

Insertion of the environment theme in teaching by graduated teachers for UFPR Litoral: An analysis from the Theory of Planned Behavior



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Elsi do Rocio Cardoso Alano

ORCID: <https://orcid.org/0000-0002-3730-9330>

Adriana Lucinda de Oliveira

ORCID: <https://orcid.org/0000-0002-9154-4665>

Emerson Joucoski

ORCID: <https://orcid.org/0000-0002-7339-9476>

Gabriela Santos Pereira

ORCID: <https://orcid.org/0000-0003-3068-4856>

Aline Hagedorn Vallejo Martins

ORCID: <https://orcid.org/0000-0002-2351-7534>

Maria Lúcia de Souza Martins

ORCID: <https://orcid.org/0009-0009-6376-0422>

Eduarda Pedrotti Trizoti

ORCID: <https://orcid.org/0000-0002-2351-7534>

ABSTRACT

The research is supposed to investigate the factors that influence the behavioral intention of the teacher (a) egress (a) of the Coastal Sector of UFPR, in the adoption of the theme environment as a teaching practice in their classes, being this transversal theme necessary and important in view of the environmental issues in teaching at its various levels. The Theory of Planned Behavior (TPB), a theory developed by Ajzen (1991), was applied in the educational context, more precisely in teaching, whose sample comprises 64 graduates of UFPR Litoral, who were teachers at the time they answered the questionnaire online of the survey, being an integral part of the respondents of the survey of the Education and Work Group, which has a total of 470 respondents until the year 2019. Of these 64 respondents, 59 include the theme Environment in education, regardless of the area of training. The results show that there are some characteristics that drive this pedagogical practice. It should be emphasized that the research is under development by the Education and Work group of UFPR Litoral.

Keywords: Graduates, Teachers, Teaching, Environment, TPB.

1 INTRODUCTION

Faced with numerous crises faced today, the notoriety of a quality training is one of the greatest objectives in the middle of academic education, both for professionals who enter courses designated to licensure and for those who enter bachelor's or technologist courses. Investments in teaching are beneficial for the whole society, especially in higher education, because it relates both to future teachers and also to future students, making them more able to address various topics in their pedagogical practices, as well as stimulating them to instigate the curiosity of their students. In such a way that innovating, or inserting more appropriate methods that provide a better understanding and apprehension of knowledge by the students, as well as bringing new approaches to the classroom is fundamental.



The current themes, in particular, the theme environment, are of extreme relevance for decades, which in fact culminates in its urgent insertion in education, especially the higher, because at a certain moment the tickets that have graduated will compose the labor society, which focus both on social, environmental and economic issues, because the actions, Even if individual, they are imbricated in sustainable development. These new professionals, as well as other professionals, may be in spaces that require decision-making in organizations of various natures, as well as will be part of the electoral body in the three spheres (municipal, state and federal), so a more conscious positioning and with a better understanding of emergency issues can make a difference, given the current conjuncture of social issues, economic and environmental.

Investments in education provide the improvement of the teaching staff and reflect on the training of future professionals in the country. The performance of teachers requires a constant reflection on reality and on the problems that emerge from it. Thus, making them increasingly able to address important issues in their pedagogical practices, within their specialties, is necessary, as it also stimulates the curiosity and reflection of students. On the other hand, the teacher is not prepared to assume so much adversity and in others the student is the one who presents few perspectives. Didactics also goes through a moment of critical review, within a conception of values that seeks to overcome a merely instrumental vision in the search for a solution for learning. The explicit denunciation in society is the announcement for the search for new paths within a joint work with professionals in the area of education with teachers of elementary and secondary education.

Several researchers such as Barbosa, Calderan and Souza (2019), focus on investigating how curricular contents can be integrated into the theme of the environment, evaluating the knowledge and perception of students. In addition, as in other countries, there are regulations in Brazil that reinforce the obligation to insert cross-cutting themes, such as the Brazilian constitutional regime itself, which imposes that the environment is a fundamental right of the Brazilian population. According to Art. 225 of the Federal Constitution of 1988, it is certified that everyone has the right to an ecologically balanced environment, a good for the common use of the people and essential to a healthy quality of life, imposing on the public power and the community the duty to defend and preserve it for present and future generations. However, having the right to the environment, through the Federal Constitution of 1988, does not mean that citizens are assured of a preserved environment or the availability of a green space for public use. In favor of this right being absent from the paper, the action of the population demanding what in fact was prescribed as a right becomes relevant. In addition, every citizen has rights, however, there is a need to fight for them.

