tourism is more feasible and likely through the inclusion of environmental education in the training of agents who will act directly in the operationalization of tourism activities (Petersen; Romano, 1999; Campos, 2006; Layrargues, 2009).

This article presents the results of a diagnosis on the degree of curricular environmentalization (DCE) of technical training courses for the receptive tourism in Sergipe, providing data that can be the basis for public and private policies for vocational training. Curricular environmentalization is a theme portrayed by normative documents² and publications in Brazil³ and in international literature⁴. However, in Brazil there are few studies that report on curricular environmentalization processes in the context of training courses for receptive tourism agents, such as travel agents, tour guides, chambermaids, cooks, waiters, sailors, and drivers⁵. These agents act directly in the receptive tourism and can be both multipliers of educational processes and guardians capable of watching over the environment while performing their work.

Added to the gap indicated in the previous paragraph, there are three more specific justifications for focusing on the curricular environmentalization of receptive tourism in Sergipe. The first is the higher proportion of tourist demand for natural attractions in Sergipe, being 35.5% against 19.5% for historical heritage, 20% for popular festivals, and 25% for business tourism (Brasil, 2013). The second is the investment from the Tourism Development Program (*Programa de Desenvolvimento do Turismo - Prodetur*⁶) in Sergipe, which currently adds to R\$ 100 million (R\$ 60 million from the Inter-American Development Bank – IDB and R\$ 40 million from the Sergipe State Secretariat of Tourism). The investments were allocated in a wide range of sectors, from architectural works, such as new waterfronts, construction of

bars, restaurants, and hotels, to receptive tourism companies with terrestrial and fluvial means of transport (Brasil, 2013). The third is the growing attention to technical courses in Brazil. The Brazilian Ministry of Education amended the Law of Guidelines and Bases of National Education through the Law 13.415/2017, with changes in the structure of secondary education, at the high school level. The definition of the new curricular organization includes a focus on areas of “technical and professional training”. The idea, according to the Ministry of Education, is to ensure an education that meets the demands of the labor market that is focused on activities considered as “technical” (Brasil, 2017c).

In the tourism market in Sergipe, vocational courses are conducted through a trade, which is composed of the Brazilian Association of Travel Agents (*Associação Brasileira de Agentes de Viagens - Abav*⁷), the Brazilian Association of Bars and Restaurants (*Associação Brasileira de Bares e Restaurantes - Abrasel*⁸), the Brazilian Association of Hotel Industry (*Associação Brasileira de Indústria de Hotéis - Abih*⁹), the Tourism Companies Union (*Sindicato das Empresas de Turismo - Sindetur*¹⁰), and the Tourism Guides Union (*Sindicato do Guias de Turismo - Singtur*¹¹), with support from the National Commercial Learning Service (*Serviço Nacional de Aprendizado Comercial - Senac*¹²), the Micro and Small Business Support Service (*Serviço de Apoio à Micro e Pequena Empresa - Sebrae*¹³), the state government (through the Secretariat of Tourism), and the Federal Institute of Sergipe (*Instituto Federal de Sergipe - IFS*¹⁴). From a complete diagnosis of the courses offered by the trade, we identified the institutions that offered vocational technical courses and training in the state of Sergipe for tourism professionals¹⁵.

Once the courses were identified and the methodological procedures were carried out to obtain the pedagogical programs from these courses (online research; E-mail messages; on-site visits) the curricular structures were analyzed with special attention to the offered subjects and used bibliography, seeking to identify contents related to the environmental field (more details in the description of the methods). The analysis made it possible to create a comparative diagnosis presented as degrees of curricular environmentalization¹⁶ for each course.

The article is divided into four sections. In the first section we present a theoretical discussion addressing, especially, the themes of environmental education and curricular environmentalization in receptive tourism. In the second section we describe the innovative

methodology created for this research. In the third section we present a summary of the research results. The last section is dedicated to conclusions and final considerations.

2 ENVIRONMENTAL EDUCATION, SUSTAINABLE TOURISM, TECHNICAL COURSES, AND PROCESSES OF CURRICULAR ENVIRONMENTALIZATION

Environmental education in the context of sustainable tourism proposes to integrate the tourist to the environment through an adapted architecture preserving and valuing the natural, historical, and cultural heritage, and the participation of local and professional communities in the process of developing awareness, respect, and protection of natural resources (Escouto, 2013). There are a number of limitations to the experience of environmental education as praxis, both in the incorporation of ecological ideals by institutions (limits to processes of environmentalization (Lopes, 2006; Bluhdorn, 2011; Payne; Rodrigues, 2012; Rodrigues, 2015b) and in the movement habitus of individuals (ontological limits to change - e.g. Fay, 1987; Carvalho; Steil, 2009; Rodrigues, 2016, 2018, 2019). Since this is not the focus of the article, we will not discuss the topic in depth. However, we highlight the importance of acknowledging these limitations in proposed processes of environmental education for the development of sustainable tourism, understanding, as Alexandre (2018, p. 18), that “in any of its forms of expression and intervention, tourism interferes in the socio-environmental dynamics of any destination”. Worldviews and practices capable of minimizing these impacts are important, and environmental education is the main expression of the (continuously evolving) “code of conduct” (Lopes, 2006) of what is understood as sustainable practices within our collective social representations.

