Student Satisfaction and Causes of Abandonment in Distance Education in Undergraduate Courses in a Public Institution of Higher Education in Northeastern Brazil

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Abstract

Distance Learning (DE) is becoming increasingly prominent in the academic field. The Federal University of Rio Grande do Norte (UFRN) invested in this modality, disseminating the teaching and learning process. The objective of this research was to identify the degree of satisfaction with the use of technologies and the causes of dropout of undergraduate students in distance learning modality of Currais Novos Teaching Center in the Brazilian state of Rio Grande do Norte (RN). The research is justified by the importance of students' perception about the use of technology in the virtual environments available in the present institution. A structured questionnaire applied for a descriptive assessment, with a quantitative and qualitative approach with the students of the Polo. The evaluation showed that most students are satisfied with the method, however, lack of time and personal reasons are among the major causes of dropout.

Keywords: Distance education; Satisfaction; School evasion

INTRODUCTION

Distance education is a new trend in the educational field, especially in undergraduate courses. The considerable growth of this teaching modality shows how valid this educational form is. Over the years, the offer of courses at the Currais Novos/RN Polo EaD has increased, as has the demand for a place in this type of education. However, despite this growth in the search for distance learning undergraduate courses, and all the academic support available to students, the number of dropouts in this teaching mode is as high as the search for these courses. Given this situation, the following problems arise: How satisfied are distance education students with the use of the technologies used.In addition, what are the causes of the dropout of undergraduate students in the distance learning modality of the distance-learning center of Currais Novos/RN?

The main objective of this research was to identify the degree of satisfaction with the use of technologies and the causes of dropout of undergraduate students in distance learning modality from the Currais Novos Distance Learning Center of the Federal University of Rio Grande do Norte. , the specific objectives were: to verify the main difficulties encountered by students in DE to better understand satisfaction; distinguish the causes that cause the evasions; propose measures to minimize the dropout of undergraduate courses in distance education.

With technological advancement, distance education has been acquiring more space and prominence in the academic field, where the demand for some courses is even higher than in the present modality. It known that the study in this modality requires a lot of discipline and determination of the students. Therefore, this research aimed better understand the degree of satisfaction and the causes of dropout of undergraduate courses in distance education. The importance of this study for the academic community is quite relevant, since it was noted the low number of students who complete undergraduate courses in distance education at the Currais Novos/RN Polo. Thus, this article is justified by its importance in detecting how the information technology used in distance learning undergraduate courses has been received and used by students, and with these new data, improve the system employed in this type of education. The study offered evaluative resources in order to seek information about the satisfaction of the student body with the technological environment offered by the institution in question.

DISTANCE EDUCATION: INTRODUCTORY AND HISTORICAL ASPECTS

Due to the demands of the professional market or simple personal fulfillment, the demand for undergraduate or even vocational courses is growing day by day. Because of this great growth, coupled with the technological advancement that has dominated the world in recent decades, a new opportunity has emerged in the educational field, the expansion of Distance Learning (DE).

Communication in this type of education is mostly under the responsibility of the available technological resources so that the necessary actions carried out as quickly and efficiently as possible. According to Moran (2002), DE is the technology-mediated teaching-learning process where teachers and students separated by time and space. The discipline and organization in this case are basic tools to succeed and successfully walk a course in this modality.

Distance Education has brought to the population a new perspective of social integration and geographical approximation, creating opportunities for those people without availability of time and resources to attend a classroom daily in a classroom course. The distance learning modality has some advantages that may explain the attraction for such population adherence. According to Claro (2016), some of these advantages are low cost, recognized courses, autonomy, and interactivity. Therefore, Distance Education is not a modality in which the student feels isolated and he only does learning. Behind every student, there is a structured foundation to support him or her in the course of his or her course.

In recent years, distance education in Brazil has had a noticeable expansion, both in terms of supply (numerical growth of institutions that have invested in this type of education and increase of courses offered), as well as demand.

According to the Ministry of Education (MEC), from 2003 to 2013, the number of students enrolled in distance education in Brazil rose from 49,911 to 1,153,572 (Claro, 2016). Also according to the author, data from the Brazilian Association of Distance Education (ABED) state that, in 2014, the growing continued and the number of students already exceeded 3.8 million. Despite the considerable increase in this educational area in recent years, distance education is a long-standing modality.