An aspect of great relevance for the implementation of environmental education is related to the contributions brought by higher education institutions – HEIs, such as the development of environmental education programs for higher education students in general (BARBIERI; Smith, 2011).



There is a need for training of professionals in specific areas, such as engineers, administrators, economists and others who can influence the environment, as well as the need to create a graduate program for students who bring specialization in some discipline related to the environment (BARBIERI; Smith, 2011).

Another aspect, which is part of the regulatory framework of the environment in Brazil, is the issue of Environmental Education (EA), in which there are many concepts, objectives, guidelines and methodologies associated with sustainable development, and which were idealized or developed in several international, regional and national conferences on the environment. Much of it was promoted or supported by the United Nations Educational, Scientific and Cultural Organization (UNESCO) (BARBIERI; Smith, 2011).

Law No. 9,795, of April 27, 1999, refers to the availability of bilization on environmental education, establishes the National Policy on Environmental Education and offers other measures. In addition, in Article 2 of this Law, environmental education is treated as an essential and continuous element of the national education offered, evidencing its need to be present with planning, incorporated in all levels and modalities of the educational process, in a formal and non-formal way in teaching.

Under this premise, the current research proposes to identify and analyze through the application of the method of the *Theory of Planned Behavior* (TPB), what is the behavior of licensed graduates, technologists or bachelors, of the Federal University of Paraná, Litoral Sector, in the adoption of the theme environment in their classes. BPD reveals that there are a number of factors necessary for the stimulus and influence that leads a professional to adopt other methods that are not within his domain. As exemplified by Alano, Souza and Hernandez (2019), if a teacher has uncertainties of his capacity to adopt differentiated methods in his classes or if he realizes that he will not have support from the environment in which he attends for his practice, the lower the chances of this teacher expanding other methodologies in his pedagogical practices. With this, the analysis of the training of teachers, their preparation and how the Environment theme is included in their practices is extremely important for the best educational development.

Based on the Doctoral Thesis of Alano (2016), a research that brought a model of adoption focused on the theme of the environment in teaching, in which it was also used, in part, the Theory of Planned Behavior (TPB), the present study aims to analyze the behavior of intention of teachers, graduates of the courses of the Coastal Sector of the Federal University of Paraná, in the insertion of the theme Environment in their classes.



2 THEORETICAL FRAMEWORK

2.1 ENVIRONMENTAL ISSUES

The themes that correspond to the environment have gained space and, what was previously seen as barriers to the growth and development of companies, is currently seen as a new business universe, of which the continuity of organizations is supported by the economic, social and environmental pillars (SOUZA, *et al.*,2021).

In general terms, society tends to ignore environmental problems due to factors such as lack of knowledge, lack of adequate public policies, the public view that environmental control policies can be uneconomical, and the fact that the few who may suffer from such regulations have strong political influence, usually greater than the many who could benefit from them (McGRANAHAN and MURRAY, 2012).

Capitalism, in turn, brought industrialization to green spaces without replacement of the damage caused by deforestation, without sanitation or air purification and globalization mainly economic, such as the aquatic transport of goods, presenting as a consequence the release of polluting waste in the aquifer environment, causing not only harm to the environment and animals, but also pathologies for the population present in the places.

With the intensification of environmental crises, as well as their multiplication in contemporary times, since the 1990s, they have stimulated academic institutions to develop a greater commitment to the theme of environmental sustainability in higher education. The remarkable events about the environment, in which, for several moments, they impacted the ecosystem, potentiate the need for engagement of various knowledge systems, as well as training from an interdisciplinary perspective (ALANO; SOUZA and HERNANDEZ, 2019).

