

A MODEL FOR MANAGEMENT OF DEGREE IN EAD: EXPERIENCE THE DEGREE IN INFORMATICS – IFES

Federal Institute of Espirito Santo (IFES) - Campus Cachoeiro of Itapemirim
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Abstract: The management of a distance learning course is a very complex and decisions can have direct impact on the outcome of the course, culminating in high dropout and repetition rates. This paper aims to present a management model for in degrees to facilitate the deployment of new courses, bringing some approaches used in the

Degree in Informatics of IFES and helped us to have good results already after the first semester

Keywords: distance education, graduate, informatics.

1. INTRODUCTION

The UAB program - Open University of Brazil - is the name given to a project created by the Ministry of Education in 2005, in which public institutions of higher education can offer higher education courses at a distance, with the aim of bringing quality public higher education to Brazilian cities that have not bid or whose courses offered are not sufficient [1].

In this model there is a degree of splitting of the form of performance of the proponent institution, ie, there is a direction on the form of performance of the courses that are developed, but there is freedom to innovative and enriching experiences both from point of view the administrative as in the pedagogical point of view.

This article aims, given the constraints presented in the UAB program, give suggestions on how to best apply the resources made available, bringing many successful experiences that occurred in the Degree in Informatics of IFES.

2. THE DISTANCE EDUCATION IN IFES

The IFES is an institution that is characterized by working from initial training of workers until the post-graduate in the face modality.

In the distance mode, the first course offered was upper of Technology, Analysis and Development Systems, as presented in [2].

We currently have undergraduate courses in: Technology Development and Analysis of Systems and Degree in Informatics [3]. We have also, via E-Tec, the technical course in informatics. In addition to 3 (three) courses Postgraduate Sensu Lato-deployment process (Informatics in Education, Vocational and Technological Education, Technical Education Integrated into the High School in mode the Youth and Adult).

3. THE COURSE OF DEGREE IN INFORMATICS OF IFES

The classes begin the Degree Course in Informatics took place on August 10, 2009. Were offered 270 vacancies, being 135 for teachers (unitholders) and 135 for the general public.

In developing the matrix of the course were taken care of legal and operational, thus seeking, a more complete and gradual training possible for our students. This course deals with the resolution CNP/CP n° 1/2002, because it has 24.56% of their disciplines the pedagogical dimension, moreover, we take into consideration the recommendations referents of the curriculum of Degree in Computing the SBC - Brazilian Computing Society, making the necessary technical skills. In addition, we distribute the disciplines in order to make our training more gradual, making the learning curve of our students is as smooth as possible.

The degree course in Informatics aims to train teachers with a vision of technology in computing, capable of acting in elementary school, high school and technical professional education of middle level, with the collaboration of professionals from diverse fields, qualified and committed to managing the teaching-learning, encouraged to research, create and invest in its training.

Besides this formation, the student of degree in informatics will be endowed with content and skills to act as instructors of courses in private companies.

4. ORGANISATION OF DISCIPLINES IN PERIODS OF COURSE

Every period of Degree in Informatics has 6 (six) disciplines, can be applied various formats for the execution of these disciplines. We go to the main:

➤ All disciplines simultaneously: this is the model currently applied in classroom courses and also used in some distance learning courses. We understand that for distance education courses that model is not the most interesting can spend as much time with our students read instructions on what will be studied.

➤ One (1) discipline at a time, all are executed sequentially: the student has a lot of content from a specific area but do not have time to ripen it, ie, the student does not have time to develop the prerequisites of

some of the content of disciplines, because the time of each discipline is too short, making the teaching-learning process quite complicated.

➤ Two (2) disciplines simultaneously: similar problem occurs when one (1) discipline at a time, all are executed sequentially, but in smaller proportions. The student needs a time of "maturity" to learn certain content, mainly in the exact sciences and so this model as the former does not meet this requirement.

➤ Disciplines alternate (usually up to two at once): each discipline individually, has its start date and end date. The criticism of this model is that the student loses the reference to the beginning and end of one stage and this can create problems of compliance deadlines.

➤ Three (3) disciplines simultaneously: this model is what we consider most appropriate, since it is the middle ground between the six disciplines simultaneous and a discipline at a time. Thus, our students have the reference of start and end of a stage (which we call the module) has a time of "maturity" which to develop the skills needed and not spend too much time to reading instruction. Moreover, this model allows us an interesting approach in the distribution of our disciplines, working in a complementary manner the different parts of the brain, thus enabling an effective learning and less tiring.

In periods of Degree in Informatics disciplines have Pedagogical, Computer and Instrumental. We seek to work with the modules of courses from different areas so that the student has no more than 2 (two) disciplines in the same area in the same module.