The Ministry of Education created the Secretariat of Distance Education (SEED), in 1996, within a policy that privileges the democratization and quality of Brazilian education. Thus, officially Distance Education, established by the Law of Guidelines and Bases of National Education No. 9,394, of December 20, 1996, although only regulated on December 20, 2005 by Decree No. 5,622 (BRAZIL, 2005). In addition, it is in 2005 that the Open University of Brazil (UAB) emerges, a partnership between MEC, states and municipalities, focused on higher education and integrating courses, research and programs.

SCHOOL EVASION

One of the biggest problems faced by the educational environment is school dropout, conceptualized by Ávila (1992);it is the dropout of school before the end of a course. Several factors contribute to this, looming among others, pauperism, as the most ponderable. In elementary school, dropout more pronounced from the 3rd grade onwards, since children in the precarious economic environment, having reached an age when parents consider them able to help them, start to provide small services at home or away from home, often contributing financially to support the family (Ávila, 1992, p. 273).

However, this reality is not an exclusive obstacle of basic or elementary education; it also exists in higher education, including also the modality of DE. For Laguardia and Portela (2009), the dropout can still be subdivided into temporary interruption, exit with partial knowledge acquisition, and abandonment before the beginning of the course and real abandonment. Several factors can analyzed to have the real cause that led the student to dropout. According to Netto, Guidotti and Santos (2012) some of them are financial issues, lack of time, non-adaptation to the method, mandatory on-site tests.

The commitment and adjustment of one's daily routine to educational obligations is a necessity for good performance and follow-up of the course to which they underwent. Having the discipline and willpower to overcome barriers is critical to success in distance education.

THE STUDY OF TECHNOLOGY IN DISTANCE EDUCATION

New information technologies are increasingly present in everyday life. Without feeling, we adapt our way of acting, thinking and communicating by integrating these new media into our behavior. Taking information technology to the educational field, distance learning is the best way to make use of it, being on the screen of a computer that this education is fluid and changing, the virtual school is an icon of a new technological time of the educational space. In the words of Serres (1994, p. 188): "Once visible and solidly constructible, schools (in networks) erase distances in real space and unite in virtual places, virtual groups".

In education, electronic communication technologies act as important helpers. In fact, they are already engaged in many educational functions, most of them outside regular education systems. In this scenario emerged Distance Education, where technology provided a means by which more people acquire academic

and professional knowledge through virtual learning environments (VLE), such as chats, forums, video lessons, video conferences and etc. ., with the mediation of teachers and the help of monitors and tutors.

MATERIALS AND METHODS

The research was carried out through a longitudinal analysis which was first applied a structured questionnaire with 18 closed questions, created in order to measure the quality of technological instruments. The information technologies used in virtual environments, more precisely the MOODLE AND SIGAA, for a descriptive evaluation, with a quantitative and qualitative approach with the students of the Currais Novos UFRN pole to measure the degree of satisfaction of the teachers regarding the use of technologies held in 2011 when they were starting their studies in this new modality teaching. The diagnostic assessment was part of the set of assessment types of VLE in the teaching-learning process and is vitally important for its quality as it allows the class as a whole (teacher, student and education system) to be able to, understand themselves, diagnosing disabilities and capabilities. Then, after the years, a survey conducted by means of a questionnaire by electronic means (e-mails and social networks) with the evaded students (2014-2016), and after receiving their answers, the data analyzed and presented the results.

The application of the questionnaire in 2011 took place at UFRN's own campus in the city of Currais Novos/RN, with most of the researched universe present, where, now, they distributed to tutors, to apply with students present after the completion of the tests. The questionnaires of the Public Administration class applied virtually, where the students answered and resubmitted for analysis together with the others.

The research took place in the first semester of 2017 and aimed to analyze the main causes of dropout in undergraduate courses in the distance learning modality of Polo Currais Novos/RN. 2014 to 2016, according to the table below. To collect the data necessary for the research, a questionnaire with 10 closed questions elaborated with the objective of tracing the profile of the respondents and trying to understand the main causes of dropout in distance learning courses at the Currais Novos/RN Polo. The questionnaire sent by electronic means such as email and social networks in July 2017, and was available for 30 days to answer. In a universe containing 277 students, 53.43% answered the survey, which corresponds to 148 students, distributed in the undergraduate courses in Biological Sciences, Mathematics, Physics and Chemistry, in addition to a Bachelor of Public Administration degree in distance education. From the Federal University of Rio Grande do Norte (UFRN) Currais Novos/RN Polo.