When it comes to environmental issues, Carvalho (2008) emphasizes that:

Currently, Environmental Education must be included in the curricula of all levels of education and in programs directed to the university community, as a permanent and essential element of national education according to the Environmental Policy, defined by Law 6,983/81 and Law 9,795, in its Article 2. According to Law 9.795, more specifically, one of the basic principles of Environmental Education is the pluralism of ideas and pedagogical conceptions, in the perspective of inter, multi and transdisciplinarity. In article 11 of this same law it is defined that the environmental dimension must be included in the curricula of teacher education, at all levels and disciplines (CARVALHO; *et al.* 2008. p. 2).

The role developed by educators is strategic and decisive in the introduction of education for sustainability. As Alencastro (2009) points out, educators aim to support the development of learning, however, often this learning is limited in much smaller terms than they should.

Educational practices, which are part of the interconnection with socio-environmental problems, need to be understood as an integral part of the social macrosystem dependent on the current development context, which conditions the pedagogical and political directions (JACOBI, 2005).



Therefore, the insertion of the environmental problem in the spaces of professional training is urgent, aiming at the need for a greater understanding of natural phenomena by the population in general, and, mainly, for a more conscious and planned use of natural resources by professionals who are in the various positions of their jobs, that is, in the various areas of activity.

Within Environmental Education we can observe some divergences in the understanding and approaches of themes related to this theme, among them conservative and transformative environmental education (SOUZA, 2016).

Conservative education, according to Souza (2016), understands environmental crises in a naturalistic and conservative way, has as an objective of education individual behavioral changes without considering social relations, does not have as its main focus the problematization of reality and historical processes, emphasizes the reduction of the consumption of natural goods without discussing the mode of production and has little understanding of the relationship between man and nature. Transformative environmental education, on the other hand, aims to seek the autonomy and freedom of societies, renewing man's way of relating to other species and to the planet. This model of education believes in social participation and the exercise of citizenship, being concerned with the interaction between different sciences and popular culture (SOUZA, 2016).

Given this contextualization in relation to the different practical and theoretical approaches to environmental education, the educational issue, in practice, can be conducted in a liberating or oppressive way, depending on the conceptions of the groups that divide and dispute this field (SOUZA, 2016, p. 4).

In this perspective, the theme environment in the educational space is premised on the sensitization of individuals, as well as the purpose of instigating them in the change of behavior generating practices that do not cause problems to the Environment, thus enabling a respectful relationship between the man / woman and the space (MEDEIROS; RIBEIRO and FERREIRA, 2011).

2.2 TEACHING

Since the understanding of environmental concepts is necessary for the effective overcoming of this crisis, the spaces of teacher education have a key role for teacher education to act fully in this area of knowledge.

Unfortunately, the educational system and universities in particular, most of the time, retain the idea of knowledge as a process of memorizing new content. Pedagogically, the fact that adolescence presents itself to the subject of knowledge is disregarded, considering the social and cultural aspects as a unique moment of discovery and concretization of the meanings present in their time. Which means numerous possibilities of construction of new concepts about this time, in line with the knowledge produced by humanity in other times (ALENCASTRO, 2009, p. 28).



In the context of the coast of Paraná, one of the main institutions responsible for the training of higher education professionals for the region is the Federal University of Paraná, Litoral sector (UFPR Litoral), which arises with the purpose of promoting a contextualized and transformative education in the socioeconomically more fragile regions of the state of Paraná (Paraná Coast and Ribeira Valley).

UFPR Litoral did not adopt the departmental division adopted by the other sectors, that is, its structure did not provide for departments, so that the sector would function as a large unit, this would enable the logical overcoming of power that was installed in the academy, where often knowledge has owner, the teacher, and place, department or course. The intention of the PPP between teaching, research and extension in an interdisciplinary way should be translated, in the degree under studies, into a curriculum that sought to break with the fragmented vision in the processes of production and socialization of knowledge (JOUKOSKI, 2015, P. 74).