If at a given moment in the trajectory of the discursive history of environmental education there was a search for universal conceptualization, this search has succumbed to the diversity and plurality of actors that constitute the universe of activities and knowledge of the environmental field, resulting in a multiplicity of practical, pedagogical, epistemological, and political positions; however, there are identifiable political-pedagogical macro trends of environmental education (Sauvé, 2005; Layrargues; Lima, 2014). This plurality is fruitful for environmental education purposes, as much as it is a challenge. In the field of receptive tourism an added challenge is the training of (technical) professionals who come from marginalized

social sectors and who often did not have the opportunity to engage critically with socioenvironmental issues, neither theoretically nor practically (Layrargues; Lima, 2014)¹⁷. Thus, the need for including the environmental theme in technical courses for tourism professionals emerges not only from the direct relationship that tourism has with the natural environment but also to overcome the possible lack of environmental education processes in the previous experiences of future tourism professionals.

Technical courses aim to train professionals who will operationally act in the labor market. However, the focus on technical learning should not mischaracterize the need for critical training which enables the professional to question his/her role as a citizen committed with local and global social issues. According to Manfrinato (2006), technical education should lead apprentices to a praxis in which there is a cycle involving action, training, and reflection, imbued with the fundamental principles that lead the future professional to act in a reflexive way regarding professional, ethical, and environmental issues. This line of argument legitimizes the insertion of contemporary (transversal and integrating) themes in the curricula of technical courses, among them, environmental education, as indicated in the Brazilian National Common Core Curriculum (BNCC) (Brasil, 2018). Manfrinato (2006) also brings up the need for critically engaging with environmental issues in technical courses to overcome the superficiality of the ecologically correct discourse.

Incorporating environmental issues and practices in the curricular sphere, either by the emergence of new practices or by the reconfiguration of existing practices, is what is called processes of curricular environmentalization (Lopes, 2006; Carvalho; Toniol, 2010), a social process that focuses on the moral representations of the interrelations between humans and the non-human world (Rodrigues, 2012). Most research on curricular environmentalization is focused on basic education and on higher education courses (important references on curricular environmentalization processes in the contexts of the Global South and North are highlighted in notes 3 and 4). More specifically in the scope of technical courses, Manfrinato (2006) analyzed the inclusion of environmental education in the curriculum of the course for cooks (1044 hours/class) offered by the Commercial Learning Service (Senac) of Águas de São Pedro (São Paulo state, Brazil). The author concluded that the evaluated course does develop environmental education in the curriculum as a transversal theme, but in an informal and disorderly manner.

Studies in the field of curricular environmentalization have the relevant purpose of basing, from contemporary discussions, the choice of contents and methods that will be incorporated by the curricula in the context of environmental issues. As the parameters of what should be addressed by the curriculum are defined the indicators for diagnoses of the level or degree of environmentalization in a given institution (at the broader level, including teaching, research, extension, and administration), or of a given set of curricular units (at a more specific level), are also established. This evaluation of practice becomes even more important when we consider the mandatory inclusion of the environmental theme in the Brazilian school education system, in a transversal way and at all levels, guaranteed by the guiding documents for education since the 1990s (see note 2). This is the direction and meaning of the diagnosis presented in this article, considering the justifications previously presented for performing this diagnosis in technical education courses.

3 METHODOLOGICAL BASIS

The training courses for receptive tourism in Sergipe are offered by the tourist trade of the state. The first methodological procedure to constitute the research corpus was the search for official documents and syllabuses of technical courses that were offered in Sergipe to receptive tourism professionals during 4 years (2015 to 2018) by the institutions of the trade. The search was done through the official websites of the institutions, by sending E-mails to the area coordinators, and, when needed, by pre-scheduled technical on-site visits. As a result of this survey, we analyzed 9 documents from courses offered by the trade in Sergipe between 2015 and 2018, namely:

- 03 Syllabuses of courses offered by IFS¹⁸;
- 01 Syllabus of the regular course of Tour Guide offered by Senac¹⁹;
- 01 Schedule of courses offered by Sebrae²⁰;
- 03 Syllabuses of courses offered by Senac in partnership with Prodetur;
- 01 Handout of courses Senac/Prodetur.

IFS and Senac are the only institutions offering courses for receptive tourism on a continuous and regular basis and were the only ones to provide complete material for analysis, including description of the syllabuses of all the subjects offered. The other institutions

representing the trade offered courses in the period from 2016 to 2018 according to sporadic demands through a partnership with Sebrae. The document available for consultation was a schedule with no syllabuses of subjects in the records, which is why these courses were not part of the analysis. In order for the analysis to be homogeneous among the documents that were found, the analyzed items related to the curricula of the offered courses were: (1) the syllabuses of the set of subjects that make up the course and (2) the mandatory and complementary bibliographic references of each subject.

The selected documents were subject to content analysis from a quantitative perspective, where the frequency of occurrence of certain terms, constructions, and references in a given text is numerically analyzed (Fonseca Júnior, 2006). The basis for the conducted content analysis was the identification of keywords in the corpus related to the development of environmental issues in the specific context of vocational training in tourism (Chart 01). These keywords were created as representations of themes that are repeated in the analysis of the Brazilian legislation on nature tourism (Plano Nacional de Turismo, 2018-2022) and bibliographic references on environmental education (Philippi Junior, 2002; Sauv e, 2005; Rodrigues, 2010, 2018, 2019; Layrargues; Lima, 2014) and Sustainable Tourism (Ceballos-Lascur ain, 1995; Mendon a; Neiman, 2005; Petersen; Romano, 1999; Campos, 2006; Layrargues, 2009; Alexandre, 2018; Blengini et al., 2019; Blengini; Rodrigues, 2019; Khanra et al., 2021).

Chart 01 - Keywords used for the analysis of curricular subjects of technical courses in tourism offered in Sergipe between 2015 and 2018.

