



ENVIRONMENTAL EDUCATION IN THE LIGHT OF THE INSTITUTIONAL THEORY

EDUCAÇÃO AMBIENTAL À LUZ DA TEORIA INSTITUCIONAL

Recebido em 25.01.2023. Aprovado em 30.05.2023.

Avaliado pelo sistema double blind review

DOI: <https://doi.org/10.12712/rpca.v17i1.57176>

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Abstract

The qualitative-quantitative case study, descriptive, and exploratory research was carried out in the Applied Social Sciences courses, through document analysis, interviews, focus groups, and surveys. The Institutional Theory was used, allowing the analysis on the contribution of the Burns and Scapes (2000) model. Considering the applicability of their categories, the institutionalisation of the encoding stage in the Political Pedagogical Programmes of the courses is confirmed, whereas the enacting, reproduction, and institutionalisation are not attended. The model is validated because the process of institutionalisation of the Environmental Education was assessed. The institutionalisation of the EE provides change to HEIs, professors, and students.

Keywords: Institutional Theory. Environmental Education. Law 9.795/1999. Higher Education Institutions.

Resumo

A pesquisa exploratória, descritiva e quali-quantitativa em Ciências Sociais Aplicadas realizada por análise documental, entrevistas, grupos focais e levantamentos, utilizou-se da Teoria Institucional permitindo a percepção contributiva do modelo de Burns e Scapens (2000). Levando em consideração a aplicabilidade das categorias atesta-se a institucionalização da codificação nos PPP dos cursos, já a incorporação, reprodução e institucionalização não estão sendo atendidas. Valida-se o modelo, pois por meio dele avaliou-se o processo de reprodução que a institucionalização do ensino da Educação Ambiental proporciona como mudança à IES, aos docentes e discentes.

Palavras-chave: Teoria Institucional. Educação Ambiental. Lei 9.795/1999. Instituição de Ensino Superior.

Introduction

The Institutional Theory, which has a sociological nature, was presented by various scholars, including Habermas (1989). The author used it to measure the social evolution resulting from individual's learning process in the context of society and, consequently, in the professional environment, where daily activities are performed (KELM *et al.*, 2014). Considering that the rules and daily activities are defined by people, it is imperative, according to the authors, to investigate the conduct of individuals within professional spaces in light of the changes that are implemented, since such changes will inevitably affect the daily routines of those involved.

The activities within the institutions are developed by people who need to perform their actions based on rules and routines. Thus, Scapens (1994) highlighted that the institutionalisation of new events becomes noticeable through the results of the undertaken actions, rather than through the established process. This context demonstrates the need for clarity and optimisation of rules so practice can be incorporated, reproduced, and, finally, institutionalised within the organisation.

Taking into account the need to analyse the standardisation processes that happen in organisations, Burns and Scapens (2000) formulated the fundamental assumptions of the Institutional Theory. Their objective was to measure institutionalisation during the implementation of the process of change in rules and routines that could be incorporated based on new demands (Ribeiro; Scapens, 2006; Frezatti *et al.*, 2009).

The conceptualisation of changes occurred within the team of a financial institution, when the authors were applying management control tools. It allowed Burns and Scapens (2000) to apply the Institutional Theory. They structured it in four categories: encoding, enacting, reproduction, and institutionalisation. According to the authors, besides the stability granted by the enacting process, the Institutional Theory recognises the changes caused by new rules and routines that are shaped by the reproduction and institutionalisation of the theory. Other authors, such as Benson (1977), Tolber and Zucker (1999), Seo and Creed (2002), Burns and Baldvinsdottir (2005) and Kelm *et al.* (2014) also contributed to the analysis of the Institutional Theory, especially in relation to the enforceability of the rules, behaviours, culture, and paradigms that occur in institutions when such processes are implemented.

