

# NURTURING THE SEEDS OF SUSTAINABILITY EDUCATION: INFORMATION REGIME IN BRAZILIAN PUBLIC HEI

#### URSULA GOMES ROSA MARUYAMA

CENTRO FEDERAL DE EDUCAÇÃO TECNOLÓGICA CELSO SUCKOW DA FONSECA (CEFET/RJ)

LIZ REJANE ISSBERNER INSTITUTO BRASILEIRO DE INFORMAÇÃO EM CIÊNCIA E TECNOLOGIA

PATRICIA PRADO NORTHUMBRIA UNIVERSITY

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## **1. INTRODUCTION**

In the Anthropocene, it is necessary to recognize both the integrating problem dimension - the aggregated impact of human action has become a geological force - and the differentiated dimension of real human life (PADUA, 2017). For Léna & Issberner (2018) the use of the term "Anthropocene" best represents the description of history, in which human species (*Homo sapiens*) generated impacts on nature equivalent to a geological force capable of modifying the planet's biophysical parameters, which diffuses rapidly, in addition to its original behavior. Edgar Morin apud Sachs (2008) affirms the need to 'ecologize' thought, given the fact that our culture and civilization are based on values and worldviews dissociated from the laws of Nature (an anthropocentric view), which results in increasing environmental degradation, waste accumulation, loss of sustainability and species extinction.

The objective of this work was to investigate and analyze the Federal Technological Scientific Professional Education Network's (RFEPCT) commitment to the environmental issue, identifying relevant issues raised by the Anthropocene. Additionally, Information Regime approach was considered to identify factors that may contribute or influence its composition and information-power relations. The theoretical approach of information regime, according to Serafim and Freire (2013), present explanations for the phenomena that encompass political, institutional, and other actors, in the adoption of new teaching proposals.

Information regime constitutes a more or less stable set of formal and informal social communicational networks in which information can be generated, organized and transferred from different producers, through many and diverse means, channels and organizations, to different recipients, whether they are specific users or broad audiences (GONZALEZ DE GOMEZ, 2012).From this proposal, it was intended to establish an analytical framework of how the relationships between actors, mediation processes and informational practices are established in the Federal Technological Scientific Professional Education Network (RFEPCT), contributing to a transition from a consumer culture for an environmental friendly culture and preserving biodiversity.

RFEPCT former institutions date since 1909, when the then President, Nilo Peçanha, created 19 Apprentices and Craftsmen schools which later gave rise to Professional and Technological Education Federal Centers (Cefets). Currently, RFEPCT, created by Law No. 11,892/2008, is responsible for approximately 82,000 (~ 22%) of active employees linked to the Ministry of Education and accountable for R\$17.6 billion in total annual expenses (2019 base year).

Within the scope of Brazilian federal education system, RFEPCT, consists of the following institutions: (i) Federal Institutes of Education, Science and Technology; (ii) Federal Technological Education Centers; (iii) Technical Schools linked to Federal Universities; (iv) Federal Technological University of Paraná; (v) Colégio Pedro II. Covering the entire national territory, the Federal Network provides a service to the nation, by continuing its mission of qualifying professionals for different sectors of Brazilian economy, conducting research and developing new processes, products and services in collaboration with the productive sector, by its 1,023,303 enrollments (2019 base year) in 653 units throughout national territory.

Even with millions of people without access to essential products and services consumption to a dignified life, we already consume 50% more than the planet is capable of replacing and we need to reduce greenhouse gas emissions by up to 40% so that the the planet's temperature does not rise by more than 2°C, a limit indicated by scientists to avoid major climatic catastrophes (IPCC, 2014). Therefore, as Lima (1997, 2011) warns, the "sustainability debate has already been established in an unsustainable society". From this and other studies

(JACOBI, 2003; LAYRARGUES, 2012; JACOBI et al., 2016; RODRIGUES & LOUREIRO, 2017), it is observed that Higher Education Institutions (HEIs) have great potential for generating multipliers for environmental sustainability.

## 2. INFORMATION REGIME

For González de Gómez (2012), Information Regime would be the dominant informational mode in a social formation, which defines who the subjects, organizations, rules and informational authorities are. Besides, it would represent the preferred means and resources of information, standards of excellence and organization, interaction and distribution models. In addition, another characteristic emphasized by the author is the association with information-power relationships.