5. ACTORS IN THE COURSE OF DEGREE IN INFORMATICS OF IFES AND YOUR RESPONSIBILITIES

The actors participating in the Degree in Informatics of IFES is the same as those presented in [4] plus the mentoring coordinator and instructional designer of the course, furthermore, the tutor face is replaced by an even more active role in the teaching learning and tutor distance is replaced by a greater bond with the course, thus facilitating the communication process highlighted by

Freire in [5]. We will present data from a questionnaire administered to our students in December 2009 to facilitate the understanding of these roles.

Tutor distance: In the course of Degree in Informatics, tutors the distance are spread over the areas (informatics, pedagogy and mathematics), ie, informatics tutors for example, will work in all disciplines related to this area, thereby, for the student at the pole, the reference in informatics is always the same person. This strategy is based on the Waldorf [6] and was used in order to approximate the student of tutor the distance, since this is one of the main difficulties of model EAD-UAB.

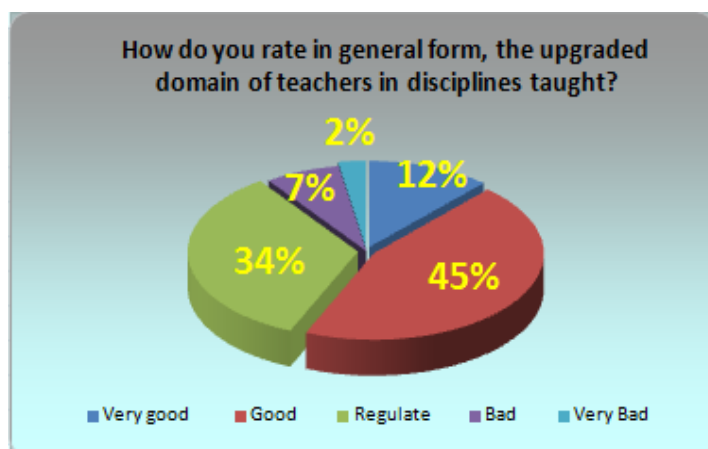


Chart (1): Refers to mentoring qualification.

For only 9% of students tutors the distance is not the domain of disciplines worked. Unfortunately it took a few exchanges of tutor, due to lack of commitment of these, however we consider that tutors are mostly, closest to the students (57%) can therefore demonstrate their technical skills. As for the other 34%, show that some tutors should work better. This is being done because by the end of March we will send the government a project for technical training of tutors (all tutors will participate), thus improving their performance. Furthermore, our coordinator of tutoring is already making an even closer monitoring of our tutors.

Tutor face: no Degree in Informatics, we have three (3) tutors in attendance: one (1) informatics tutor, one (1) tutor of education and one (1) math tutor. These complementary formations are key for tutors to face is an active agent in the clarification of doubts. We can see this actor as responsible for clarifying initial misgivings, leaving it to the tutor distance doubts mid-level

and advanced, obviously if the tutor in person know the answer to such questions, he can do it. The chart (2) illustrates the importance of this model.

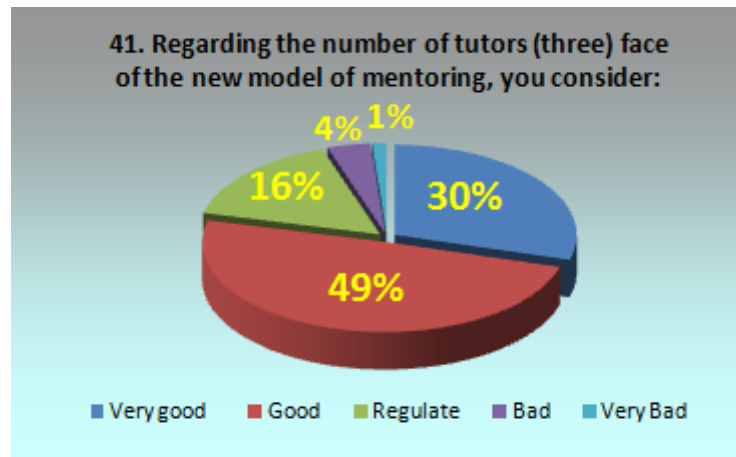
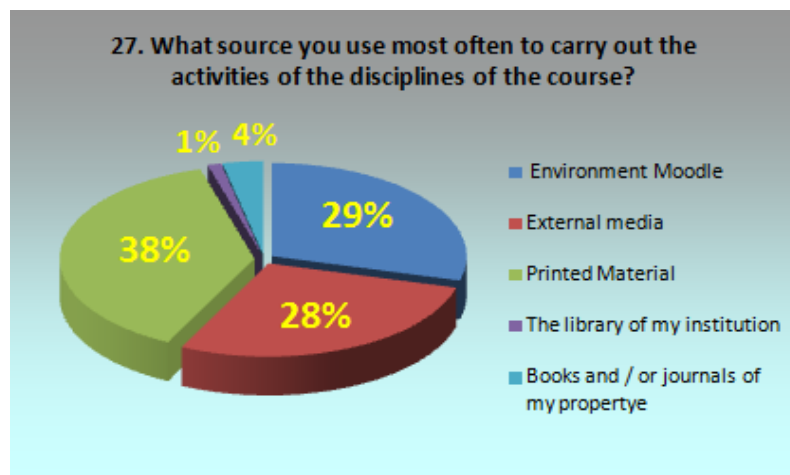


Chart (2) Refers to the adequacy of the new model of mentoring.