This factor allowed the applicability of the Institutional Theory in other areas, such as in the Higher Education Institutions, with the purpose of analysing the behavioural demands that stem from new rules, as in the case of the institutionalisation of the Environmental Education and the development of the 2030 Agenda for Sustainable Development (Capponi *et al.*, 2021). The National Policy of Environmental Education (PNEA/NPEE), institutionalised through the law 9,795/1999, inferred modifications in the political pedagogical projects (PPP) of a Higher Education Institution in the Western Paraná (BRASIL, 1999). This insertion established new behavioural demands in the work performed by teachers in the classroom routines in the various subjects offered by the courses that integrate the Centres for Applied Social Sciences (Business Administration, Accounting, Economics, Law, Hotel Management, Executive Secretarial Studies, Social Service, and Tourism).

These actions allowed testing the applicability of the Institutional Theory in the Burns and Scapens (2000) model. Such things also allowed the analysis of the reproduction of the institutionalisation of the Environmental Education in the rules and routines of the teachers who make up the courses in the Centre of Applied Social Sciences at the researched university. Through this semantics, actions and decisions were interpreted, consolidating them (or not) to align with the new dynamics of institutionalization. (Carvalho; Vieira; Goulart, 2005; Kelm *et al.*, 2014).

The justification for the research lies in the application of the Institutional Theory developed by Burnes and Scapens in 2000, given that the objective of this study is to explain the effectiveness of the institutionalisation of the Environmental Education within the courses of Applied Social Sciences in a multi-campus Higher Education Institution. In addition, the Resolution 102-CEPE, from 2016, is also

taken into consideration. It is made clear that the focus of development and analysis of results is on the relevance of the research regarding the critique and discussion of the model structured by the authors.

According to National Policy on Environmental Education, the teaching of Environmental Education must occur in a cross-cuttingly form. When researching the subject, Pereira and Terzi (2010) make it clear the need for enforcing legal provisions related to Environmental Education. They highlight the cross-cuttingness as a pivotal factor for reaching a greater comprehensiveness among the professionals and enhancing their competence as well as awareness on environmental preservation.

Proposing and developing social actions is part of the process of institutionalisation. These actions are also essential standardisations that relate to what occurs in organisations. This semantic framework enables actions and decisions to be interpreted and consolidated into new dynamics since its institutionalisation on (Carvalho; Vieira; Goulart, 2005; Kelm *et al.*, 2014).

These delineations are crucial for assessing the applicability of using the Institutional Theory structured through the model proposed by Burns and Scapens (2000). As a result, they could help validate the utilization of concepts such as encoding, enaction, reproduction, and institutionalization in the context of Environmental Education, as well as the dissemination of this knowledge among professors, who need to be trained in order to incorporate the standardizations of Environmental Education into their respective disciplines.

Material and Methods

The construction of knowledge about the investigated reality in research is made possible through information derived from daily experience and the way knowledge is presented (GIL, 2008). This method is in accordance with the model proposed by Burns and Scapens (2000), who emphasize that rules and routines can be identified through the analysis of the model composed by the following steps: encoding, enacting, reproduction, and institutionalisation. Therefore, the objective is to operationalise the implementation of Federal Law 9,795/1999, which aims to promote institutional changes, teacher formation/training, and consequently, changes in the content regularly taught in classroom.

This research is part of a thesis and is presented as a case study. It involves gathered information from Applied Social Sciences Centres and utilises an exploratory and descriptive research approach, incorporating qualitative-quantitative criteria as outlined by Richardson (1999).

Qualitative sources such as a documentary (checklist), interviews, and focus groups were used. The data were assessed through content analysis with support from ATLAS.ti and Wordart.com. On the other hand, the administration of the questionnaire through Google Docs to the faculty members of the CCSAs in the university campuses facilitated the quantitative data analysis. The ordinal scale used corresponds to the following responses: 1 - Strongly Disagree, 2 - Disagree, 3 - Neither Agree nor Disagree, 4 - Agree, 5 - Strongly Agree. The requirements followed the Burns and Scapens model and were adapted based on Santos (2017). The data were subjected to analysis using the SPSS v/25 software after tabulation based on the Likert scale. It should be noted that the present study does not rely solely on statistical data, but rather also employs various indexes as a means of complementing the perceptions obtained during the interview sessions. The usage of these sources allowed triangulating information. This led to convergence on the theme and provided greater comprehensiveness (Richardson, 1999). The research in a multi-campus restricts the replication of data in other institutions.