From Bezerra, Capurro and Schneider (2017) interpretation on the Foucauldian perception of 'truth regimes': ordered sets of propositions, institutions and disciplines that organize and control discourses, imposing strategies for maintaining power, through a universal truth policy submitted to normalizing disciplines and sanctions - it is possible to apprehend the meaning that circumscribes the foundations of the Information Regime.

According to Unger and Freire (2008), Information Regime approach presents differences in Frohmann and González de Gómez: while the latter approaches Information Regime from a political point of view, Frohmann focuses on technological artifacts, on the viability of informational transit through physical environment. The present work adopted the political and social perspectives of González de Gómez. Thus, according to González de Gómez (2003, p.36-37), within the scope of an Information Regime, information actions strata are articulated and manifested through three modalities:

a) **mediation** - when information is developed within the scope of another social action, whose actors are seen as <u>functional</u> subjects;

b) **formative** - when oriented towards finalizing information, whose actors are seen as <u>experimenting</u> subjects;

c) **relational** - when it seeks to intervene in another action to obtain direction and purpose, expanding its space of achievement, whose actors are <u>articulating social</u> subjects.

According to Caixeta & Rodrigues (2008), an analysis of decision-making process, must take into account the social context and history of its actors and, above all, the understanding of processes by which their social practices are institutionalized. While for Braman, the informational state would be characterized by its interdependence in relation to other state and non-state actors, in such a way that it needs a global infrastructure for the creation, processing, flow and use of information; it would be through information control (informational power) which could reconstitute and reformulate its sphere of power, define new figures and areas of autonomy, in a networked environment (MARUYAMA, 2019).

According to Rabello (2018), document materiality in synergy with social practices and institutionalities interpretations reveals not only the need for alternative epistemologies with an interest in fundamental or basic research, but even the possibility of questioning epistemology as a meta discursive or place of public interpretation in knowledge fields, finding in the political component a complementary and strategic alternative.

Society, in general, has difficulty in obtaining reliable information about environmental protection policies, how they are organized and controlled; while not realizing the impacts that consumer behavior can cause to the planet's biodiversity. From the understanding of these concepts, it is expected to obtain a clearer vision on how to use the presented perspectives for environmental sustainability culture implementation in RFEPCT.

#### **3. EDUCATION IN THE ANTHROPOCENE**

Education has been recognized as the key to changing human behavior. Research indicates that education is the main factor for significant involvement in environmental behaviors and sustainable living (AAU, 2009; KHAN, 2013). The relationship between environment and education takes on an increasingly challenging role, demanding "emergence of new knowledge to apprehend increasingly complex social processes and intensifying environmental risks" (JACOBI, 2005, p.247). The challenge is presented to build 'sustainable development', which, as a basic premise, should have the following characteristics: (i) economically feasible; (ii) ecologically appropriate; (iii) socially fair; (iv) culturally equitable, respectful and without gender discrimination.

In this dialogical movement, the educational environment is built so that, in scientific field, opportunities are used for new ways of rethinking survival on the planet since ocean waters level rise and other problems related of coastal cities; global warming and cereal crops transformation that will be impossible in the tropics; drinking water scarcity; biodiversity decrease in the oceans due to water temperature increase are increasingly threatening species. Therefore, informational devices and practices combined with informational policy are considered as drivers for a transformation of culture in professional education in the Anthropocene.

This research intends not to seek the answers, but to problematize the question of how HEIs prepare for the Anthropocene. For this, it is intended here not only to carry out an analysis of scenarios based on historical studies, but also to identify actors and their informational mediation process, in order to analyze scenarios bringing contributions to a paradigm shift in HEI management at facing Anthropocene issues.

## 3.1. Federal Network of Professional, Scientific and Technological Education

The Institutes idea was conceived and implemented as a result of a centralized decision by Brazilian federal government, contradicting the participatory spaces discourse. The proposition of this model naturally surprised institutions and caused apprehension mainly due to the lack of knowledge of this new organizational model, as well as meaningful change in direction in view of institutions development projects.