The pedagogical axes of the Pedagogical Political Project (PPP), of the Coastal Sector, moves through the Project Methodology, which through the learning processes, the students are stimulated to know, understand and formulate actions with the local reality. The PPP has as its principle the autonomy of the student for his learning process. In parallel, the university is co-responsible for its learning, generating self-organization and self-productivity: "The intention of the educational process is integral development, not only in the cognitive aspect, but also in the affective and social aspects, in an emancipatory perspective and protagonism of its subjects and their collectivities" (UFPR, 2008, p. 13).

The project starts from the concrete local reality, in this way the curriculum was organized through data collection of this reality and the expansion of student projects involving educators and especially the community. Based on this, the Coastal Sector is organized in three moments: 1 - to know and understand; 2 - understand and propose; 3 - propose and act. These three lines are transformed into three axes: Theoretical-practical Fundamentals, Learning Project and Humanistic Cultural Interactions (CUNHA and FAGUNDES, 2008).

2.3 THEORY OF PLANNED BEHAVIOR

The Theory of Planned Behavior (TPB) was created by Ajzen as a means of complementing the Theory of Rational Action (ART). The BPD has a differentiated approach and starts from the indication of motivational factors that can influence the behavior, followed by the efforts willing to be invested to carry out the action and, finally, to what extent they would be prone to consolidate such action (AJZEN, 1991). According to Ajzen and Fishbein (1972) The immediatist objective of the theory is the prediction of behavioral intentions that are stated to mediate the observed behavior, the authors evidence that the intention of an individual to perform a certain action is a joint function of his attitude towards that behavior and his beliefs about what others expect him to do in that situation.

BPD holds that a person's behavioral intent is established by three main factors: 1) Attitude; 2) Subjective Norms; 3) Perceived Control (AJZEN and MADDEN, 1986).



Attitude refers to personal evaluations about behavior, which has in its formation positive and negative evaluations of its actions. Subjective Norms, on the other hand, are related to personal discernments about social pressures in relation to the behavior in question. Thus, it can be understood as the opinion of other people that the individual has important consideration in relation to a certain behavior (AJZEN and MADDEN, 1986). The Subjective Norms have for variance the propensity of the individual to accept or agree with the influence of other people (AJZEN and FISHBEIN, 1972).

When it comes to the Perceived Control over the behavior concerns the firmament in which the success of an attempt at behavior is submitted to the level of subjection that the individual has in relation to the internal and external factors that can influence the realization of a desired behavior (AJZEN, 2002). It is believed that the greater the understanding of the individual in relation to the intensity of the factor in contributing or inhibiting the behavior, the greater the interference of the perceived control in the prognosis of the intention and the behavior (AJZEN and DRIVER, 1991).

It is perceived that the behavioral intentions of the individual as the attitude, subjective norms and control with Perceived portamental have agreement with the constructs of the hypothesis of the theory of planned behavior (BPD). Thus, taking into account the competence of teachers as one of several reasons that define their deliberations regarding the inclusion of a theme in teaching, that is, their behavioral intention along with other influences can incorporate importance to the environment theme at the time of incorporating it into their discipline (ALANO, 2016).

The BPD explains that a number of factors are necessary to stimulate a professional to adopt other methods that are not within his domain. As exemplified by Alano, Souza and Hernandez (2019), if a teacher has uncertainties of his ability to adopt differentiated methods in his classes or, if he realizes that he will not have support from the environment in which he attends for his practice, the lower the chances of this teacher to increase other methodologies in his pedagogical practices. Thus, the analysis and results of which determinants most allow teachers to insert the theme Environment in their pedagogical practices can assist in the development of the theme for various areas of teaching.

3 METHODOLOGY

The current research uses data from the collection built, researched and prepared by the Research Group Education and Work, this group of scientific initiation is part of the Federal University of Paraná Litoral Sector (UFPR Litoral), where since 2016 operates with the central objective of generating a database with information about the processes of insertion and professional development of graduates of UFPR Litoral.