Results and discussion

The studied Higher Education Institution is public and composed by 5 campuses in the western and southwestern Paraná, being governed by the master plan. This allowed the Centres to work according to the needs of their areas in relation to teaching, researching, and community outreach.

The HEI follow the standardisation that come from higher instances, with the Federal Constitution, the Federal Laws, and State ones, which institutionalised the Environmental Education. These standardisation processes allowed the structuring of the Institutional Political Pedagogical Programme (IPPP). This standardised the subject matter with guidelines based on the graduate profiles, emphasizing the interconnectedness of teaching, research, and extension. It also helped training professionals with critical, reflexive and human knowledge in the areas that Environmental Education is involved (Paraná, 2013; Unioeste, 2007).

Grounded on the IPPP and the National Curricular Guidelines the Resolutions 138/2014-CEPE and 102/2016-CEPE were institutionalised. These motions guided the reformulation of the Political Pedagogical Programme (PPP) of the courses (Brasil, 2012; Unioeste, 2014: 2016). The Structuring Teaching Committee or Academic Board defined the changes to be implemented in the PPPs from 2017 until 2020 (Unioeste, 2016). The modifications corresponded to the inclusion of People with Special Educational Needs, Ethnic Relations Education and Environmental Education in a transversal, continuous, and permanent way across the disciplines."

The analysis of the documents was assigned to the encoding category, according to the Burns and Scapens (2000) model, since the standardization of the law and the knowledge of the professionals regarding their attributions fall under this category. The checklist was applied to 18 Applied Social Sciences courses. These were comprised of Business Administration, Accounting, Economics. They concentrated 684 disciplines/subjects distributed in 4 types of activities: General and specialised training, supervised internship, final graduation project, and complementary activities. It was observed that the regulatory documents pertaining to the Environmental Education institutionalisation in the PPPs are followed by the Centres and Course Committees, in accordance with the Resolution 138/2014-CEPE. It has also been demonstrated that the legal basis was constituted by the Pro-Rector for Undergraduate Education, which disseminated it to the Centres, and subsequently to the collegiate bodies. The latter, in turn, institutionalised the studies and adaptations through the Nuclei of Educational Development, and conveyed their understanding to their peers.

The proof regarding the inclusion of the discussions was pointed out by the interviewees. According to the Director A, "[...] well, we were informed about the regulations that compelled us to modify the PPPs, including the one related to the Environmental Education. It was a drastic discussion, composed by many meetings, lead to the Centre and the approval of the current guidelines". The course coordinator (L) certified it "We carried out the Teaching and Learning Committee to discuss the reformulation of the pedagogical project, which had to be regularised in the new curriculum by 2020 [...] The content would be too little for a single discipline. This is why it was proposed that the content would transcend the other subjects". The professor (A) from the Cascavel *Campus* pointed out that "there was/there has been the organisation of the Teaching and Learning Committee, but I have not take part in it. Later, we were informed about the necessity of adapting the Syllabi.

Nevertheless, these dynamics were restricted to the establishment of the specific discipline. The documentary analysis demonstrated that few courses approached the theme within the disciplines transversely/in a cross-cutting manner. This situation is proved through the analysis of the syllabi of the 684 active disciplines in the 18 courses, because only 73 of them contemplate words related to Environmental Education, sustainability, Environment, and other ones pertaining to environmental topics. The fact that only 11% of the disciplines that constitute the Applied Social Science Centres meet

the new curriculum guidelines regarding Environmental Education clarifies that knowledge about the matter is not yet common between professors.

However, the **encoding** category is validated. In other words, its evidence is directly reflected on the actions that were executed through the Pro-Rectorate for Undergraduate Education, Centres, Collegiates, and Teaching and Learning Committees.