RFEPCT has approximately 82,000 employees (almost 47,000 teachers and more than 35,000 administrative staff); 65 institutions, 10,888 courses, 1,023,303 students' enrollments, approximately 25% distance learning education (PNP, 2019). There are currently 38 Federal Institutes present in all states offering qualification courses, integrated high school, higher technology courses and degrees. This Network is still formed by institutions that have not joined the Federal Institutes, but also offer professional education at all levels. Besides, there are two Cefets, 25 schools linked to Universities, Colégio Pedro II and a Technological University.

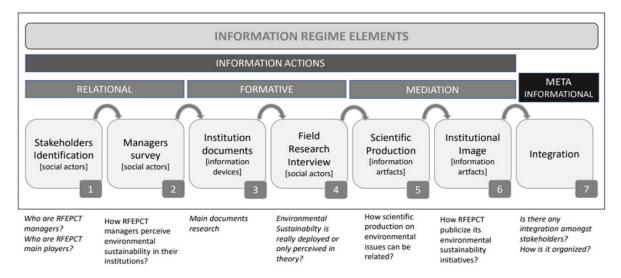
## 4. METHODOLOGY

A literature review was carried out considering the following themes: Anthropocene, 'Education for Ecologization' and Information Regime, in order to support the HEI commitment to the environmental issue's empirical research. By documentary research and survey, it becomes the basis for further discussion. One of the assumptions adopted from Information Science perspective, considers that 'thinking about document institutionality' implies reflecting on the attribution of value whose authority is recognized by others (RABELLO, 2018).

Considering the informational universe among RFEPCT leaders still little known by the community, it was decided to maintain in this research (LUNA, 2007): (i) descriptive approach; (ii) qualitative research paradigm by symbolic interactionism; (iii) applied study, since it seeks

to generate knowledge - through the understanding of interactions among social actors, inserted in RFEPC Information System related to greening education - practical application, directed to problems specific; (iv) exploratory; (v) regarding the procedures: bibliographic, documentary research, survey (seeking information directly with an interest group), as well as reports of experience with a specific RFEPCT group.

Information Regime elements were assigned to each of this study stages in which each informational element is related, as shown in Figure 1.



#### Figure 1: Information Regime Perspective Data Analysis

Source: Own elaboration.

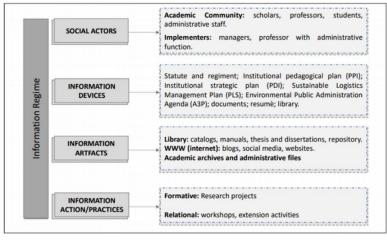
Also, according to a structure based on Freire (2018) for Information Regime elements classification, categorized as 'information actions' (relational, mediation, formative) and 'meta-informational', from the stages of development of this research (Figure 1):

### I) Information actions:

- a. Relational: (1) identification of the actors; (2) competence of managers;
- b. Mediation: (5) institutional image; (6) study of the RFEPCT and reports;
- c. Formative: (3) scientific production; (4) institutional documents;

#### II) Meta-informational: (7) integration.





Source: Own elaboration.

From this perspective, six drivers were considered as the category of analysis: (i) *actors and information environment*; (ii) *informational devices and artifacts* [sources of information]; (iii) *informational practices/actions* [information mediation process]; (iv) *information usage behavior*; (v) *priorities assigned by HEI decision makers*; (vi) *changes resulting from decisions made.* 

Considering the Information Regime context in which RFEPCT members are inserted, an attempt was made to identify the main elements of this structure (Figure 2) that represent: (i) social actors; (ii) information devices; (iii) information artifacts; (iv) institutional information actions /practices.

Therefore, based on data consolidation and their association with informational elements, it will be possible to consolidate the results for an Environmental Agenda proposal based on Education in the Anthropocene for RFEPCT.

### **5.RESULTS**

Among international, national, regional and local organizations, linked to governmental, non-governmental bodies, research institutes and research centers or development institutions, more than one hundred institutions were identified as relevant and possible actors (stakeholders) as influences for an Environmental Agenda establishment in RFEPCT.