Courses	2014		2015		2016	
	Enrolled	Evaded	Enrolled	Evaded	Enrolled	Evaded
Public administration	58	26	36	14	23	4
Biological sciences	96	49	57	13	47	6
Physical education	39	9	35	6	30	3
Physical	35	13	20	7	14	1
Geography	44	18	32	8	29	4
Story	46	24	26	5	22	1
Portuguese language	69	16	57	11	50	3
Mathematics	75	29	47	18	29	7
Pedagogy	92	15	79	4	75	2
Chemistry	40	21	17	7	12	2
TOTAL	594	220	406	93	331	33

TABLE 1 - EVASION TABLE - POLO CURRAIS NOVOS (2014-2016).
SOURCE: INTEGRATED MANAGEMENT SYSTEM FOR ACADEMIC ACTIVITIES - SIGAA, CONSULTATION HELD ON 07/06/2017.

This research also has a documentary character since it used information on the number of students enrolled and evaded provided by the distance education center of the city of Currais Novos/RN, unit linked directly to the Department of Distance Education (SEDIS) belonging to the Federal University of Rio Grande do Norte (UFRN).

RESULTS AND DISCUSSION

In the results analysis phase, we sought to identify the degree of student satisfaction, the causes of dropout, suggesting a proposal to minimize dropout in distance education courses.

DEGREE OF SATISFACTION OF STUDENTS

To characterize the research sample, the following variables considered interactivity, accessibility, communication, satisfaction, attendance and tools of the virtual learning environment beyond age, gender, course, access, graduation and satisfaction.
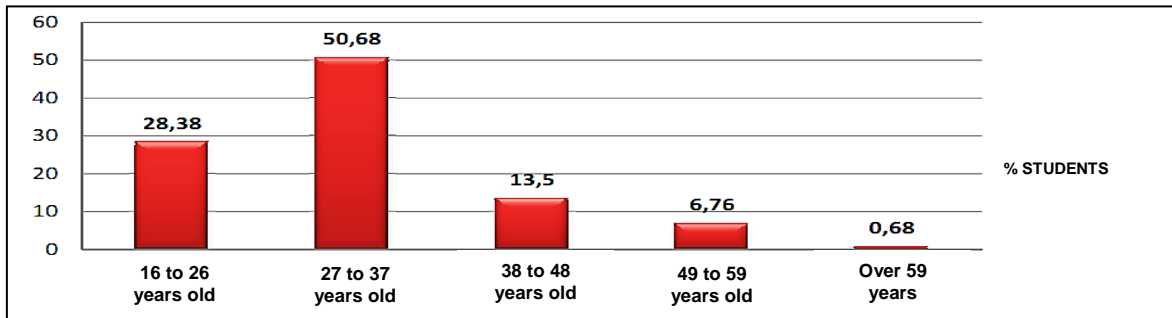
GRAPH 01 - AGE OF STUDENTS
SOURCE: DATA SEARCHED - NOVEMBER / 2011

According to graph 01, it observed that according to the students' profile, the average age is between 27 and 37 years old, with approximately 50.68% of respondents.
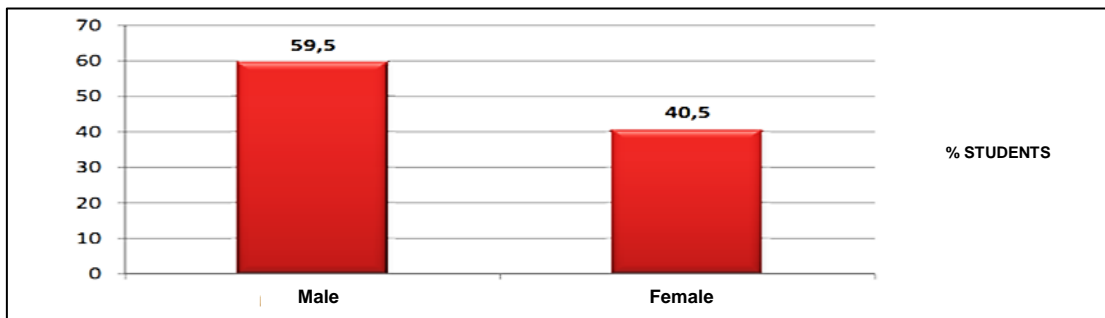
GRAPH 02 - GENDER OF THE STUDENTS
SOURCE: DATA SEARCHED - NOVEMBER / 2011