CATEGORY	DESCRIPTION
A	Environmental Education
B	Sustainable Development
C	Sustainable Tourism
D	Sustainability
E	Environment
F	Environmental Protection/Preservation
G	Principles of Tourism
H	Legislation of Tourism
I	Sociocultural Preservation

Source: Created by the authors.

We analyzed 7 courses (Secondary-Level Technician - Tour Guide IFS; Secondary-Level Technician - Hosting IFS; Secondary-Level Technician - Hosting IFS - EJA; Secondary-Level Technical Professional Qualification - Tour Guide Senac; Basic Course - Cook Senac/Prodetur; Basic Course - Waiter Senac/Prodetur; Basic Course - Chambermaid Senac /Prodetur) and a total of 100 subjects. The data relative to the course “Secondary-Level Technician - Tour Guide IFS” (from now on, “IFS course for guides”) are presented below to exemplify the analytical framework of the research. For each course, a matrix was created composed of the subjects and keywords (Chart 01) addressed in the syllabuses and bibliography (Chart 02, with the categories addressed in the subjects of the IFS course for guides marked with the letter X and highlighted in green)²¹.

Chart 02 - Analysis of the subjects of the IFS course for guides offered in the years 2015 to 2018

KEYWORDS		A	B	C	D	E	F	G	H	I
SUBJECTS	Hours									
I- Fundamentals of Tourism and Hospitality	30	X	X	X	X	X	X	X	X	X
II- Interpersonal Relationships	15									
III- Legislation Applied to Tourism	30	X	X	X	X	X	X	X	X	X
IV- Field Guidance Techniques	30									
V- First Aid and Workplace Safety Notions	15									
VI- Environmental Education	30	X	X	X	X	X	X	X	X	X
VII- Tourist Destinations of Brazil and South America	30	X	X	X	X	X	X	X	X	X
VIII - Language and Communication	30									
IX- Applied English	30									
X- Applied Spanish I	30									
XI- Applied Spanish II	30									
XII- Ecological Aspects	30	X	X	X	X	X	X	X	X	
XIII - History of Sergipe	30									X
XIV- Geography of Sergipe	30					X				X
XV- History of Brazil	30									X
XVI- Geography of Brazil	30					X				X
XVII- Cultural Heritage	30	X							X	X
XVIII- Professional Theory and Technique I	60	X	X	X	X	X	X	X	X	X
XIX- Professional Theory and Technique II	60									

XX- Professional Theory and Technique III	60									
XXI- Integrator Project I	60	X	X	X	X	X	X	X	X	X
XXII- Integrator Project II	60	X	X	X	X	X	X	X	X	X
XXIII- Integrator Project III	90									

Source: Created by the authors.

In the case of the IFS course for guides, presented as an example, the keywords were identified in 13 subjects: 7 of the 23 subjects included 100% of the keywords; 1 included 88.8% (8 of 9 keywords); 1 contemplated 33.3% (3 of 9 keywords); 2 included 22.2% (2 of 9 keywords); and 2 contemplated 11.1% (1 of 9 keywords). To calculate the DCE of the course, two sets of data were used:

(X) Of the universe of 100% of the subjects that make up the course, **56.5%** of them include at least one keyword of the analysis of curricular environmentalization.

(Y) Comprising the total possibilities of keywords contemplated (207, number obtained from the multiplication of the 9 keywords by 23 subjects), there are 80 indications (cells marked with X and highlighted in green in Chart 02), a representation of **38.7%**.

The two percentage representations, identified as **X** and **Y**, were transformed into integers, from 1 to 10, with approximation to the first decimal place, with the new values identified as Xf and Yf (the letter “f” as a reference to the “final” value). In the case of the IFS course for guides, 56.5% (**X**) was transformed into 5.65, approximated to 5.7 (**Xf**); and 38.7% (**Y**) was transformed to 3.87, approximated to 3.9 (**Yf**). The assignment of final value was defined by the simple mean between the two numbers ($[Xf + Yf] / 2$). In the case of the IFS course for guides, the final value was 4.8 ($[5.7 + 3.9] / 2$). The final value is considered the coefficient, or degree, of curricular environmentalization of the course.

It is important to highlight that this specific methodological framework for calculating the DCE of higher education courses through a quanti-qualitative²² approach was created by the authors for the means of this research. Using the methodology in other similar research will certainly offer meaningful data for comparative analysis. The methodology could also be used for calculating the DCE in other contexts, such as government documents (e.g. projects, laws, policies) and scientific publications (e.g. academic dissertations from different courses in a higher education institution, or published papers in different journals).

4 SUMMARY OF RESULTS

Following the same evaluation structure presented in the previous section for all analyzed courses, the overall results are presented in Chart 03 (see note 21 on how to access the full set of data of the research as well as the mathematical work to calculate the DCE for each course). The chart also presents the number of students graduated in each course, enabling the analysis between the degree of environmentalization of the course and the number of graduated professionals.

Chart 03 - Degree of curricular environmentalization of technical courses offered in Sergipe for tourism professionals.

Course	X Coefficient	Y Coefficient	Degree of curricular environmentalization	Quantity of graduates
Secondary-Level Technician - Tour Guide IFS. (duration: 870h)	56.5%	38.2%	4.8	110
Secondary-Level Technician - Hosting IFS. (duration: 900h)	54.2%	44.4%	4.9	10
Secondary-Level Technician - Hosting IFS – EJA (duration: 2400h)	40.7%	24.3%	3.3	13
Secondary-Level Technical Professional Qualification - Tour Guide Senac. (duration: 800h)	0.0%	0.0%	0.0%	60
Basic Course - Cook Senac/Prodetur. (duration: 180h)	12.5%	9.7%	1.2	525
Basic Course - Waiter Senac/Prodetur. (duration: 180h)	16.7%	13.0%	1.5	225
Basic Course - Chambermaid Senac /Prodetur. (duration: 180h)	20.0%	15.6%	1.8	50

Source: Created by the authors.