The sample comprises 64 graduates, being an integral part of the respondents of the Education and Work Group survey, which has a total of 470 respondents until the year 2019. The method used for the resourcefulness of the research is quantitative, descriptive and qualitative, based on the Theory



of Planned Behavior. For Godoy (1995) "qualitative study can, however, be conducted through different paths [...] providing a bird's-eye view of three well-known and widely used types of qualitative research: documentary research, case study, and ethnography." Considering, however, that the qualitative approach, as a research exercise, is not presented as a rigidly structured proposal, it allows imagination and creativity to lead researchers to propose works that explore new approaches (GODOY, 1995, p.21).

The constitution of the plan of this article started from the identification of the percentage of graduates who address the theme environment in their pedagogical practices, in view of the analysis of the institution's planning and the frequency with which this theme is addressed in the student environment. In view of the above, a theoretical survey was carried out according to the categories: Environment, methods used in the approach to the theme in the educational environment and the Theory of Planned Behavior (TPB). During the reading of the materials, the process of data collection was also carried out through the questionnaire that the research group Education and Work applied to the graduates of the courses of the Coastal Sector of UFPR. The data collection instrument was made possible through the free and open platform *Lime Survey*, which aims to filter the data. This questionnaire consists of open, closed and multiple-choice questions, totaling 116 questions, which may vary according to the response of the graduates and structured according to the items of the BPD scale for this particular study. Considering the questions based on the Theory of Ajzen (1991), for the application of these, through the questionnaire, it was necessary to search for the graduates through telephone calls, *Facebook*, *Instagram*, *WhatsApp* and messages via *e-mail*.

It should be noted that the surveys of the data, of the general research, of the Education and Work group, are in progress, as it has an approximate total of 1,810 graduates until the year 2019, graduates among the 9 undergraduate courses and technologists, namely: Public Administration, Agroecology, Environmental Management, Tourism Management, Management and Entrepreneurship, Real Estate Management, Public Management, Sports and Leisure Management, Collective Health and Social Work. In addition to the 6 undergraduate courses, UFPR – Coastal Sector, namely: Arts, Sciences, Rural Education, Physical Education, Language and Communication.

4 ANALYSIS AND DISCUSSION OF RESULTS

The data collection process provided a sample of 470 respondents to the questionnaire applied, among them 64 graduates who, regardless of their area of training, were teaching at the time they answered the questionnaire.

Table 1 presents this quantity separated by sex and age of the respondents.



TABLE 1 - Former professors teaching: Gender and Age

	Age				Total
	22 to 29 years	30 to 39 years	40 to 49 years	50 to 55 years	
Women	10	24	9	3	46
Men	6	7	4	1	18
Total	16	31	13	4	64

SOURCE: Prepared by the authors.

Taking into account that the sample of graduates has more female respondents, it is possible to observe that its highest rate of female insertion in the educational environment is between the age of 30 and 39 years (37.5% of the sample analyzed), in agreement with the male index that are also mostly between 30 and 39 years (10.9% of the sample analyzed).

The authors Ricoldi and Artes (2016), present that the numerical insertion of women enrolled in higher education is visible, but when the systematization of society regarding gender in the world of work and professionalization is considered, it is observed that men stand out in this index. Therefore, the authors believe that the advantage of this insertion in teaching can be complexified, because their inclusion alone does not guarantee that they are in better working conditions and development, capable of being motivated by this environment to invest in a certain student continuation, but rather that they are coerced to try harder. Entering a Higher Education, so that they can be seen as potential candidates in the world of work.

Considering the professional insertion as a teacher, it was also possible to verify those who already taught before their training at UFPR Litoral, conforme Table 2.

TABLE 2 - Former professors who taught before having taken higher education at UFPR Litoral.

	Five.	Men.	Total
Taught	8	0	8
He did not teach	28	13	41
N/A	10	5	15
Total	46	18	64

SOURCE: Prepared by the authors.

Table 2 shows that 43.75% of the women who teach did not have this practice before entering the course, totaling most of the sample among the graduates.

The authors Hirata, Oliveira and Mereb (2019) emphasize that teachers, mostly women, have the highest rate of their participation in the scope of early childhood education and in the early years of elementary school. In addition, the bond of women decreases in the following stages, but they continue to be the majority.



Given the specificity of tema and the constant current changes, the question about the continuity of the studies was present, as shown in Table 3.