According to the analysis of graph 02, most respondents are male (59.5%), with another 40.5% female. Despite the difference, the survey considered balanced in relation to this characteristic of respondents.
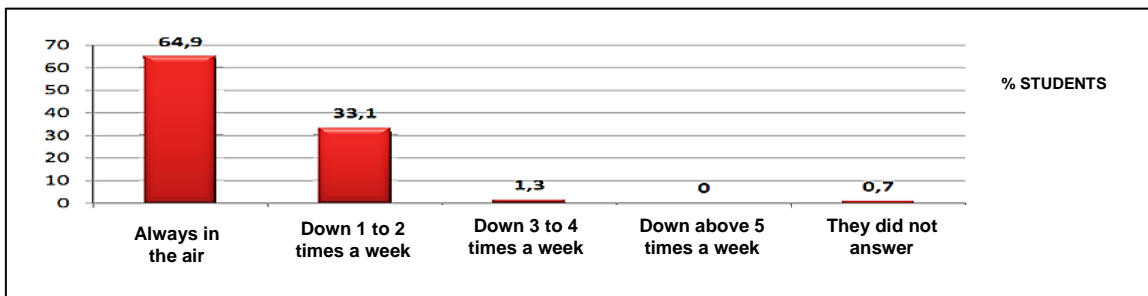
GRAPH 03 - DIFFICULTY OF ACCESS TO MOODLE
SOURCE: DATA SEARCHED - NOVEMBER / 2011

Regarding the degree of difficulty in accessing the MOODLE page, it found that 64.9% of students said that it is never down, 33.1% said it is down 01 to 02 times, 1, 3% from 3 to 4, 0% never access and 0.7% of the total respondents did not answer. For Claro (2016) the autonomy and interactivity available are factors that corroborate the system, thus, a system that is always available for use strengthens these factors.
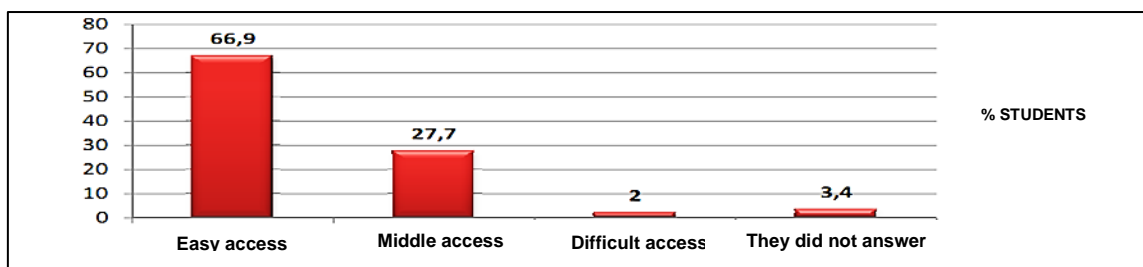
GRAPH 04 - OVERALL ASSESSMENT OF MOODLE
SOURCE: DATA SEARCHED - NOVEMBER / 2011