Among the analyzed institutions, the courses from IFS have the highest degrees of curricular environmentalization (4.9; 4.8; 3.3, respectively). Considering the 3 courses offered by IFS, the 133 professionals that graduated during the time of the analysis represented only 13.4% of the total of 993 graduated professionals of the whole set of analyzed courses. The courses offered by the partnership between Senac and Prodetur had lower degrees of curricular environmentalization (1.8; 1.5; 1.2, respectively). The added number of graduated professionals from the three courses (total of 800) result in a much larger percentage, representing 80.6% of the total graduates of the analyzed courses. The regular course offered by Senac (Secondary-Level Technical Professional Qualification - Tour Guide) is the only course not to present any degree of curricular environmentalization (0.0), being responsible for the training of 60 graduated professionals during the period of the research, representing 6.0% of the total of graduated professionals in the analyzed courses.

5 CONCLUSION

This research focused on diagnosing the DCE of the technical courses offered in Sergipe to receptive tourism professionals, proposing an analysis of the curricular structures of the courses offered by IFS (public institution), Prodetur, in partnership with Senac (state's public policies), and Senac (private institution). The analysis of the current DCE of the courses offered in Sergipe to tourism professionals corresponds to the period of 4 years (2015 to 2018). The result of the diagnosis points to a higher DCE in the courses offered by IFS (average degree of 4.3, considering the three courses offered by the institution). However, IFS was responsible for only 13.4% of the graduated professionals of the analyzed courses. The sporadic and short-term courses offered by Prodetur, in partnership with Senac, had a lower degree of environmentalization (average degree of 1.5, considering the three courses offered by the Prodetur/Senac partnership); and the regular Senac course did not have any degree of curricular environmentalization (0.0). Added up, the courses offered by Prodetur and Senac were responsible for 86.6% of the graduated professionals in the analyzed courses. The occurrence of a higher degree of curricular environmentalization in the courses offered by the partnership between Senac and Prodetur than in the regular course offered by Senac can be explained by a probable requirement of the Inter-American Development Bank–IDB, the international

organization that funded Prodetur (see Handl, 1988; Mikesell; Williams, 1992 for earlier discussions about the role of international banks in promoting sustainable practices through their loans).

There are a series of normative documents of Brazilian education that refer to the mandatory inclusion of environmental issues, in a transversal way, at all levels and modalities of teaching, even offering the guidelines for such inclusion (see note 2). The diagnosis of courses for training receptive tourism professionals in Sergipe highlighted some problems in this aspect: (a) the courses responsible for the most significant number of graduated professionals (80.6%) show low levels of curricular environmentalization (average of 1.5 DCE); (b) the courses responsible for the most significant number of graduated professionals (80.6%) have the shorter duration, and are offered sporadically through state public policies that are highly susceptible to changes in government; (c) the presence of a regular vocational training course in tourism with no recorded DCE (0.0%); (d) the lack of transversality (presence of the environmental perspective in all subjects of the course) in all analyzed courses. Some questions can be asked based on this finding: What could justify the higher DCE in the courses offered by IFS? What would be influencing this greater inclusion of environmental issues in the curricula of IFS? Is the DCE of the course influenced by the area of vocational training? Would that explain, for example, the difference of DCE between the courses for guides offered by IFS (DCE 4.8) and the courses offered by Prodetur for cooks, waiters, and chambermaids (average DCE of 1.5)? Is this evidence of a certain hierarchy of the areas of activity within the field of tourism? In this context, would courses for hotel and tourist company managers, for example, focus more on environmental issues? Or, since receptive tourism professionals are commonly residents from the tourist regions where they work, many of them having low educational levels²³, will curricular environmentalization always be second (or third, fourth, etc.) to more technical topics? Further studies are needed to answer these questions.

Among the recognized limitations of the work, we highlight particularly the restriction of the analysis to normative documents of the courses that were part of the research scope. The survey of data from, for example, direct observations of classes and interviews with teachers and students of the investigated courses could provide important complementary data for the analysis. Another recognized limitation is the definition of keywords that guide the analysis from a significant but limited representation of documentary and theoretical references.

However, considering both acknowledged limitations, it is worth pointing out that the same evaluation structure was used for all the analyzed courses. Thus, although other methods could have been used to calculate the DCE (see examples in note 16), the used method as standard allows comparative analyses between the corpus, supporting the study conclusions.

The results of the diagnosis on DCE of technical training courses for receptive tourism in Sergipe show important deficiencies in relation to the processes of curricular environmentalization, providing data that can be the basis for public and private policies for vocational training. In addition, the data of the research located in Sergipe point to the need for further studies that correlate DCE with the variables: (1) public or private sphere; (2) short or long duration; (3) high or low status of the position or function in the professions within the field of tourism; and (4) high or low level of education associated with the position or function in the professions within the field of tourism. Similar studies in the field of technical training for receptive tourism in other locations would also be essential for comparative analyses. Thus, the article offers a direct contribution to the tourist sector of Sergipe, with data that justify and support proposals for changes in the current curricular structure of the training courses of professionals who will directly act in the operationalization of the tourist activities in the state. The article also projects possibilities for future research with generative potential towards sustainable tourism.

REFERENCES

Alexandre, Lilian. Maria de Mesquita. **(Re) invenção do turismo de base comunitária no litoral sul sergipano**: turismo e economia criativa como elos de gestão participativa. 2018. Tese (Doutorado em Geografia) – Universidade Federal de Sergipe, São Cristóvão, 2018.