TABLE 3 - Attended or is attending continuing education.

Attended	44
Did not go	20
Total	64

SOURCE: Prepared by the authors.

After the formation of the egressed respondents, the paths are diverse. However, it was possible to identify that 68.75% of the graduates who teach continued their training after graduation at UFPR Litoral.

As the authors discuss Alvarado-Prada, Freitas and Freitas (2010), the continuing education of teachers, should be observed as an instrument that assists educators in the teaching-learning process of their students, in the search for new theoretical and methodological knowledge for professional exploration and the transformation of their teaching practices. With this purpose, the school as a training institution and as a space for continuing education of teachers, must provide means and time for educators to understand their own institutional reality, analyze it and, thus, transform it, so that there is a series of developments.

An important question for the analysis of the sample, based on the Theory of Planned Behavior, which also measures the influences by peers in the action of the teachers, it was of great value to bring to the study the nature of the Institution in which the teacher teaches. Table 4 presents these data.

TABLE 4 - Nature of the Educational Institution in which the graduates work.

Educational Institution	Teachers		
	Fem.	Men.	Total
Public Institution	35	13	48
Private Institution	7	4	11
Public and Private Institution	4	1	5
Total	46	18	64

SOURCE: Prepared by the authors.

Regarding educational institutions, 75% of the sample of teachers teach in public institutions. According to Hirata, Oliveira and Mereb (2019), in their study they could evidence that public institutions have a relative percentage more teachers with higher education at almost all levels of education, except in Youth and Adult Education (EJA).

When dealing with quality in teaching it is also necessary to realize how integrated teachers are with their institutions, or in more than one, because every teaching action has an investment time in



the preparation of classes and other activities conducted in the environment. Table 5 shows the scenario of the number of institutions that each respondent operates.

TABLE 5 - Number of institutions that the professors work.

Teachers	Five.	Men.	Total
Only one School	32	12	44
In 2 Schools	8	3	11
In 3 Schools	4	2	6
In 4 or more Schools	2	1	3
TOTAL	46	18	64

SOURCE: Prepared by the authors.

It is worth mentioning that 20 of the respondents who teach (31.25% of the sample) are practicing their profession in more than one educational institution.

There is a difficulty in effectively qualifying and tabulating the hours worked by teachers, so the official data made available with a certain frequency consider only the time spent in the classroom, or the contractual time. In addition, the teaching trajectory encompasses numerous elements that make up their professional development and their pedagogical skills, so it is difficult to measure time accurately, as it is not defined during the clock mark and through restricted school activity (BARBOSA, FERNANDES and CUNHA, 2021).

This result not only presents a diversity in the teacher profiles but also in the consequences that these (as) have to meet their own professional demands, data that are relevant to discuss the workgarlic from these professionals. As a complement, Table 6 presents the number of hours worked.

TABLE 6- Weekly hours worked by former teachers.

Hours worked	Former Professors
4 to 10 hours	13
12 to 20 hours	25
25 to 32 hours	12
34 to 50 hours	14
Total	64

SOURCE: Prepared by the authors.

A sample of 51 (79.68% of respondents) teachers indicated that they exercise their profession for more than 10 hours per week, that is, many hours/class, which requires at least twice as many hours for the preparation of classes and other teaching activities.

Considerof what many already worked as teachers before their graduation from UFPR Litoral, it is worth noting that the teaching time also brings a baggage of experiences both in the teacher(a) x student relationship, as in the teacher(a) x knowledge relationship. This time is presented in Table 7.



TABLE 7 – Time in which the graduate works as a teacher.

How many years have you been working as a teacher?			Total by age
Time	Men.	Fem.	
My first year	5	5	10
1 to 2 years	1	10	11
3 to 5 years	7	15	22
6 to 10 years	3	10	13
11 to 15 years	1	4	5
More than 16 years	0	3	3
Total	17	47	64

SOURCE: Prepared by the authors.

About 67.18% of the professors indicated that they have been working in the area for more than 3 years.