Instructional Designer: It has key role in the preparation of printed materials and the environment Moodle, he is responsible for guiding the teachers expert in how best to implement their activities, adapting to existing restrictions on the poles, making the course more enjoyable.



Graph (3): Refers to sources of further research used.

We see, in Chart 3 that the majority of our students (67%) have as their primary source material that has active participation of the instructional designer, thus enhancing its importance. Moreover , for 53% for our students, the printed media is more important.

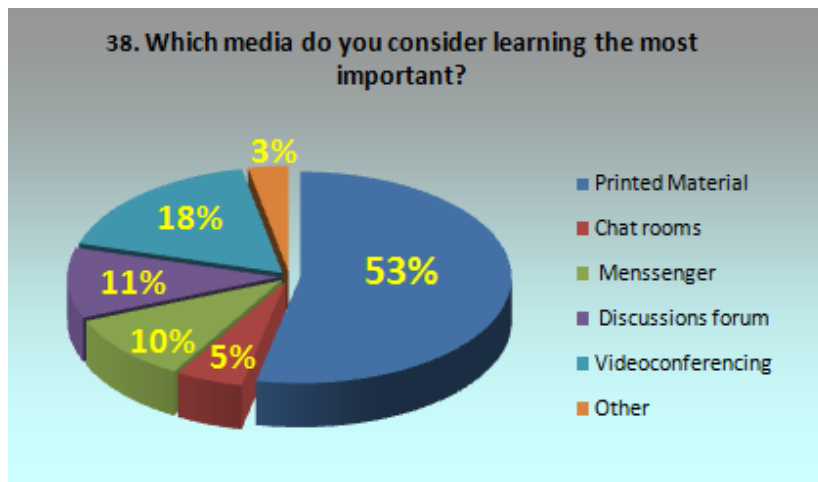


Chart (4) Refers to the media learning more valued.

Coordinator of Tutoring: It's a kind of assistant coordinator, and support the course coordinator in various activities. It is fundamental that has been tutor and is very important that it has been a teacher specialist. In the case of Degree in Informatics of IFES, both functions were already performed by our coordinator of tutoring. The mentoring coordinator should assist specialist teachers in the implementation of their disciplines and help to tutors on how best to interact with their students.

6. MANAGEMENT COURSE AND RESULTS OBTAINED

All the actors presented can interact directly with the coordination of the course, making suggestions or criticism they deem necessary. This is critical because this communications channel creates greater integration between all actors (members), thus generating a better end result.

The work of the production team of CEAD-IFES is also of great importance, since it is through her that the contents developed are presented in more enjoyable for the student. The partnership instructional designers - the production team, is the best way for a more humane and enjoyable material. The diagnostic work of the student's vision must also always be reviewed and closely monitored by the coordination of the course. The following are the results considered most important for the coordination of the course:

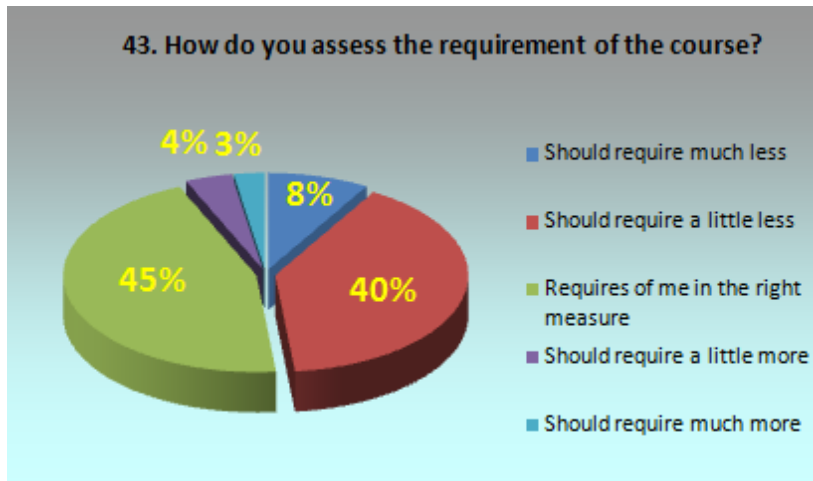


Chart (5) refers to the analysis of the student as a requirement of the course.