Arbat, Eva.; Geli, Anna M. (org.). **Ambientalización Curricular de los Estudios Superiores**: aspectos ambientales de las universidades. Girona: Universitat de Girona-Red ACES; Servei de Publicacions, 2002.

Blengini, Isabelle Aparecida Dellela.; Lima, Luana Brito.; Silva, Isadora Souza Melo; Rodrigues, Cae. Trilha interpretativa como proposta de Educação ambiental: Um estudo na RPPN do Caju (SE). **Revista Brasileira de Ecoturismo**, São Paulo, v. 12, n. 1, p. 142-161, 2019. Available at: <https://doi.org/10.34024/rbecotur.2019.v12.6717>. Accessed on: Aug. 17, 2019.

Blengini, Isabelle Aparecida Dellela; Rodrigues, Cae. Pesquisa em educação ambiental em RPPN: Instrumentos para a pesquisa de campo. **ReviSEA**, São Cristóvão, v. 7, n. 2, p. 83-95, 2019. Available at: <https://doi.org/10.47401/revisa.v8i2.12846>. Accessed on: Aug. 17, 2019.

Bluhdorn, Ingolfur. The politics of unsustainability: COP15, post-ecologism, and the ecological paradox. **Organization & Environment**, v. 24, n. 1, p. 34-53, 2011. Available at: <https://doi.org/10.1177/10860266114402>. Accessed on: Aug. 17, 2019.

Brasil. Secretaria de Educação Fundamental. **Parâmetros Curriculares Nacionais: meio ambiente, saúde**. Brasília: MEC/SEF, 1997. Available at: <http://portal.mec.gov.br/seb/arquivos/pdf/livro091.pdf>. Accessed on: Aug. 17, 2019.

Brasil. Secretaria de Educação Fundamental. **Parâmetros Curriculares Nacionais: terceiro e quarto ciclos do ensino fundamental: Volume 10.3 - Temas Transversais - Meio Ambiente**. Brasília: MEC/SEF, 1998. Available at: <http://portal.mec.gov.br/seb/arquivos/pdf/meioambiente.pdf>. Accessed on: Aug. 17, 2019.

Brasil. **Lei Nº 9.795, de 27 de abril de 1999**. Dispõe sobre a educação ambiental, institui a Política Nacional de Educação Ambiental e dá outras providências. 1999. Available at: http://www.planalto.gov.br/ccivil_03/Leis/L9795.htm. Accessed on: Dec. 16, 2018.

Brasil. Ministério da Educação. Conselho Nacional de Educação; Conselho Pleno. Resolução nº 2, de 15 de junho de 2012. **Estabelece as Diretrizes Curriculares Nacionais para a Educação Ambiental**. Brasília: MEC, CNE, CP, 2012. Available at: http://portal.mec.gov.br/dmdocuments/rcp002_12.pdf. Accessed on: Dec. 15, 2020.

Brasil. Ministério de Turismo. **Plano de Desenvolvimento e Interiorização do Turismo**. Brasília: MTur, 2013. Available at: http://www.turismo.gov.br/sites/default/turismo/DPROD/PDITS/SERGIPE/PDITS_POLO_COSTA_DOS_COQUEIRAS.pdf. Accessed on: Oct. 20, 2018.

Brasil. Ministério do Turismo. **Anuário Estatístico do Turismo**. 2017a. Available at: <http://www.dadosefatos.turismo.gov.br/2016-02-04-11-53-05.html>. Accessed on: Oct. 20, 2017.

Brasil. Ministério da Educação. **Base Nacional Comum Curricular**. Brasília: MEC, 2017b. Available at: http://basenacionalcomum.mec.gov.br/images/BNCC_EI_EF_110518_-versaofinal_site.pdf. Accessed on: Dec. 15, 2020.

Brasil, Ministério da Educação. **Novo Ensino Médio**. Brasília: MEC, 2017c Available at: <http://portal.mec.gov.br/component/content/article?id=40361>. Accessed on: Jul. 19, 2019.

Brasil. Ministério do Turismo. Plano de Desenvolvimento e Interiorização do Brasil, Ministério do Turismo. **Sergipe Amplia Números de Municípios no Mapa do Turismo**. Brasília: MTur, 2017d. Available at: <http://www.turismo.gov.br/assuntos/8161-sergipe-amplia-numero-de-municipios-no-mapa-do-turismo-brasileiro.html>. Accessed on: Aug. 29, 2018.

Brasil. **Base Nacional Curricular**. Brasília, 2018. Available at: <http://basenacionalcomum.mec.gov.br/>. Accessed on: Aug. 20, 2019.

Brasil. Ministério do Turismo. “**Cresce a participação do Turismo no PIB nacional**”. 2019a. Available at: <https://www.gov.br/turismo/pt-br/assuntos/ultimas-noticias/cresce-a-participacao-do-turismo-no-pib-nacional>. Accessed on: Dec. 15, 2020.

Brasil. Secretaria de Educação Básica. **Temas Contemporâneos Transversais na BNCC: Proposta de práticas de implementação**. Brasília: MEC, SEB, 2019b. Available at: http://basenacionalcomum.mec.gov.br/images/implementacao/guia_pratico_temas_contemporaneos.pdf. Accessed on: Dec. 15, 2020.

Campos, Angelo. M. N. O ecoturismo como alternativa de desenvolvimento sustentável. **Caderno Virtual de Turismo**, v. 5, n. 1, p. 1-6, 2006. Available at: <http://www.ivt.coppe.ufrj.br/caderno/index.php/caderno/article/view/75>. Accessed on: Dec. 15, 2020.