The integration of these institutions makes it possible to observe Information Regime characteristics in which RFEPCT is inserted to consolidate its goals for implementing a shared Environmental Agenda, as shown in Figure 3.



Source: Own elaboration.

Concomitant to this stage, the main institutional guiding documents of RFEPCT 40 HEIs were selected, totaling more than 120 documents, in order to identify the informational devices and the manner in which informational practices were transformed into institutionality value.

Another result obtained by SurveyMonkey (SM) tool was sent to Institutional Development HEI managers - FDI members (Conif Institutional Development Forum): 35 out of 40 respondents (87.5%), considering 30 complete and 5 incomplete forms.

The questions were based on legal environmental specifications, which are based on the holistic conception of information materiality (RABELLO, 2018) based on: Institutionality, Information Regime, Informational Practices, Information Validation, Study of the documentary form, Bureaucracy, Information Materiality (Chart 1).



Source: Own elaboration.

From these institutional archives, were collected and analyzed the following documents: statute, general regulations and institutional development plan (current or more recent). A search tool was used to identify the terms "sustainability", "environmental" and "environment" withing this documentation.

## 5.1. RFEPCT Managers Best Practices Report

From documentary analysis and responses obtained by electronic survey sent to RFEPCT 40 managers, the following Good Practices reports were selected:

## a) Federal Institute of Professional Scientific and Technological Education of Acre (IFAC)

- Implementation of Biodigestors on campuses;
- Planning of Rainwater Recovery actions;
- Solar Energy System Project for its largest campus.

## b) Federal Institute of Professional Scientific and Technological Education of Amazonas (IFAM)

- Approval and implementation of its Environmental Policy in 2017;
- Approval and implementation of its PLS in 2018
- Energy Efficiency and Renewable Energy Policy (under implementation);
- Solidary Selective Waste Collection;
- Correct disposal of Technological Waste;
- Participation in A3P agenda, Sustainable Esplanade Program.

## c) Federal Institute of Professional Scientific and Technological Education of Goiás (IFG)

• Agroecology on Cidade de Goiás campus

## d) Federal Institute of Professional Scientific and Technological Education of Minas Gerais South (IFSULDEMINAS)

- Conservative Plan of Mantiqueira (PCM) Partnership whose main objective is to promote forest restoration of native species, in approximately 1,200,000 hectares in Serra da Mantiqueira (perpassing more than 280 municipalities in the States of Minas Gerais, São Paulo and Rio de Janeiro), based on Extrema city knowledge (Conservador das Águas Project, the first Brazilian experience of forest restoration project using PES Payment for Environmental Services), as well as support for Atlantic Forest Municipal Plan (PMMA) implementation. The specific objectives of this plan are to:
  - i. Formation of an ecological corridor in Serra da Mantiqueira coverage area and influence.
  - ii. Improve environmental services production capacity, such as water, soil conservation, biodiversity, carbon sequestration, and landscape maintenance.
  - iii. Promote a municipal and regional plan for the Atlantic Forest with participation of many stakeholders and support from the SOS Mata Atlântica Foundation.
  - iv. To improve municipalities resilience capacity to face damage caused by climate change.
  - v. Strengthen environmental governance in municipalities

## e) Federal Center for Technological Education Celso Suckow da Fonseca (CEFET/RJ)

- 'Recicla Cefet' Institutional Program for Solidary Selective Collection: collection of oil, recyclable and electronic waste in addition to those common as cardboard, paper, plastic, metal and glass, donated to the cooperative;
- 'Mutirão project' of electronic waste: Batteries collection, treatment and proper destination;
- Chemical Waste Survey Project at CEFET/RJ;
- *Extension project*: Joint task force at CEFET/RJ (collection and recycling of used writing instruments);
- *Extension project*: Ecological roof in order to provide thermal comfort;
- *Extension project*: Environmental Sustainability Panel Website creation to publicize the activities and projects developed;
- Sala Verde Project (MMA Brazilian Ministry of Environment support) creation of an integrating environment based on socio-environmental development activities;
- Conscious Water Consumption Project Monitoring water consumption in bathrooms in order to identify waste or leakage;
- Conscious Energy Consumption Project Monitoring of lights on and connected air conditioning equipment in the absence of students in block L;
- Beach Cleaning Task Force for the Collection of Recyclables (plastics, metals, etc.) linked to the "Less Plastic is More" Project;
- CEFET/RJ Campus Petrópolis, Solidary Selective Collection Commission (CCSS) articulates, through teachers, administrative staff and students, environmental education initiatives campus internal environments such as the replacement of single waste collectors, by selective collectors (by type of material), Seminar of the Solidary Selective Collection Commission which promotes dialogue of external speakers with academic community and the CCSS demonstration of results.