Regarding the degree of difficulty in accessing the MOODLE page, as a result that most respondents, with 66.9% find it easy to access as shown in graph 04. This data corroborates the thinking of Claro (2016) that reminds the importance of good interactive access to this technology.
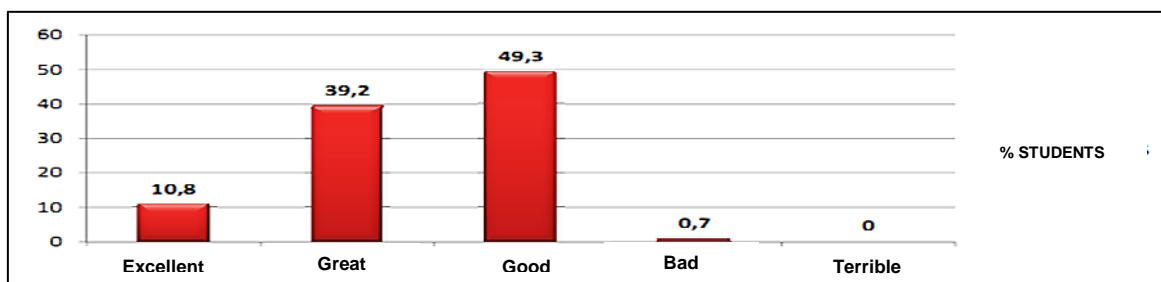
GRAPH 05 - OVERALL ASSESSMENT OF MOODLE
SOURCE: DATA SEARCHED - NOVEMBER / 2011

Overall, MOODLE's rating was positive, as 50% of students rate the page as excellent to great, and 49.3% say it is good. Which makes the high level of satisfaction explicit. According to Netto, Guidotti and Santos (2012) some of the motivations for evasion is the non-adaptation to the method or technology adopted.
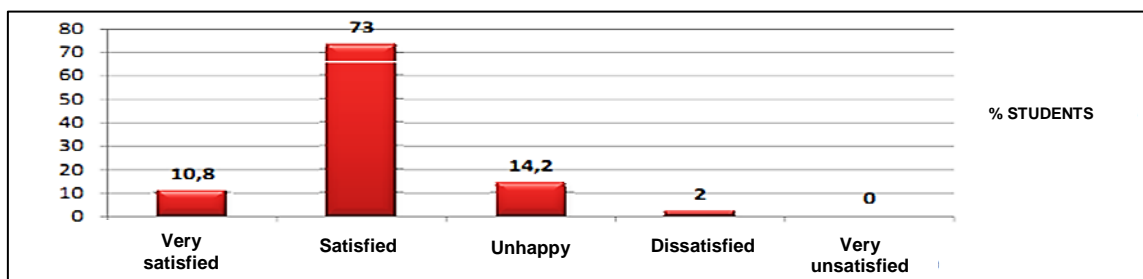
GRAPH 06 – DEGREE OF SATISFACTION AT SIGAA
SOURCE: DATA SEARCHED - NOVEMBER / 2011

Regarding the access to SIGAA, 83.8% of students surveyed showed to be satisfied, or very satisfied, with the tool, as shown in graphs 06. The diffusion in this learning modality is in charge of the available technological resources, enabling actions of quickly and efficiently (Moran, 2002).

CAUSES OF STUDENT EVASION

The purpose of this study was to identify the profile of students and their main difficulties and causes of dropouts in the distance learning undergraduate courses of the Currais Novos/RN.Regarding gender, there is a predominance of female evaded students in undergraduate courses at the EaD - Currais Novos/RN cluster, corresponding to 57.1% of the respondents and 42.9% male.

MALE	FEMALE
42,9%	57,1%

**TABLE 2 – SEX**
SOURCE: RESEARCH DATA, JULY, 2017

Regarding the age group, it can be seen in Table 3 that, the majority of the target students of this research are between the ages of 21 to 30 (35.7%), and 31 to 40 years (47.65). totaling over 70% of responses received.

AGE	PERCENTAGE
21 to 30 years old	35,7%
31 to 40 years old	47,6%
41 to 50 years old	11,9%
Over 50 years	4,8%

TABLE 3 - AGE RANGE
SOURCE: RESEARCH DATA, JULY, 2017

A relevant question about who is pursuing an undergraduate degree in EaD was also analyzed, asking if in the period. In which the undergraduate was studying, the student only studied or also engaged in some professional occupation, and in the results 90.5% answered that they worked and studying, which shows that distance learning is an opportunity for those people who do not have much time, but want to go to college. While only 9.5% were dedicated to academic life only.