Carvalho, Isabel Cristina Moura; Steil, Carlos Alberto. O hábitus ecológico e a educação da percepção: fundamentos antropológicos para a educação ambiental. **Educação e Realidade**, v. 34, n. 3, p. 81-94, 2009. Available at: <https://seer.ufrgs.br/index.php/educacaoerealidade/article/view/9086>. Accessed on: Dec. 15, 2020.

Carvalho, Isabel Cristina Moura; Toniol, Rodrigo. Ambientalização, cultura e educação: diálogos, traduções e inteligibilidades possíveis desde um estudo antropológico da educação ambiental. **Revista Eletrônica do Mestrado em Educação Ambiental**, Rio Grande, v. especial, p. 28-39, 2010. Available at: <https://doi.org/10.14295/remea.v0i0.3393>. Accessed on: Dec. 15, 2020.

Ceballos-Lascuráin, Héctor. O Ecoturismo como um Fenômeno Mundial. In: Lindberg, K.; Hawkins, D. E. **Ecoturismo: um guia para planejamento e gestão**. São Paulo: Senac, 1995. p.23-29.

Down, Lorna. Addressing the challenges of mainstreaming education for sustainable development in higher education. **International Journal of Sustainability in Higher Education**, v. 7, n. 4, p. 390-399, 2006. Available at: <https://doi.org/10.1108/14676370610702190>. Accessed on: Dec. 15, 2020.

Escoto, Francélia de Moura Barros. Educação ambiental, meio ambiente e turismo. **Revista Científica INTERMEIO**, ano 1, n. 1, p. 50-56, 2013. Available at: https://www.fapor.edu.br/pesquisa/arquivos/REVISTAINTERMEIO_ANO1_N1_MAIO_2013.pdf#page=50. Accessed on: Dec. 15, 2020.

Fay, Brian. **Critical social science: liberation and its limits**. New York: Cornell University Press, 1987.

Fien, John. **Education for the environment: critical curriculum theorizing and environmental education**. Geelong: Deakin University, 1993.

Fonseca Júnior, Wilson C. Análise de conteúdo. In: Duarte, J.; Barros, A. (orgs.). **Métodos e técnicas de pesquisa em comunicação**. 2. ed. São Paulo: Atlas, 2006. p. 280-315.

Freire, Laísa Maria.; Rodrigues, Cae. Formação de professores e educadores ambientais: diálogos generativos para a práxis **Pesquisa em Educação Ambiental**, v. 15, n. 1, p. 106-125, 2020. Available at: <http://dx.doi.org/10.18675/2177-580X.2020-14666>. Accessed on: Dec. 15, 2020.

Freitas, Denise; Souza, Marcos L. O ensino superior no Brasil: desafios para a ambientalização curricular. In: Leme, P. C. S. et al. **Visões e experiências Ibero-Americanas de sustentabilidade nas universidades**. São Paulo: USP; Madrid: Universidad Autónoma de Madrid, 2012. p. 129-136.

Geli, Anna M.; Junyent, Mercé; Sánchez, Sara. **Ambientalización curricular de los estudios superiores**: diagnóstico de la ambientalización curricular de los estudios superiores. Girona: Universitat de Girona-Red ACES; Servei de Publicacions, 2003.

González-Gaudio, Edgar. La dimensión ambiental: convergencia o disyuntiva en el currículum universitario. In: Alba, A. (coord.). **El currículum universitario**: de cara al nuevo milenio. México: Centro de Estudios sobre la Universidad/UNAM/Plaza y Valdés Editores, 1997. p. 199-204.

Handl, Günther. The Legal Mandate of Multilateral Development Banks as Agents for Change Toward Sustainable Development. **The American Journal of International Law**, v. 92, n. 4, p. 642-665, 1998. Available at: www.jstor.org/stable/2998127. Accessed on: Nov. 27, 2020.

Johnson, Sue. Higher education and sustainable development: paradox and possibility. **Environmental Education Research**, v. 17, n. 2, p. 281-284, 2011. Available at: <https://doi.org/10.1080/13504622.2010.535726>. Accessed on: Nov. 27, 2020.

Junyent, Mercé.; Geli, Anna. M.; Arbat, Eva. (eds.) **Ambientalización Curricular de los Estudios Superiores**: proceso de Caracterización de la Ambientalización Curricular de los Estudios Universitarios. Girona: Universitat de Girona-Red ACES. Servei de Publicacions, 2003.

Khanra, Sayantan; Dhir, Amandeep; Kaur, Puneet; Mäntymäki, Matti. Bibliometric analysis and literature review of ecotourism: Toward sustainable development. **Tourism Management Perspectives**, v. 37, 2021. Available at: <https://www.sciencedirect.com/science/article/pii/S2211973620301446>. Accessed on: Dec. 03, 2020.

Layrargues, Philippe Pomier. Educação ambiental com responsabilidade social: o desafio da superação das desigualdades. In: Loureiro, Carlos Frederico Bernardo; Layrargues, Philippe Pomier; Ronaldo Souza de Castro (Orgs.). **Repensar a Educação Ambiental**: um olhar crítico. São Paulo: Cortez, 2009. p.11-31.

Layrargues, Philippe Pomier; Lima, Gustavo Ferreira da Costa. As macrotendências político-pedagógicas da educação ambiental brasileira. **Ambiente & Sociedade**, v. 17, n. 1, p. 23-40, 2014. Available at: <https://www.scielo.br/j/asoc/a/8FP6nynhjdZ4hYdqVFdYRtx/>. Accessed on: Dec. 03, 2020.