With respect to **enacting**, it is verified that the actors are still in a stage of engagement. To put it differently, they are dependent of the rules and routines encoded by the institutional principles that the IPPP presented regarding Environmental Education

When considering a Higher Education Institution and the enacting process, it is understood that, in order to prevent the resistance of the teaching to the new modality, there should be offered training to the professionals. This would, subsequently, stimulate the inclusion of the subject matter in classroom curricula. It was proved that enacting of the investigated matter was not consolidated between the professionals, because there was no training provided to the professors. According to Burns and Scapens (2000), the actors are responsible for promoting new rules e routines from their social evolution. In the case of this study, if the knowledge about Environmental Education was not offered to the professors, with training courses in the studied area, there is really no way through which they could take this expertise to their daily activities.

This gap of knowledge was perceived in the qualitative analysis as well as in the quantitative. This was deduced as a result of the answers given to the question “What is Environmental Education for you?”. A tacit or formal level of knowledge that occur through their personal formation was observed. To the professor B, “Environmental Education in Brazil becomes mandatory and, simultaneously, let us say, a trend [...] but it need to be measured based on the view of the environmental asset and environmental liability and not purely through conservativeness”. To the alumna A, “The Environmental Education is too much focused on separating rubbish, but it has a higher purpose, that would be forming individual concerned about environmental issues”/

The term Environment is linked with other words or terms emphasised by the interviewees, demonstrating the importance of it to people. Due to the way words were put, it can also be observed that they are crucial in driving Environmental Education. This would allow for an understanding that it is one of the ways in which interdisciplinarity and transdisciplinarity promote the dialogue of knowledge in the insertion of strategies that permeate discussions about nature, before the environmental crisis can become irreversible to the quality of life on planet (Leff, 2001). These multiplicities oblige the adequation of the universities, given that the crises originated by the research and teaching and qualified technical formation/training have not been able to prepare human being in a integral form (Ahlert; Neukirche, 2017; Capponi *et al.*, 2021). It demonstrates the matter needs to be addressed in all spheres, for the higher the quality in regard to the interaction of the university with this demand, the more professionals with ecological consciousness will be trained/formed.

In relation to the quantitative aspect, of the 120 who answered the survey research, just 32 mentioned having proper knowledge, derived from specialisations or majors, Master’s degrees, and Doctorates (Phd). In addition, whereas 44 interviewees possess fundamental knowledge, 39 exhibit reasonable understanding. These numbers are aligned with the opinion of professors who work with the discipline attributed with the matters of the EE. The professor (A) clarified: “Although I have not had any training/formation, I work with an elective subject at university in which I approach such content [...] it has become an important discussion, because raising people’s awareness involves the issue of environmental education”. The professor (C) described: “My understanding is not thorough, but I see that the values established regarding the importance of sustainability are intrinsic to the quality of life”. These remarks illustrate the inexistence of an antagonism towards the matter. Rather, there is an

eagerness that allows for a deeper and significant implementation of the subject in pedagogical training, as highlighted by Guimarães (2015) and Reigota (2014).

Another concern emphasised by the professor (B) regarded the inclusion of the topics in the curricula: "The resolutions did not require the insertion in the syllabi, but only in the content of the subjects/disciplines. Thus, in the Teaching and Learning Committee, I argued that if sustainability was not included in the syllabus, but only in the teaching plans, substitute professors would face many difficulties". The professor (D) pointed out that "Law is useful in both theory and practice. However, how the professors are applying such knowledge is not clear. This is why the Teaching Plan must be well elaborated, with careful attention".

The analyses reveal that the category of enacting does not effectively achieve the transversality of Law 9,795/1999. On the contrary, the responsibilities are being transferred to the personal knowledge of the in the routine of the classroom. Despite being deficient due to the small number of professionals who address the subject in the syllabi, 74 teachers attest that their education outside of Unioeste strengthens their knowledge, improving their approach with students. One professional (F) wrote, "My master's degree is in this area," while another professor (B) stated, "As soon as I started at Unioeste, they asked me to develop an extension project involving sustainability [...] and a postgraduate degree in Tourism Management expanded my knowledge of the SDGs, which I really like." Another teacher (D) clarified, "I have been a professor at Unioeste since 1988, and this concept has been with me since then [...] I work with environmental relations in this economic scenario because sustainability is not a trend, it is a process".