The greatest variation in how to represent institutional perceptions about environmental sustainability was identified in documents representing the Institutional Development Plan (PDI), in which all institutions made at least one mention of the theme (Chart 2).

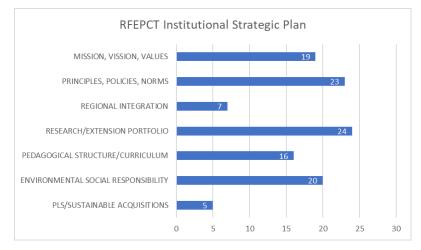


Chart 2: RFEPCT PDI 'environmental sustainability' quotation

Source: Own elaboration.

In consideration of RFEPCT members' Statute, only CEFET/MG made no mention of the terms 'sustainability', 'environmental' or 'environment'. While CEFET/RJ mentioned only the term 'compliance with environmental legislation'. The remaining 38 federal institutes, mostly follow a similar model of statute, considering the concept of 'environmental sustainability' in their institutional mission. Regarding General Regulations documents, only 22 out of 40 have an indication of the terms: 'socio-environmental responsibility', 'environmental legislation', 'environmental preservation', 'environmental sustainability', 'green marketing', 'sustainability actions'.

During January 2019, CNPq Research Groups Directory was consulted, using as search criteria the following terms: 'environmental sustainability', 'environment', 'natural resources', 'ecology', 'sustainable development' ', for RFEPCT member institutions: total of 830 groups, stratified according to Chart 3.

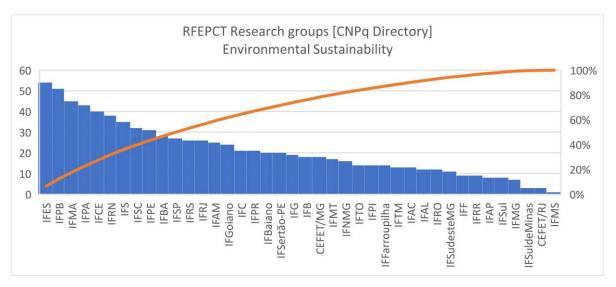


Chart 3: CNPq Research Directory – RFEPCT on Environmental Sustainability

Source: Own elaboration.

From the research in CNPq Directory, the ten institutions that most have Research Groups (IFES; IFPB; IFMA; IFPA; IFCE; IFRN; IFS; IFSC; IFPE; IFBA) were identified. However, it was observed that these institutions would not necessarily be the most productive (IFES, IFG, IFPB, IFCE, IFRS, IFMA, IFPE, IFPA, IFSP, IFSC) in RFEPCT members, from selected thematic area (*environmental sustainability*), applying the same to HEIs with CNPq Productivity fellows.

This can be explained by the fact that many research groups created by federal institutes are linked to Brazilian or international universities, with production geared to their leaders oversees or in other locations nationwide. In addition, news collected on Conif website on Environmental Sustainability theme published from February 17,2017 to June 2,2019 were analyzed. As a result, 68 out of 918 news published in this period, were dedicated exclusively to environmental sustainability.

## 6.DISCUSSIONS

From the analyzes on each Information System element on RFEPCT sustainability (SWOT analysis, Figure 4), compared to the literature, it is possible to consider that:

- I. Actors and Informational Environment: RFEPCT members have partnerships with several institutions, government agencies, NGOs and even with the surrounding community, generating a valuable network of relationships. However, RFEPCT still needs to strengthen partnership ties compared to universities. A positive aspect is its greater proximity to society (local community).
- II. Informational Devices and Artifacts: One of the main devices surveyed was digital platforms (institutional website) that still need to be standardized and adjusted by IT teams some still do not meet e-Gov standards, Open Data Plan and other 'Access to Information Law' tools.