Lopes, José Sérgio Leite. Sobre processos de “ambientalização” dos conflitos e sobre dilemas da participação. **Horizontes Antropológicos**, Porto Alegre, ano 12, n.25, jan./jun., p.31-64, 2006. Available at: <https://doi.org/10.1590/S0104-71832006000100003>. Accessed on: Dec. 03, 2020.

Manfrinato, Márcia Helena Vargas. **Proposta de organização curricular em curso técnico-profissionalizante: meio ambiente e educação ambiental-um estudo de caso**. 2006. Tese (Doutorado em Ciências da Engenharia Ambiental) - Universidade de São Paulo, São Carlos, 2006.

Mendonça, Rita; Neiman, Zysman. **Ecoturismo no Brasil**. São Paulo: Manole, 2005.

Mikesell, Raymond F.; Williams, Lawrence. **International Banks and the Environment: From Growth to Sustainability: An Unfinished Agenda**. San Francisco: Sierra Club Books, 1992. 302p.

Payne, Phillip.; Rodrigues, Cae. Environmentalizing the curriculum: a critical dialogue of south-north framings. **Perspectiva**, Erechim, v. 30, n. 2, p. 411-444, 2012. Available at: <https://doi.org/10.5007/2175-795X.2012v30n2p411>. Accessed on: Dec. 03, 2020.

Petersen, Paulo; Romano, Jorge O. **Abordagens participativas para o desenvolvimento local**. Rio de Janeiro: Assessoria e Serviços a Projetos em Agricultura Alternativa, 1999.

Philippi Junior, Arlindo. **Educação Ambiental, Desenvolvimento de Cursos e Projetos**. São Paulo: Signos, 2002.

Reigota, Marcos. O Estado da Arte da pesquisa em Educação Ambiental no Brasil. **Pesquisa em Educação Ambiental**, v. 2, n. 1, p. 33-36, 2007. Available at: <https://doi.org/10.11606/issn.2177-580X.v2i1p33-66>. Accessed on: Dec. 03, 2020.

Rodrigues, Cae. Observando os “estudos do meio” pela lente da educação ambiental crítica. **Rev. Eletrônica Mestr. Educ. Ambient.**, v. 24, p. 503-517, 2010. Available at: <https://doi.org/10.14295/remea.v24i0.4390>. Accessed on: Dec. 03, 2020.

Rodrigues, Cae. A ambientalização dos currículos de Educação Física no ensino superior. **Motriz**, Rio Claro, v. 18, n. 3, p.557-570, 2012. Available at: <https://doi.org/10.1590/S1980-65742012000300016>. Accessed on: Dec. 03, 2020.

Rodrigues, Cae. A ambientalização curricular de programas de Educação Física em universidades federais do Brasil. **Rev Bras Educ Fís Esporte**, São Paulo, v. 29, n. 3, p.421-37, 2015a. Available at: <https://doi.org/10.1590/1807-55092015000300421>. Accessed on: Dec. 03, 2020.

Rodrigues, Cae. O (não) lugar das sinergias motricidade-meio ambiente em contextos escolares. In: Corrêa, D. A.; Lemos, F. R. M.; Rodrigues, C. (orgs.). **Motricidade Escolar**. Curitiba: CRV, 2015b. p. 147-172.

Rodrigues, Cae. Limites da mudança e propostas vagabundas: perspectivas práticas da educação ambiental. In: Araújo, M. I. O.; Nepomuceno, A. L. O.; Santana, C. G. **Educadores ambientais**: caminhos para a práxis. Aracaju: Criação, 2016. p.15-30.

Rodrigues, Cae. Movement Scapes as ecotricity in ecopedagogy. **The Journal of Environmental Education**, v. 49, n. 2, p. 88-102, 2018. Available at: <https://doi.org/10.1080/00958964.2017.1417222>. Accessed on: Dec. 03, 2020.

Rodrigues, Cae. A ecotricidade na apreensão da natureza: inter-ação como experiência lúdica e ecológica. **Desenvolvimento e Meio Ambiente**, Curitiba, Seção Especial: Técnica e Ambiente, v. 51, p. 8-23, 2019. Available at: <http://dx.doi.org/10.5380/dma.v51i0.63007>. Accessed on: Dec. 03, 2020.

Rodrigues, Cae.; Payne, Phillip G. Environmentalization of the physical education curriculum in Brazilian universities: culturally comparative lessons from critical outdoor education in Australia. **Journal of Adventure Education and Outdoor Learning**, v. 17, n. 1, p. 18-37, 2017. Available at: <https://doi.org/10.1080/14729679.2015.1035294>. Accessed on: Dec. 03, 2020.

Sampaio, Tânia. M. V. Educação física, lazer e meio ambiente: desafios da relação ser humano e ecossistema. In: Marco, A. (org.). **Educação Física**: cultura e sociedade. Campinas: Papirus, 2006. p. 87-107.

Sauvé, Lucie. Currents in environmental education: mapping a complex and evolving pedagogical field. **Canadian Journal of Environmental Education**, v. 10, p. 11-37, 2005. Available at: <https://cjee.lakeheadu.ca/article/view/175>. Accessed on: Dec. 03, 2020.

NOTES:

¹ The article by Khanra et al. (2021) presents the result of a bibliometric analysis of 878 articles in ecotourism, identifying 4 main thematic areas. The first thematic area highlights the need for the ecological preservation of tourist destinations.