"Moreover, the embrace of the subject promotes reflection and broadens students' ideas about the environment. As one alumnus put it, 'What led me to take the elective course was what I read about it. So, I sought out more knowledge, and studying about it was very timely.' Another alumnus, (N), said, 'I believe that if we had more engaged professors speaking about Environmental Education, there would be a network for that matter'".

Taking into consideration the model that Burns and Scapens (2000) dimensioned in relation to the Institutional Theory with the purpose of explaining the analytical concepts in case studies that interpret the changes that occur in the environment, it is possible to say that this category does not converge with the practice established in the routine of the professors. However, the small transformations that are happening, due to the studies occurring in a personal form, the understanding of the students already changes, for it becomes relevant and is worked in relation to both professional e personal life.

The Reproduction category allows observing if the behavior related to the implemented rules and routines is occurring, consciously or not. In this case, It concerns the applicability of teaching Environmental Education in the teaching practice. Bearing in mind that conscious changes happen when its actor use the new changes in order to apply them daily, the observations indicate that professor who have experience teaching the subject matter do not encounter major issues in implementing it in their work. This situation is perceived in the remarks of the students who participated in the interviews, as may be seen in the text table below:

Campus	Excerpts
Alumna O and M from Francisco Beltrão	The Environmental Education subject/discipline is one of the few that we can say changes not only the workplace, but also the personal aspect, because it is constant in my day-to-day life.
	The Environmental Education is way beyond just recycling. It is more than just knowing laws. Otherwise, EE is associated with applying this knowledge in habits change [...] today I put a significantly higher value on water and nature [...] I have, likewise, brought the knowledge of the 17 Sustainable Development Goals to my workplace, sharing it with the others.
Alumni G and H from Foz do Iguaçu	The The university provided me with this knowledge. The professors supplied the content. When I entered the university, I had no prior knowledge of the subject. Today, everything I have learned has been beneficial, not only for me but also for my family and community. I have developed a critical perspective that is very useful in my profession. I believe that the university has fulfilled its educational role
	I do not live in Brazil anymore, but the main contribution that I brought with me is the critical sense, which the University helped me awaken.
Alumna U from Toledo	This topic goes well beyond what is typically covered in environmental education and sustainability discussions, which often focus on issues such as recycling, waste management, and poverty eradication [...] There are so many things could be explored, including governmental questions [...] The knowledge I gained through my education has allowed me to participate in the women's committee of the Cooperative where I work [...] This is an important topic that should be discussed in relation to the SDGs, because it is good.

Text table 1 – Academic View Regarding the Reproduction of the Discipline
Source: The Authors.

These statements demonstrate that institutional action and control occur both synchronically and diachronically. This allows the knowledge acquired through personal experience to be shared in the classroom, becoming routine in teaching activities and valued by students (Burns & Scapens, 2000).

Regarding the unconscious change that takes place even in the absence of monitorable systems for the execution of rules and routines (since they have not been implemented in perfect harmony within the organizational environment), it has been noticed that the plurality of courses within the institution creates difficulties in discussing environmental issues. But “there is a change in behaviour that occurs influenced by the transformation of the media, especially in relation to what is regarded as a scarce resource [...] I perceive a modification in people, and this has become a more discussed topic”.

Hence, the enactment process is pivotal in this discussion. However, as sporadic interventions among professors interested in environmental education are not sufficient, it is necessary to provide a framework that enables everyone to engage with the subject matter. The more prepared students are to work with topics related to environmental education, the more firmly established it will be in the organisational routine of professors (Guerreiro, Pereira, & Frezatti, 2008).

The last category determines the the apex of the model. This is the point at which changes should be fully incorporated into established routines, facilitating new and concurrent collaboration among the participating actors. Nonetheless, the research reveals that the application of the Environment Education does not occur in the structure of the National Environmental Policy, that is, a transversal approach across disciplines/subjects, given that few professors acquired knowledge to disseminate it throughout the taught content. These gaps can be altered through continuing education on this issue.

Despite its incipient nature, some positive results were observed, highlighting that professors in certain Centres and Courses are taking actions related to environmental issues. This demonstrates that institutionalising Environmental Education is possible on a long-term basis among all professionals. Moreover, integrating the topic into the content taught to students can offer multiple benefits. It not only provides cost savings for the university, but also allows the advancement of new studies and knowledge that become valuable assets for both institutions and society.