As for the artifacts, a search was carried out in the main institutional documents. The terms and concepts related to environmental sustainability in HEIs - with some exceptions - still present themselves as 'formal compliance' with legislation or linking the institutional image, without necessarily representing concrete actions.

- III. **Informational Practices and Actions:** They were obtained through informal conversations, interviews, non-invasive analyzes (carried out during field research) and digital media (YouTube), in some cases produced by academic community and works of local digital media, television or traditional press. Representing informational dynamics elements in a given context that implicitly or explicitly shape the institutional informational game rules.
- IV. There are some professionals and specialists with initiatives that could be replicated, but in general, isolated activities observed both at institutional level and within RFEPCT itself. Information about the carry out activities most of the time is not formalized or is restricted to an area or department.
- V. **Information use behavior**: Scientific productions (congresses, conferences and journals) selected from Lattes curriculum of Research Groups leaders linked to CNPq Directory, it was possible to observe that productions are random to institutional guidelines, being much more linked to external research groups and partnerships (especially international). There is a great variety in content provision and scientific dissemination about environmental sustainability in institutional communications and

digital platforms. This behavior is also observed in scientific productions and publications in journals.

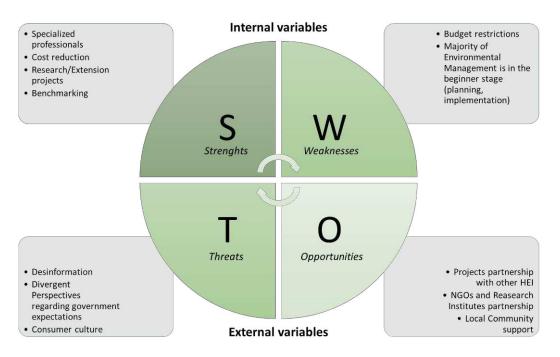


Figure 4: Information Regime SWOT Analysis.

- V. **Priorities assigned by decision makers in HEI**: Most of the time, it was observed that the priority assigned by managers is much more related to budgetary and legal restrictions (as well as the attention given to energy efficiency projects). There is still no formal evidence on environmental sustainability influence on the initiatives and decision-making of most RFEPCT managers.
- VI. **Changes resulting from the decisions taken**: From the analysis of the previous topics, it was possible to elaborate a proposal in order to enhance RFEPCT informational potential, using its capillarity associated to local, regional and national range by its social networks, its 'strong ties' and 'weak ties' through an integrated digital platform. Thus, together with other initiatives, it would become an important articulator in the Information Regime for RFPECT Environmental Education Agenda.

Regarding the negative aspects observed in RFEPCT internal environment, within Information Regime, the following stand out: (i) Budget restrictions; (ii) Majority of Environmental Management in the RFEPCT HEIs in the planning, initial or implementation stage.

On the other hand, elements that can be considered as positive perspectives collaborate continuously on RFEPCT performance in its Information Regime were also identified, externally to RFEPCT member institutions: (i) *Integration of Projects with other HEIs*; (ii) *Partnerships with Research Centers and NGOs*; (iii) *Support and participation by society*. Each of these elements used as an analysis category was organized in a structure that represents the minimum unit of informational representation of HEI within the Information Regime, as elaborated in the scheme of Figure 5.

Source: Own elaboration.