² In Brazil, some important normative documents for curricular environmentalization processes are: the National Curriculum Parameters (*Parâmetros Curriculares Nacionais* - PCN) (Brasil, 1997; 1998), especially the part addressing the Transversal Theme “Environment”; the National Environmental Education Program (*Programa Nacional de Educação Ambiental* - PNEA) (Brasil, 1999); the Environmental Education Guidelines (*Diretrizes da Educação Ambiental*) (Brasil, 2012); and the National Common Core Curriculum (*Base Nacional Comum Curricular* - BNCC) (Brasil, 2017b; 2019b), especially the section addressing the Contemporary Transversal Theme “Environment”.

³ A list of relevant publications on the subject is presented in Rodrigues, 2012; see also Carvalho and Toniol, 2010; Freitas and Souza, 2012; Rodrigues, 2015a; Freire and Rodrigues, 2020.

⁴ E.g., from the Global South and North, Fien, 1993; González-Gaudiano, 1997; Arbat and Geli, 2002; Junyent, Geli and Arbat, 2003; Geli, Junyent and Sánchez, 2003; 2004; Down 2006; Johnson, 2011; Rodrigues and Payne, 2017. In Payne and Rodrigues (2012), the authors present outstanding characteristics of the way curricular environmentalization processes take place in the Global North and South.

⁵ The master’s dissertation of Reigota (2007) listed 40 doctoral theses and 246 dissertations on various environmental themes in pedagogical and political conceptions. The approach did not include curricular

environmentalization in technical and training courses for tourism professionals. It is noteworthy that, within the diversity of activities in the field of tourism, there are sectors that do not require higher education, such as waiters, chambermaids, drivers, and guides.

⁶ Prodetur is the Program of the Ministry of Tourism that aimed to contribute to the structuring of Brazilian tourist destinations by fostering local and regional development through partnerships with states and municipalities. In Sergipe, there has been a very significant spatial change in the last five years associated with Prodetur's investments - <http://www.prodetur.turismo.gov.br>.

⁷ More information about Abav is available at: <http://www.abavsergipe.com.br>.

⁸ More information about Abrasel is available at: <https://se.abrasel.com.br>.

⁹ More information about Abih is available at: <https://abih-se.com.br>.

¹⁰ More information about Sindetur is available at: <https://www.tudodeturismo.com.br/sindetur>.

¹¹ More information about Singtur is available at: <https://trade.nosis.com/pt/SINDICATO-DOS-GUIAS-DE-TURISMO-DE-SERGIPE/5403420/315/p#.X9ktidhKjIU>.

¹² More information about Senac is available at: <http://www.se.senac.br>.

¹³ More information about Sebrae is available at: <https://www.sebrae.com.br/sites/PortalSebrae>.

¹⁴ More information about IFS is available at: <http://www.ifs.edu.br/>.

¹⁵ Higher education courses in tourism were not included in the analysis, seeing most jobs in receptive tourism do not require higher education.

¹⁶ Other methodologies used for the diagnosis of curricular environmentalization can be found in publications referring to the ACES Network (Arbat; Geli, 2002; Junyent; Geli; Arbat, 2003; Geli; Junyent; Sánchez, 2003; 2004), based on references, especially, from the Global South. And in Payne and Rodrigues, 2012; in this publication, the authors discuss the scope and limitations of the ACES network proposals and indicate complementary references, especially, from the Global North.

¹⁷ Despite the relevant emphasis on the difficulties imposed on ecological experiences in the daily contexts of socially marginalized populations, it is also important to highlight that belonging to non-marginalized social classes does not guarantee the incorporation of the ecological habitus, especially considering the ontological limits of change (Fay, 1987), the social strength of unsustainability policies (Bluhdorn, 2011), and the generalized failure of processes of curricular environmentalization (Rodrigues, 2015b).

¹⁸ IFS is a multi-campus institution formed by the integration of two federal authorities: The Federal Center for Technological Education of Sergipe (*Centro Federal de Educação Tecnológica de Sergipe* - CEFET-SE) and the Federal Agrotechnical School of São Cristóvão (*Escola Agrotécnica Federal de São Cristóvão* - EAFSC). Linked to the Ministry of Education, it has administrative, patrimonial, financial, didactic-pedagogical, and disciplinary autonomy. Currently, IFS comprises eight campuses: Aracaju; São Cristóvão; Lagarto; Itabaiana; Estancia; Glória; Propriá; Tobias Barreto, in addition to two others in the implementation phase (Nossa Senhora do Socorro and Poço Redondo), and a center in Cristinápolis. The University President's Office is the executive body, located in Aracaju/SE.

¹⁹ Professional education institution that has been operating in the Sergipe market for almost 70 years, offering initial and continuing training courses (learning, training, improvement, socio-environmental programs, socio-professional programs, and instrumental programs), technical vocational education courses at high school level, and higher education courses, specifically, postgraduate and extension courses promoted by the EAD/Senac Network Portal (<http://www.ead.senac.br>). The Regional Unit of Sergipe has sub-units in Aracaju, Itabaiana, Lagarto, and Tobias Barreto.

²⁰ In the legal form of a non-profit Civil Society of private law, Sebrae is a support service to micro, small, and medium-sized enterprises, with the mission of promoting competitiveness and sustainable development of small businesses and to stimulate entrepreneurship.

²¹ To access the Charts of all analyzed courses, go to https://drive.google.com/drive/folders/1u4amKTu_fFIVMK1svJGJVtNn6h7Ly9SJ?usp=sharing.

²² Qualitative in the selection of the keywords that serve as the basis for the content analysis (e.g. different keywords could have been selected as meaningfully important to the research, which would have altered the results of the analysis). Quantitative in the nature of the content analysis.

²³ For example, in the region of the Velho Chico Center, in Brazil, region with high potential for tourism and with investments from Prodetur, the index for adult illiteracy is 40% (Brasil, 2013).

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