THE ISSUE OF PERMANENCE AT AN ONLINE CLASS: an analysis based upon Moodle platform´s accesses

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ABSTRACT

The offer of online disciplines is an option for Brazilian higher education institutes granted by MEC in 2001, which stipulates simple conditions such as the need of curricular change communication and a previous public announcement. This change has been affecting both students and teachers whose formation and experience have taken place inside school walls in a face-to-face instruction. New relationships and new tools, and also a new learning autonomous learner centered model are online education characteristics newly introduced in the superior education universe where evasion is still a great burden. This study approaches the topic of permanence with a quantitative analysis based upon Moodle platform registers during an online discipline in 2014 and the 47 approved and the 20 unsuccessful students' profiles. It resulted in an evaluation that barriers can be much more organizational than technological and that freshmen college students with both access and experience in internet resources do miss personal contact but face successfully the typical activities in a learning management system even without prior experience in online education.

KEYWORDS: Online classes, Distance education, Higher education, Moodle

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Introduction

Brazilian colleges and universities adopted online courses as their main strategy to promote certain educational policies, following Law number 9.394 of Guidelines e Bases of Education National of 1996 (LDB). The amount of courses has increased and official statistics from the Institute National of Studies and research Anísio Teixeira (INEP) proves their success with the increase in students' enrollment. It is clear that educational policies have been successful in their purpose to expand college access to a larger portion of the population. In this expansionary scenario, it is observed the introduction of online courses originally regulated by order 2253 of 18/10/2001, replaced in its entirety by order 4059 of 10/12/2004 (MEC, 2004). It authorizes colleges and universities to replace up to 20% of their classroom classes with online ones. The percentage is freely chosen by the university. In many cases, general education classes or classes with low grades are the ones chosen for this change (SEGENREICH, 2006, p.2).

At the same time, the number of dropouts is still high and it reaches both classroom and online courses. Such evasion has been related to different circumstances, such as the feeling of not belonging to a certain group. This issue is more related to organized classes in Virtual Learning Environments (VLE) with mostly online tutoring system, reduced presential meetings, or extremely large groups.

The distance mode offers an opportunity for new learning and teaching experiences and the simple transposition of in classroom model for VLE opposes such potential.

The addition of this educational model involves self-challenges, as well as the permanence of students until the end of the course. The main purpose of this work is to observe, through the access of the Moodle platform [(1)], how a freshman group in presential courses joins, or not, an online class and if they are successful achieving the course's goals, obtaining final approval.

The following suggestions were the main ones of the study:

- The participation frequency in discussion forums;
- Students profile and relationship with the achieved success; and

- Internet access and time and resources avaiability as factors of success to complete the course.

The next chapter promotes the context of public policies and the expansion of the access to college and universities. It presents current statistics of the growing number of online courses.

2- Theoretical Framework

Online courses still causes mistrust and enthusiasm in different segments of society, including educators and opinion leaders. It appears inferior and poorer than presential courses to some people and recognized as a big progress of the traditional education to others.

Public policies have contributed not only to formalize and enhance the implementation of online courses in higher education institutions, but also to control this addition. National educational plans, “Planos Nacionais de Educação” (PNE), have provided powerful tools to the expansion policy and believe the implementation of online courses as an implicit or explicit strategy on goals related to the shaping of different education levels.

In this case, online courses' regulation in order 4.059/04 consists in the whole basis of the current legislation about the subject, still with no significant changes. Accredited colleges and universities are allowed to substitute at most 20% of classroom classes for online ones.

Over the past four years, the increase in the offer of both online and presential courses, as well as the offer of online disciplines, can be illustrated by the following table produced with data obtained from the higher education census (INEP, 2015):

Higher Education Courses	**2010**	**2011**	**2012**	**2013**	**2010-2013 Variation**
Presential	28577	29376	30718	30791	8%
With online classes	5587	6177	6724	7542	35%
Without online classes	22990	23199	23994	23249	1%
Online	930	1044	1148	1258	35%
Total	29507	30420	31866	32049	9%

Table 1: Growth of Cumulated Offer – 2010 to 2013
Source: INEP, 2015.

The figure indicates that more than 20% of the degrees already offer online courses and these numbers keep growing. The total presents positive growth of the amount of courses offered each year (9%), but this rate is still inferior to the growth of online degrees (35%) and to the growth of presential degrees offering online classes (35%). The growth rate from 2010 to 2013 of regular degrees without online classes (1%) presents possible tendency for these degrees to start offering online courses.

On the other hand, INEP does not provide any information of which or how many online classes are offered in each degree, the specific identification of registered students, or even the permanence and dropout rate. However, the considerable growth is evident; it shows how online classes are impacting college students' routine.

Detailed information about online courses in presential degrees are available in Associação Brasileira de Educação a Distância (ABED, 2014) studies. They demonstrate that in 2011, 2012 and 2013 the average rate of courses completion, specifically online courses, are around 22%. 309 colleges participated in the ABED survey in 2013, while INEP researched the total of 2391 institutions. Therefore, the data of ABED seems weak compared to the magnitude of data of INEP. Even though this survey involves fewer institutions, it shows the undesired high rate of dropouts to a category that brings up potential resources for students' new experiences and discoveries.