As for the period in which the student dropped out of the course, 45.2% answered 2014.1. Followed by the period 2015.1 with 23.8%, this leads us to conclude that in the first semester of the course, the number of dropouts is quite significant, since in the semester mentioned above, there was entry through a selection process for the courses offered by Polo EaD - Currais Novos. For Ávila (1992) several factors can contribute to the dropout of a course.
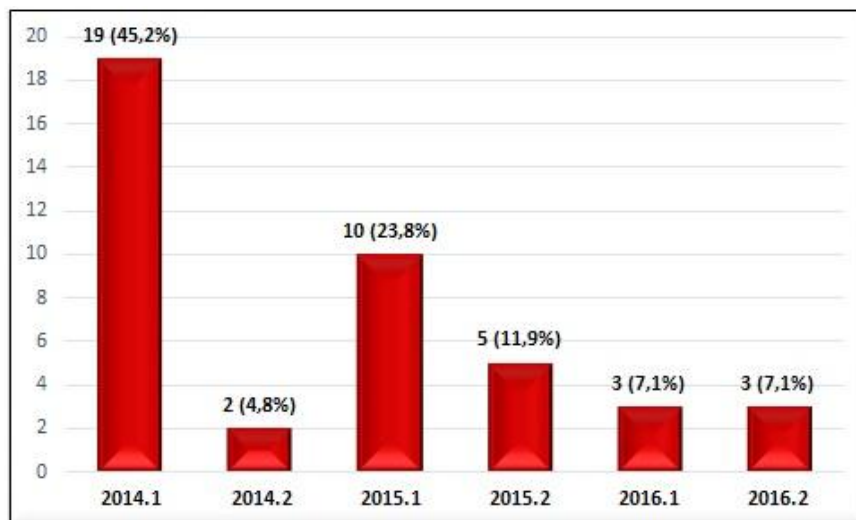
**GRAPH 7 - PERIOD OF DROPPING OUT OF THE COURSE**

SOURCE: RESEARCH DATA, JULY, 2017
One of the factors researched among the evaded students was the difficulties they encountered during the period in which they took the distance education. In response to this question, the main ones enumerated by the respondents were lack of time with 52.4%, lack of teacher feedback with 31% and interaction between students with 28.6% of answers. According to Laguardia and Portela (2009), the dropout can still be subdivided into temporary interruption, exit with partial acquisition of knowledge, dropout before the beginning of the course and real dropout.
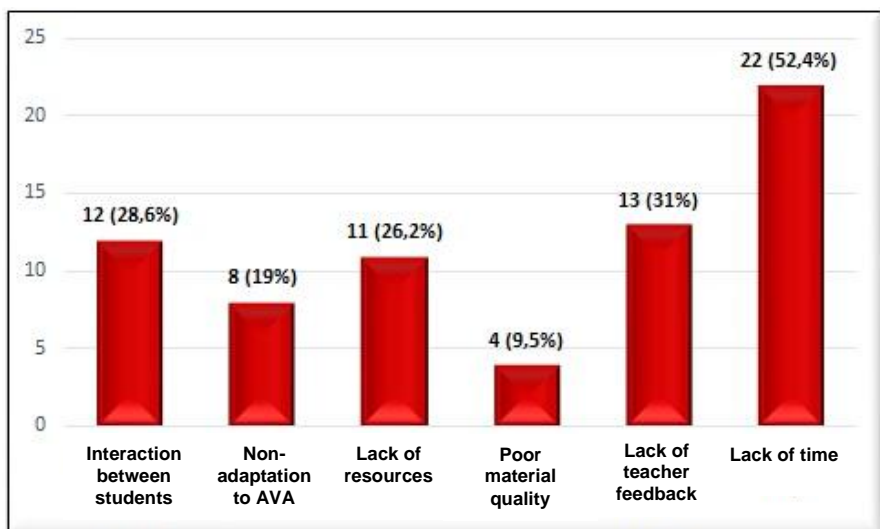
GRAPH 08 - DIFFICULTIES ENCOUNTERED IN UNDERGRADUATE DE
SOURCE: RESEARCH DATA, JULY 2017