This category was scrutinised through questioning the professors in the quantitative research. In every question, it is shown that the topics are consistent with the interviewees. More than 70% testify that it is possible to work with the topics in classroom and that they could engage students, enabling them to discuss the matter in their Undergraduate Thesis.

When students engage with the theme, it becomes possible for them to replicate it in their day-to-day lives in the workplace. This encapsulates the prerogative of SDG4, which emphasizes that education is one of the key skills for sustainable lifestyles, enabling a culture of peace and non-violence, and reducing inequalities between different cultures. This topic is highlighted by interviewees, as can be seen in the Text Table 2.

Campus	Excerpts
Professor A Cascavel	With respect to the university structure, it is possible to say that there are modifications taking place. [...] It is still moving slowly, but the university is seeking to create a favorable environment for environmental issues. However, there is a lack of dissemination of information and communication, so projects cannot grow to their full potential. [...] It is necessary to conceive a project to integrate all of this into a greater and unified plan.
Professora B Foz do Iguacu	Copying is one of them. Students request texts to be sent via email so that they do not need to print them or use paper. Another positive thing is the recycling bins. They have had a great impact in the classroom. I consider this an institutional action because, had the university not provided them, the students would not have realised the importance of separating rubbish.
Director of the Centre – A Cascavel	"We have observed an increase in sustainability management actions, although the data is not statistical. [...] The photovoltaic energy project, which is focused on Agricultural Engineering, has provided economic benefits to the campus. [...] Another project, related to recycling and reusing papers and waste, as well as composting, involves the participation of university members and an environmental education laboratory that collaborates with the community and schools. None of these projects were created just because of a trend. [...] The role of the university is to make these actions feasible and to disseminate them to employees, professors, and students.
Director of the Centre C Foz do Iguacu	There is a work that comes from collaborative efforts of directors, professors, employees, and the rectory itself [...] here in this campus, a project related to recycling paper was developed, being presented as an international project. There is also Itaipu, which integrate/reconcile many of our objectives, transforming them into very positive experiences!

Text Table 2 – Perception of the Institutionalisation in the Academic Environment.

Source: The Autors.

The statements of the interviewees indicate that there are actions taking place within the institutional sphere and in councils, which have already influenced the routines of those involved to some extent. Some environmental actions also occur in the campuses of the University, highlighting that some courses are prone to work with environmental topics. The Business Administration and Law, in the campuses of Foz do Iguacu e Marechal Cândido Rondon, courses made the most of it. Both presented coherence regarding x the courses that present subjects/disciplines structures with these proposes. However, as mentioned by a professor (B) from de Foz do Iguacu campus “there is a lack of governmental marketing, showing these actions to community both internal and external”.

The perception that environmental actions occurring within an institution are isolated events is reflected when Crombach's alpha coefficient is applied, as it allows for measuring internal consistency and estimating the reliability of results obtained. Table 1 presents the categories used in this research, and the obtained data are described through measures such as average, standard deviation, variance, dispersion, and kurtosis. The percentages obtained are consistent with the central tendency of the data set. These factors enable systematic reading and interpretation of the information for each category (Moreno & Morcillo, 2019).

Categ.	N	Mean	Median	Mode	SD	Varian.	Min	Max	Sum	Range		Kurtosis	
	Val									Stat	Std. Error	Stat	Std. Error
Encod.	120	2,9333	3,0000	3,00	0,87671	0,769	1,00	4,00	352,00	-0,402	0,221	-0,607	0,438
Enact.	120	3,2667	3,0000	4,00	0,94142	0,886	1,00	5,00	392,00	-0,928	0,221	0,401	0,438
Reprod.	120	3,2000	3,0000	4,00	0,90610	0,821	1,00	5,00	384,00	-0,814	0,221	0,455	0,438
Institut.	120	3,3917	4,0000	4,00	0,89156	0,795	1,00	5,00	407,00	-0,860	0,221	0,824	0,438

Text Table 3 – Descriptive Statistics of the Categories
Source: The Authors.