This research is justified in this context; developing available knowledge to know what keeps students in college, especially in online courses.

3- Methodological Procedures

A research studied the students' profile and participation of the online class "Metodologia do Estudo e da Pesquisa" (MEP) offered in VLE Moodle. This online class was held in the first half of 2014 for ungraduate students of Centro de Teologia e Humanidades of Universidade Católica de Petrópolis. The research's main goal was to fully analyze the students' characteristics with data from VLE, such as daily and weekly accesses to the offered resources, sending component tasks of units, and the access to mandatory participation forums.

Thus, it was possible to draw a complete profile of students who accept or not online courses.

Therefore, it is described as an intentional sample where elements are selected based upon the search problem criteria, the characteristics of the observed group, and of conditions and methods of observation and analysis; also as of intensity subtype, which includes observation of cases or elements easier to verify or richer in information. It evidences pre-defined characteristics. (FRAGOSO, RECUERO e AMARAL, 2011, p. 79).

3.1- Subjects, Evaluation and Data Collection Strategy

The research subjects consist of 67 students, among the 69 enrolled according to the final academic report; two disregarded because one was an accessing test student and the other was an intern of scientific initiation. The course ended up being accessed by 98 students, according to platform registers; indicating that the academic system disregarded the enrollment activity in the first semester, when a second class was created.

The elements defined for the evaluation of MEP's course were the attendance in forums at least twice a week (regular and direct participation), the compliance of mandatory activities, and the presential final exam at the end of the semester. These guidelines are used as reference in this study to obtain positive results in the course by students.

An exploratory research gathered three sources for data collection: the academic system final report; survey to determine individual profile; course assessment and self-assessment survey; and even Moodle platform on which the course was offered. This research calculated the number of views or accesses by students, data of participation (such as forums,) and the course's schedule activities.

3.2- Records Organization and Analysis Model

The records were organized in a database. A "Student" table was created based on the list of users enrolled in VLE, followed by the creation of a "Log" table with the information of views of platform resources. These first two tables were related through a student registration code. Viewing tracks where calculated by the total of accesses to the course activities realized by each

student. The limits of tracks *B*, *C*, *D,* and *E* where defined by the maximum number of 142 unique daily views[(2)] related to the duration of the class (142 days) minus 10% variation. The *A track was created for more accurate observation of those students that most exceeded* the average, considering views above half of the difference between the top views (260 views) and the upper limit of track B (128). Tracks varying between A and E in decreasing total order, plus the ordinal position of each student in his track, were used to identify students in the case study. This resource enriched the data with a prompt visualization of the access to VLE condition per student, as well as keeping their identity secret.

The database also included "Activities" table, with available resources on the platform; the "Profile" table, containing answers from the first survey; and the "Evaluation" table, an analysis of the final survey over students' impressions.

A content analysis technique was applied in the results. It is described, according to Berelson cited by Gil (2008, p. 152,) as an investigation technique that, through an objective, systematic, and quantitative description of the communication content, has the interpretation of such communications as its goal.

4- Presentation and Discussion of Results

The table 2 provides an overview of the study and the relationship between the number of access to the virtual environment symbolized by the classification range and the amount of approvals on each layer.

Range	Total of Students	Dropout Students	Enrolled Students	Approved Students	Failed Students	Approved Percentual
A	5	0	5	5	0	100%
B	14	0	14	14	0	100%
C	27	0	27	25	2	93%
D	5	1	4	2	2	50%
E	11	3	8	1	7	9%
Never	5	2	3	0	3	0%
Total	67	6	61	47	14	77%

Table 2: Access Ranges and Final Academic Status in the Course

Students who accessed VLE more often presented a high rate of approval in the class and sum up more than half of total students enrolled.

Dropouts were around 10% and layers of less access (D and E) ended up showing some approval. As for students who failed, some of them never accessed the VLE.

4.1- Approved Students, Profile and Final Impressions

The study continues with a comparative analysis of 47 students approved in their own classification frequency track, compared to the total accesses, final result, individual profile and participation in activities offered at the VLE, such as forum and tasks. Approved students were split in two groups according to the final result. The next chart illustrates the result of the first 23 students in descending grade order and crescenting of the search handle:

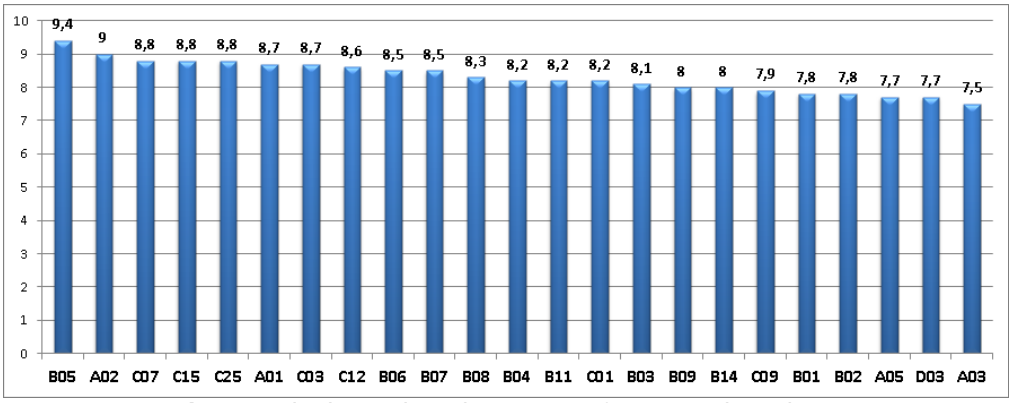

Chart 1: Final Result – First Group of Approved Students

It is noticeable that the best results in the course were not of high frequency students. For example, a representative of the C category (student identified as C25) has the third best final grade in the course. Only seven students had prior experience with online courses in this successful group; computer skill levels ranging from good to very good. Among the other 15 inexperienced students, seven indicated average computer skills and internet access at home. Correlating the most successful with their participation in homework and forums of the online course, it is possible to see that majority of them turned their work in and contributed someway in forums.

Among the remaining 24 approved students whose performance is illustrated in the chart below, only six students presented prior experience with online courses. In the group of 18 freshmen, four manifested low or very low computer skills and others varied from average to very good. Most of the approved students indicated having fast internet access.

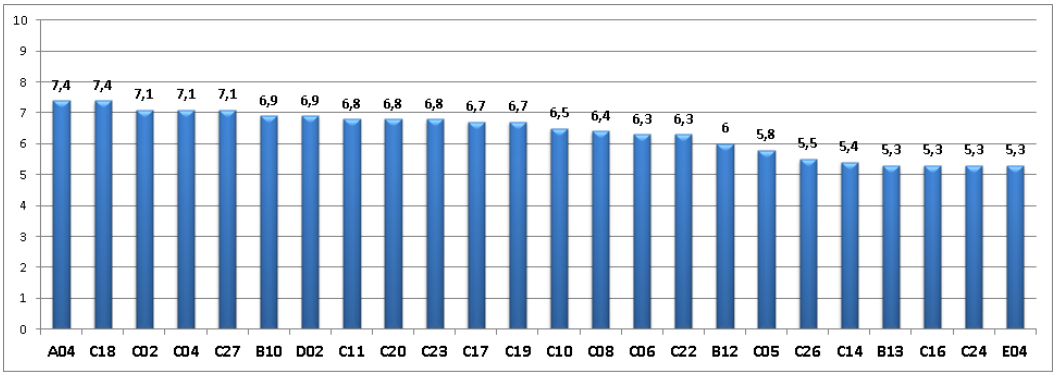

Chart 2: Final Result – Second Group of Approved Students

The evaluation of students specifically about the class they were concluding resulted in repeated answers to two negative aspects: long descriptive texts (20%) and the class itself (16%). In this case, eight of the 47 successful students mentioned that the class should be presential (in a classroom); the second most frequent student (A2) showed difficulty in adapting to the model, while the other (C3) justified that the class is very important so it should be taught in a classroom.

4.2- Answers to Questions Match

Several responses were obtained to the initial question about how participation in discussion forums occurs: from the content point of view, it was observed the inexperience of the group in cooperative participation; from a quantitative point of view, it was low both the total direct participation and the forums views by the approved group.

About students profile and their relation to the success achieved, it is possible to affirm that the fact that this course has in its majority freshmen students without experience with online courses, combined with average knowledge of computer skills and internet access, had no significant effect on their success. The access frequency was the main influence over the success achieved.

This conclusion is confirmed by the profile analysis of the group of failing students, indicating favorable conditions, such as internet access from home and free time, to conclude the online class.

Conclusions and Recommendations

The challenges in online education are multiples and involve all stakeholders in the process: teachers, students, and experts in educational technology, institutions, government, and the whole community interested in the broad knowledge access. This study allows us to demonstrate the importance of monitoring changes in access to the virtual environment. This is an important information for teachers interested in students' success in the online course and a great indicator for educational management focusing on efficiency and effectiveness of the process.

Returning to the starting point, the expansion of higher education and the adoption of entirely online degrees are found in numbers released by INEP in many organizations and formats, in syntheses, summaries, and its own micro data. Bring to knowledge, through these same numbers, the situation of online classes addition in classroom courses is a need still not accomplished on the official data.

As well as preparing students, teachers, technicians and managers for new experiences, relationships, resources, and opportunities present in the virtual learning environment, also requires political will and institutional sponsorship. The reason why main characters of online education process are experiencing, appropriating, and developing skills simultaneously to the development of online courses; and in some cases, giving up silently and entering in impersonal statistics.

(1) *Modular Object-Oriented Learning Environment*

(2) Counts only one time for the total of the disciplines views when the student returns to the same resource at the same day.

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