_	Figure 5: Information Elements in HEI Informational Regime.
	INSTITUCIONALITY
	Situation or formal space where objetivation of values or atributes occurred
1	Rede Federal de Educação Profissional Científica e Tecnológica (RFEPCT)
	MATERIAL CULTURE
	Testimonials regarding man intervention in the environment under diferente social and cultural contexts
	RFEPCT members report/storytelling
	INFORMATION REGIME
	Dominant mode in which defines information production in a given place, time and the related
	2030 Agenda, social political & economical scenario
	INFORMATIONAL ACTION
	Operations modes in Information Regime
E	ducation initiatives such as Teaching, Research, Extension (News, projects, publications
	INFORMATION VALIDATION
	Creation or value appropriation in order to transform na object (data) into document (information)
	Managers answers (budget approvers, decision making)
	DOCUMENTAL SHAPE STUDY
	Documentary contente which presente itself as a solution to a given issue
	Actors organization (informal and formal) structure and proccess
	HISTORIOGRAPHY
_	History registration perspective over implemented actions
	Archives analysis. History registration (documents)
	BUROCRACY
	Govermental means to act under the Law
	Legal requirements, governance, transparency, effectiveness criteria
	INFORMATION MATERIALITY
	Material expression which allows to connect information to its social and public nature
11 1	Institutional documents (estatute, regiment, PLS, A3P, etc)
	COLLECTION DEVELOPMENT
	Selection procedure in documental and informative institutions
	Information Repository simulation: Education in the Anthropocene website
	KNOWLEDGE ORGANIZATION
	Field investigation in Information Science organizing and supporting knowledge
	Environmental Agenda in HEI

Figure 5: Information Elements in HEI Informational Regime.

Source: Own elaboration.

Using Information Regime elements: (i) Information actions (ii) Services, systems and formal information networks adapted from Gonzalez de Gomez (2009), actions and information used throughout this research were associated, as shows in Figure 6.

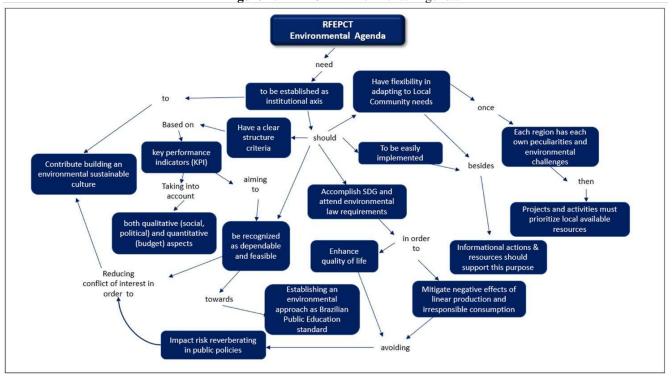
	Figure 6: RFEPCT In	iformation Syste	em and Actions.
INFORMATION ACTIONS & SYSTEMS	INTERSECTION ZONE WITH INFORMATION TECHNOLOGIES SUPPORT	INTERSECTION MODE DECISION	
	CULTURAL TRANSMISSION (ACTORS NARRATIVE/STORYTELLING)		RFEPCT members storytelling
INFORMATION ACTIONS	SOCIAL INTEGRATION (COLLECTIVE CONFIGURATION, AGREEMENTS)	Demand and Validation Commitment	Extension Actions Contribution to society
	SOCIALIZATION (IDENTITIES; INTERACTIONS)		Research Group, Scientific Communication
SERVICES, FORMAL	GOVERNMENT	Strategy and negotiation	Laws, Decree, Resolutions,
INFORMATION NETWORK & SYSTEMS	ORGANIZATIONS	Efficacy/cost	Policies, Norms, Institutional documents

Figure 6: RFEPCT Information System and Actions

Source: Own elaboration.

However, there are also obstacles, issues arising from external environment that negatively affect activities developed by RFEPCT related to the promotion of a greening teaching culture: (i) *Disinformation*; (ii) *Divergent perspectives in the environmental area, taking into account the current government*; (iii) *Capitalist and consumerist culture.* 

The combination of each of these elements favored a set of initiatives that can be considered in HEI integration based on greening education. In this sense, from data collection and analysis of the results obtained in the research on Information Regime and environmental sustainability in the RFEPCT and from the aforementioned premises, relevant elements were identified - both in its internal and external environment - for the construction of an Environmental Agenda (Figure 7).





Source: Own elaboration.

Building a proposal for an Environmental Agenda is not a trivial task, not only because of the complexities of its interactions in the Information Regime, but also because of the peculiarities which characterize HEIs.