With the response of the 120 professors, it has become possible to verify that the Burns and Scapens (2000) model of the Institutional Theory process is effective in evaluating the matter of Environmental Education in the classroom. In other words, it aids in comprehending the professors' work routine, although they require training, as shown in the data set. Of the 31 questions presented to them, the encoding category has a average of 2.9333. The highest average is related to institutionalization, corresponding to 3.3917. These results also show a lower variance of 0.769. However, on the other hand, the standard deviation is 0.87671.

Incorporation and reproduction categories presented results of 3.2667 and 3.2000, respectively, indicating that the scores were close. However, the standard deviation showed that the responses were clustered near the mean, with only a 1% deviation for almost every question in the construct composition. 19 of these questions had a negative kurtosis, indicating that they were clustered even more closely around the mean, and that there was variation between the studied categories.

Such information allows affirming that the data provide robustness and reliability in the results obtained through the application of the analytical instrument, as shown by the percentages. This trustworthiness is also confirmed when it is considered that the research instrument has to perform two functions: i) to describe the characteristics; and ii) to measure certain variables of a social group (Richardson, 1999, p. 189).

Despite these findings, Environmental Education is not yet fully institutionalized in accordance with the structure established by the National Plan for Environmental Education, which calls for its integration across all subjects taught in the classroom. However, both the qualitative and quantitative data demonstrate that the offered disciplines create social values, skills, behaviours and competencies. As a result, a process of knowledge transmission is established among professors and students, which emphasizes the importance of Environmental Education and the necessary measures to be taken for the conservation of the Earth as a healthy habitat, as outlined in Law 9.795/1999 (Brasil, 1999).

The professor (D) from the Campus of Foz do Iguaçu stated that “multidisciplinary courses facilitate discussions and allow professors to think outside the box [...] Thus, working intelligently with the professors can result in good students!”. In this context, it is suggested that establishing a relationship between Environmental Education and the Sustainable Development Goals (SDGs) can promote sustainability in societies and cities, as education is necessary to make them more sustainably developed.

Accordingly, dialog and action must become frequent, with priority being on teaching rules of the Environmental Education, in order to ensure their incorporation in daily practices by all actors within the State University of Western Paraná.

Conclusion

The qualitative-quantitative case study aimed to explain the effectiveness of the institutionalisation of Environmental Education within the courses of Applied Social Sciences at a multi-campus Higher Education Institution. To conduct such analysis, the Institutional Theory was taken into account. Special attention was placed on the model structured by Burns and Scapens (2000), with the categories of encoding, enacting, reproduction, and institutionalisation.

Taking into consideration the relevance of the categories introduced by the authors, it is evident that encoding has become institutionalised in the Pedagogical Projects of the courses offered by the Centres for Applied Social Sciences of the University. However, the other categories (namely, enacting, reproduction, and institutionalisation) appear to be neglected, thus **undermining the institutionalisation process as conceptualised by the authors**.

The use of Institutional Theory helped to enhance the perception of the contribution that the model developed by Burns and Scapens (2000) provided. Additionally, their epistemological framework contributed to understand how Environmental Education can offer new practices.

It is important to emphasise the validation of the model developed by the authors. This framework allowed for an assessment of the institutionalisation of Environmental Education and of the change it can induce in the reproduction process. As discussed, such analyses could benefit HEIs, professors, students, and society as a whole.

The limitations in this Case Study are related to the fact that the findings are intrinsic to a multi-campus Higher Education institution, of regional scope. It causes an improbable generalization of the found data. Another factor that limits it is the fact that the research occurred in just the Centres for Applied Social Sciences, which reduces the proportion of professors who developed the teaching of the Environmental Education in their professional daily lives. As a prospect for future studies, the application of Institutional Theory, according to the Burns and Scapens (2000) model, throughout the institution is recommended. A focus on assessing the effectiveness of Environmental Education teaching as proposed by the Brazilian Federal Law 9.795/1999 and Sustainable Development Goal 4 of the 2030 Agenda should also be evaluated as a focal point.

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