Regarding the causes that led them to drop out of their courses 64.3% answered Personal reasons, 45.2% lack of time and walking difficulties with 28.6% were the main reasons for dropping out of the course. For Netto, Guidotti and Santos (2012) several may be these personal motivations such as financial issues or lack of time.
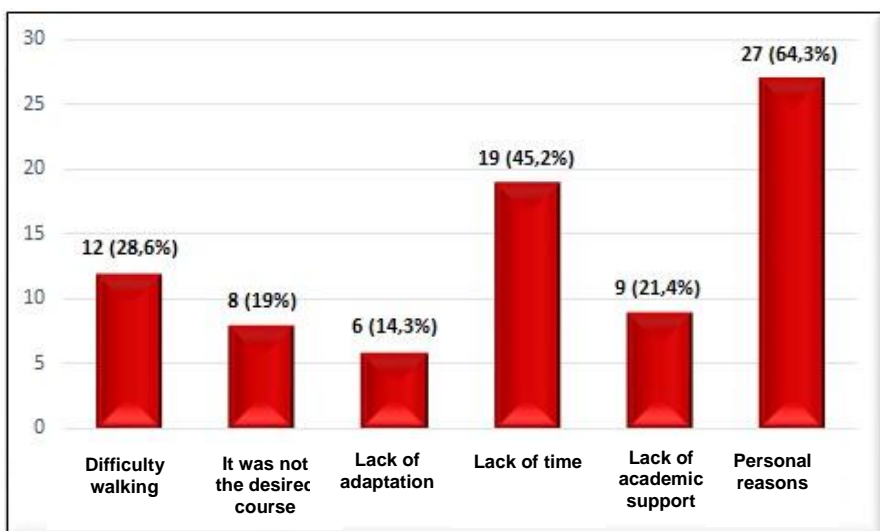
GRAPH 09 –THE CAUSES OF GRADUATION DROPOUT (DE)
SOURCE: RESEARCH DATA, JULY, 2017

To finalize the research, the students asked if they would go back to a degree in distance education, and among the respondents, 95.2% said yes. According to the answers obtained by the questionnaires, it be observed that the distance learning modality is a very valuable alternative for those people who wish to return to academic life and do not have free time to attend a classroom daily. With the flexibility of the distance learning modality, the opportunity to study undergraduate courses has become a closer reality, but the EaD still needs adjustments in its development so that it can keep students enrolled and willing to complete the courses they have entered. Increased interactivity between teachers, tutors, coordination and students, as well as routine assessments of students' yearnings and expectations regarding courses is a possibility for Distance Education to gain strength.

PROPOSAL FOR MINIMIZATION OF EVASION IN DEAD COURSES
For the prevention of dropout in UFRN distance learning - Polo Currais Novos/RN would be first to make a self-assessment of the students with this, analyze the main difficulties encountered by them during the

semester performing questionnaires with open questions with the coordination of the Polo, at the end of each semester.

Complementary group activities would also be to integrate the class virtually for students to adapt to and interact with the virtual environment, creating group activities such as discussion of a text or video within the context of the course or Virtual Environment, between teachers and tutors, at the end of each week.

Another action is virtual study groups, for better assimilation and use of the contents of the discipline, thus creating groups in social networks where students discuss the contents of the discipline among themselves. Developed in the virtual environment / social networks with students in each subject on a monthly basis.

Take a virtual environment course to familiarize students with the virtual environment that will accompany them throughout the course. Demonstrate step-by-step each area of the virtual environment, including practical activities for better use by users, carried out at the EaD pole, with support from the pole coordination and tutors, at the beginning of the first semester of each course.

CONCLUSION

The analysis of the evaluations made by the students of the undergraduate distance courses indicate a high level of satisfaction in general and, particularly, regarding the available technological environment (MOODLE and SIGAA).

Therefore, it observed that the level of satisfaction of the undergraduate students surveyed, in the distance learning modality of the Federal University of Rio Grande do Norte (UFRN), more precisely the Currais Novos/RN. Are important for the improvement of variables presented in the research, since the information about the technological system present in the academic environment helps in the learning and improvement of the system, contributing, therefore, to an academic formation in harmony with the current panorama and the technological advances employed, in favor of an increasingly excellent teaching.

The analysis of the responses of students evaded from undergraduate courses in the distance learning modality of UFRN at Polo Currais Novos, regarding the difficulties encountered by them when attending an undergraduate degree in distance education, indicate that there is still a long way to go to study circumvention is considerably reduced.

According to the results obtained, it be verified that distance education is an attractive and possible modality. With a little more maturity and more focused work understanding the needs of distance learning students, dropout will be a less and less barrier in the future of this teaching modality.

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