The activity of teachers is a complex professional exercise, composed, in reality, of several activities that are not socially visible. The experience constitutes the expression of professional learning and, through daily contact with students and colleagues, becomes the way to acquire professional skills that translate into the profile of the "good teacher" (VASCONCELLOS, 2002, p.310)

Tables 8, 9, 10, 11 and 12 refer to the adoption of the Environment Theme by the teachers surveyed and the application of the Theory of Planned Behavior of Ajzen (1991).

TABLE 8 – Former teachers who at some point in their career included the theme Environment in their pedagogical practices.

Course	Have you included the theme?		Total per course
	Yes	No	
Public administration	0	0	0
Agroecology	0	1	1
Environmental Management	6	0	6
Tourism Management	0	1	1
Sports and Leisure Management	0	0	0
Management and Entrepreneurship	2	0	2
Real Estate Management	2	0	2
Public Management	0	0	0
Bachelor of Arts	16	1	17
Bachelor of Science	14	1	15
Degree in Rural Education	10	0	10
Degree in Physical Education	3	1	4



Degree in Language and Communication	2	0	2
Collective Health	2	0	2
Social services	2	0	2
TOTAL	59	5	64

SOURCE: Prepared by the authors.

The sample obtained shows that, regardless of the area of training, most of the responding teachers include the theme Environment in their pedagogical practices, as shown in Table 8. Thus, considering only the respondents of the courses who reported having included the theme environment in teaching, it can be stated that, despite being the majority, they were almost unanimous in adopting the theme.

According to the BPD there are three factors that affect the behavioral intention of the individual, thus, for the approach of the environment theme Tables 9, 10, 11 and 12 show the results obtained.

TABLE 9 – Teaching attitude towards the adoption of the Environment theme in their classes by teachers who graduated from UFPR Litoral

ATTITUDE	I agree more than I disagree	Totally Agree	Disagree more than I agree	Strongly disagree	Not applicable/Did not address the topic	Total
AT 01 - Inserted the theme Environment in my classes by personal preferences	25	28	4	2	5	64
AT 02 - Includes the theme Environment in my classes because I believe that this topic is important for teaching	12	46	1	0	5	64
AT 04 - I adopted the theme Environment in my classes because I believe that this theme provides greater job opportunities for students	17	18	18	6	5	64

SOURCE: Prepared by the authors.

For Ajzen (1991) when a person is willing to respond to an object or event, whether it is positive or negative, there is a manifestation for which the author conceptualizes it as an attitude. Table 9 shows that the attitude of each respondent, in favor of the inclusion of the theme environment in teaching, are present in a positive way, that is, the majority believes that the theme is important, that it provides more opportunities for students and that the theme is also present in the preferences of teachers.

With regard to Subjective Norms, Ajzen (1991) considers that there is a relationship between the beliefs of individuals, given a concern aimed at approving their behavior to the detriment of their actions performed from groups, family or even friends.



TABLE 10 – Subjective Norms in the adoption of the Environment theme by professors graduated from UFPR Litoral in their classes

SUBJECTIVE NORMS	I agree more than I disagree	Totally Agree	Disagree more than I agree	Strongly disagree	Not applicable	Total
NS 01 - The people I consider most important in my work think that I should adopt the theme Environment in my classes	14	20	6	4	20	64
NS 02 - My coordinator/director thinks I should teach the subject of Environment in my classes	10	23	7	8	16	64
NS 03 - The teachers I work with think that I should include the topic of Environment in my classes	19	15	7	5	18	64

SOURCE: Prepared by the authors.

Table 10 shows that the teachers, with whom the respondents work, influence their action for the adoption of the theme Environment in their classes, as well as 34 of the respondents indicate that the people they consider important also exert influence on their adoption of the theme, that is, in the three variables the respondents exceed 50% of those who are moved by the Subjective Norms.

For Ajzen (1991), in relation to the perceived Behavioral Control, there may be a variation between action and situation, because this construct is related to the individual's own confidence while his capacity for accomplishment.