Considering the Information Regime in which RFEPCT is inserted, environmental sustainability management of each member institution must first be established as an institutional guideline inasmuch each of them, ensures respective Environmental Agenda transformation, taking into account the following criteria (MARUYAMA, 2019):

- Flexibility to adapt serving its Local Community;
- Respecting each region peculiarities, potentials and challenges regarding the environmental issue, so institutional activities and projects must prioritize resources available in the region;
- Be easily implemented, in the same way that informational actions and resources must support this purpose;
- Comply with the Sustainable Development Goals (SDGs) and environmental laws;

- Clear structure criteria, using specific metrics for performance analysis (key performance indicators KPIs), with both qualitative (i.e. political, social) and quantitative (i.e.budget) aspects;
- Compliance within United Nations Sustainable Development Goals (SDGs) and environmental legislation, aiming to mitigate harmful effects of linear production and irresponsible consumption;
- Improving the quality of life;
- Avoiding the risk of impact for retroaction public policies in order to reduce conflict of interest;
- Environmental Sustainability establishment as an institutional guideline contributing to an environmentally sustainable culture.

## 6.1. Digital platform for Environmental Agenda in RFEPCT

Elaborated as a contribution to the Federal Network of Professional Scientific and Technological Education, Education in the Anthropocene website was carefully organized as RFEPCT repositor available at <https://antropocenorfepct.wixsite.com/ppgci> as shown in Figure 8.

<b>•</b>	U			Sour P	and -		2033
Suste	entabilidade Am		tropocer ederal de Educação REPCT).			CUBK/	
PEGCE New Billion				ibict Acesse	este site pelo c	omputador para visualização do o	conteúdo completo
agina inicial	Sobre	Educação n	o Antropoceno	RFEPCT	Boas Pra	áticas Stakeholders	Contato
meando	a cult	ura da s	sustental	bilidade	na RF	EPCT.	
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Source: Own elaboration.

The idea of using it as a pilot project aims to integrate a set of institutional initiatives, based on documents, practices, news and informational actions, which were consolidated in the construction of a digital platform (designed and implemented by the author herself between February and March 2019), consolidating the main data sources used throughout the development of this study and organized electronically.

Therefore, the implantation of an 'environmentally sustainable culture' through an Environmental Agenda (MARUYAMA, 2019), provides a greater awareness about the interference of human beings in the environment, recognizing the importance in the elaboration of public policies, regulations and sanctions for its governance, considering the aspects of the Information Regime of which it is an integral part.

## **7.FINAL CONSIDERATIONS**

The relationship between environment and education for citizenship takes on an increasingly challenging role, demanding the emergence of new knowledge to apprehend social processes that are becoming more complex every day. At this point, there needs to be an

educational process capable of taking a political stand and carrying out a critical analysis of the various socio-environmental projects that dispute social and political-pedagogical objectives.

When analyzing the concept of 'truth regimes' - ordered sets of propositions, institutions and disciplines that organize and control discourses, imposing strategies for maintaining power, through a universal policy of truth submitted to the normalizing disciplines and sanctions - it is possible to apprehend the conditions of Information Regime. One of the main functions of the State is to provide institutional spaces for dialogue and legitimation with citizens and sectors of society, to meet a fundamental condition for proper functioning of Public Administration in modern democratic regimes.

In order to observe informational practices, analyzing the information mediation process in HEIs, we identify the main informational devices, elements of institutionality, information validation, material culture, study of the documentary form and informational actions.

The RFEPCT members actions are carried out in isolation by their own areas (teaching, research, extension and management) needing an element that aggregates and integrates information, as well as more effectively articulating their social networks in order to create synergy amongst HEI members. Henceforth, the obtained answer was that the managerial priority was for the most part, motivated by economic issues (budget restrictions, economics through studies focused on energy efficiency) or Public Administration regulation requirements.

There is still a long way to go within environmental management in HEIs: in the case of RFEPCT, although there are educational initiatives aimed at environmental concern, its practice related to investments made to promote a greening agenda is still incipient in most institutions.

Finally, this research is considered as a contribution by the elaboration of an unprecedented Mapping on RFEPCT Information Regime elements associated with Education for Ecologization - not intending to be exhaustive on the subject, but elucidating on the largest number of content possible - which can enable composing HEI Environmental Agenda. In addition, it is expected that this will be the first step towards the consolidation of an integrated RFEPCT Environmental Agenda that is capable of promoting meetings, interactions among its members with the purpose of building an institutional culture committed to environmental sustainability in a socially just and transparent manner.

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