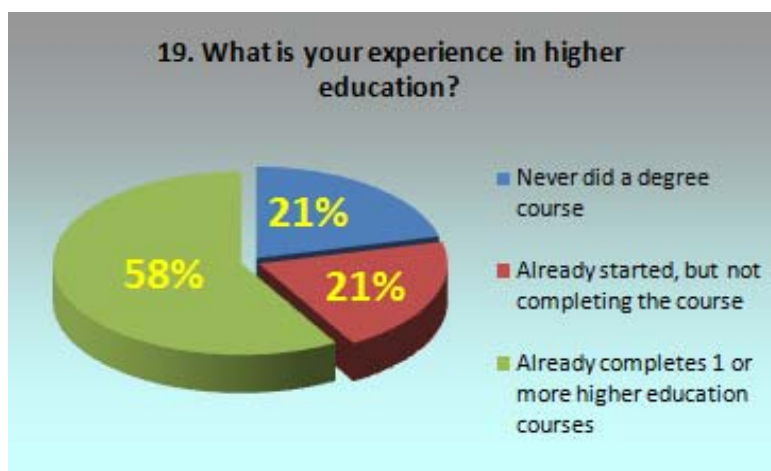


Chart (6) refers to the experience of students in higher education.

For 89% of our students the level of demand is close to ideal. That to us is very important, since many of our students (79%) already have experience of other higher education, this occurs in our course, mainly because of quotas for teachers.

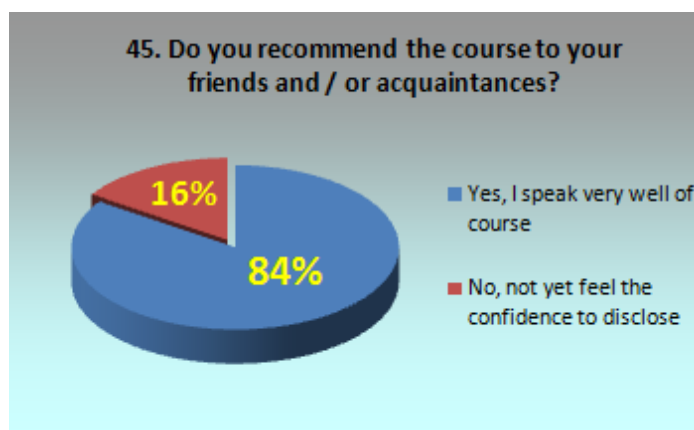


Chart (7) Refers to students' confidence in the disclosure of the course.



Chart (8) refers to student satisfaction regarding the course.

These last two charts illustrate how our students visualize the course. For 82% of our students have attended the course your expectations, moreover, 84% recommend the course to friends and / or acquaintances. These results are the fruit of the approaches presented in this work.

We know that there is still evolving and we are working to take a course even better. In our research most of our students requested more time synchronous (Web conferencing, MSN, Skype, etc.) and a greater use of videos, the discipline of algorithms eg, we have several videos with the resolution of certain issues, and Flash animations showing some concepts, thus facilitating the learning of our students.

7. CONCLUSIONS:

We are in the 2nd Period Degree in Informatics, there are still some aspects that need improvement, but we are working to seek even better results. The more intensive use of Web conferencing and extension of the preparation of the videos in the course are the two key measures that will be used this semester for the evolution of the results of the course.

References:

[1] OPEN UNIVERSITY OF BRAZIL - UAB. **What is UAB**. Available at: <http://uab.mec.gov.br/conteudo.php?co_pagina=20&tipo_pagina=1>. Accessed May 4, 2008.

[2] BALDO, Yvina et al. **The planning model for the development of distance**

education course. São Paulo: Anais CIAED, 2008.

[3] TEIXEIRA, Giovany, TOCZEK, Jonathan. "**Undergraduate in Computer Science from a distance, a strategic approach to raising the quality level of national education**", Proceedings of the V ESUD - Brazilian Congress on Higher Education, Distance, ID 38555. Gramado, Rio Grande do Sul, 2008.

[4] NOBRE, Isaura et al. **Communication and interaction among the actors responsible for managing distance education - Experience college of technology in analysis and systems development in Distance Education - CEFET.** São Paulo: Anais CIAED, 2008.

[5] FREIRE, Paulo. **Pedagogy of Autonomy: Knowledge needed for educational practice.** 31. ed. São Paulo: Paz e Terra, 1996. 148p.

[6] LANZ, Rudolf et al. **The Waldorf. Way for a more humane education.** São Paulo: Editora Antroposófica, 1998.