TABLE 11 – Behavioral Control in the adoption of the Environment theme by teachers graduated from UFPR Litoral in their classes

BEHAVIORAL CONTROL	I agree more than I disagree	Totally Agree	Disagree more than I agree	Strongly disagree	Not applicable	Total
CC 01 - I know how to approach the topic Environment in my classes	21	35	3	0	5	64
CC 02 - Teaching the subject Environment in my classes is entirely within my domain	21	30	7	3	3	64
CC 03 - I have the resources to explain the theme Environment in my classes	21	22	16	2	3	64
CC 04 - I have the knowledge to explain the topic Environment in my classes	20	31	8	3	2	64

SOURCE: Prepared by the authors.



Table 11 works with the variables that are on the domain of each graduate teacher who responded to the research, thus, it is possible to affirm that most of them are more likely to insert the theme Environment in their classes, given the knowledge, domain, resources they have to do so.

Thus, considering the Theory of Planned Behavior, applied in the present study, the perceived behavioral control and the behavioral intention are consistent in the behavior performed. For Ajzen (1991) the behavior performed is much more prone for those who have more confidence in their skills and knowledge than for those who have doubts. For the author, perceived behavioral control can be successful to the extent that the perception of control is as realistic as possible, that is, without unpredictability or changes in the context of behavioral control.

Consecutively the problem is that, even though there is an evident awareness and specific legislation on the subject, not all HEIs have returned to this subject. To date, at the higher education level, there are no answers that evidence the reality of the adoption of this theme in undergraduate curricula and teaching-learning practice, as well as initiatives for complementary training of teachers, in a more continuous and systematic way, on the subject of Environmental Management (CARVALHO; *et al.* 2008. p. 2).

5 FINAL CONSIDERATIONS

The research presented demonstrates some pertinent questions such as: the importance of approaching the theme Environment in its pedagogical practices; the preparation of the graduates in relation to the knowledge of the subject; the choice of graduates of courses directed to the bachelor's degree and who at some point may choose to act as teachers. It is noticeable the importance of inclusion with more dynamics and continuity of the theme Environment in teaching, because it is from it that one can influence the more conscious practice of the human being in relation to the environment in which he lives. Awareness in attitudes and the improvement of actions before society are of extreme necessity, but many only want to impose and treat them only in areas that have coherence with the training in their various levels of education. According to Antunes (2008), Environmental Education (EA) in a formal way develops in the school environment, in accordance with the curriculum adopted in public or private institutions, in all teaching modalities, so environmental education is not a single discipline but an element that must be worked on different subjects in different disciplines, should follow the entire educational process.

With regard to non-formal environmental education, Antunes (2008) describes it as a set of practices and actions before the social environment, which aims to sensitize and raise awareness of individuals, so that they participate in the preservation and quality of the environment, from the information of the media and in the conversation circles. Thus, to the extent that the development of the child occurs and how it is instigated and influenced before the qualitative knowledge in relation



to society, this contributes with the stimulus to its thinking in order to create a sharper reflection in the course of its development and human formation before society, which can make-a more human and an adult more aware of the problems that involve the environment and the consequences that their actions can cause.

According to the sample of graduates, who at the time they answered the questionnaire were teaching, there are several factors that influence their decision to address the theme Environment in their pedagogical practices, both as co-workers, superiors, teachers, friends, family, educational institution in which they teach, among others. With this, the Theory of Planned Behavior (BPD) is related to behavioral intention, for example dividing into two topics: Action Plans and Motivation for Action, that is, the vision of BPD can be applied in the cycles of actions taken by teachers and even in the training of these teachers.

It is important that teachers are properly instructed within the training on the content of Environment, because it will always be an issue to put on the agenda. Following the cycle, well-educated teachers on the subject will pass to their students, and it is at this moment that TPB contributes to the elaboration of the teaching plan, with the purpose of absorbing knowledge by the students, in which a perspective of a *continuum is possible*, because they can put into practice in the future, from caring for and respecting the environment and/or even working or acting in the environmental area.

Finally, one of the premises of this research, in relation to the adoption of the theme environment in the pedagogical practices of teachers, is that the study can be considered for all disciplines of the curriculum, as a cross-sectional theme, because the higher the frequency of the approach, the more virtue one obtains awareness about environmental and social problems that require urgent changes.



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