# Discipline Monitoring Program to Undergraduate Students: A system that to Secure the Academic Experience and a Higher Education of the Quality

Bruno Fonseca Coelho <sup>1</sup>, Elemilson Barbosa Caçandre<sup>2</sup>, Gilson Silva-Filho<sup>3</sup>, Hélio Gustavo Santos<sup>4</sup>, Cíntia Cristina Lima Teixeira<sup>5</sup>, Helimar Rabello<sup>6</sup>

<sup>1</sup>Math Graduate, University Center São Camilo, Cachoeiro de Itapemirim, Espírito Santo, Brazil

Email: brufon23@gmail.com

<sup>2</sup> Math Graduate, University Center São Camilo, Cachoeiro de Itapemirim, Espírito Santo, Brazil

Email: elemilson1010@hotmail.com

<sup>3</sup> Postgraduate program in engineering and sustainable development, UFES, Vitória, Espírito Santo, Brazil / São Camilo University Center, Cachoeiro de Itapemirim, ES, Brazil.

Email: silva.filho.gilson@gmail.com

<sup>4</sup>University Center São Camilo, Cachoeiro de Itapemirim, Espírito Santo, Brazil

Email: heliogustavo3@hotmail.com

<sup>5</sup>University Center São Camilo, Cachoeiro de Itapemirim, Espírito Santo, Brazil

Email: cintiatelima@gmail.com

<sup>6</sup>University Center São Camilo, Cachoeiro de Itapemirim, Espírito Santo, Brazil

Email: helimarbio@hotmail.com

Abstract— This article serves as a result of a research carried out on the Academic Monitoring Program that is a teaching-learning platform of the São Camilo University Center, located in the City of Cachoeiro de Itapemirim, in the State of Espirito Santo. A total of 141 monitors were contacted who presented themselves or were currently providing academic monitoring. Academic monitoring instructions, from its inception, underwent numerous transformations and adjustments, reaching up to the system we currently have, but this fact has not eliminated the need for further adjustments. research has merely gotten information on the monitors who were part of this program to know if they have this program if you think the program is at its fullest or if it makes some modifications so that all the expected esper in its idealization. Approximately 90% of the interviewees declared the monitoring program of previous years and only 10.5% declared that they were participating in the program during the semester (2018), which allows inferring a small participation over time; This is just a high end in the development of monitoring for quality, being in capacitating for monitors, inimed for the academic monitoring and incentiving the monitoring classes.

Keywords—Monitoring, University graduate, Quality education, Methodology.

# I. INTRODUCTION

The student monitoring system emerged from 1968, with the creation of Federal Universities, through Federal Law no. 5,540, which was instituted on November 28, 1968, where it established norms for the operation of higher education and also in its article 41 academic monitoring (Lins et al, 2018).

After its legal implementation in the educational field, academic monitoring expanded and took its place in several universities throughout the country, being a fundamental part of higher education courses and even

part of the political pedagogical project of each course, making it effective (DIAS, 2007).

The program allows many students to have access to this system, allowing educational indexes related to teaching and learning to undergo a major transformation and many monitors can receive incentives for teaching career.

The academic monitoring, the aim of this work, is primarily a system where, through a selection method, students from various courses are selected and that, upon their approval in this process, can, together with the

teachers of the subjects assist students in doubt. and especially deepen their contents even more (COSTA; ARAÚJO, 2014, 2015).

The academic monitoring system, among other things, has two main objectives, the first is to establish a relationship between experience and teaching, thus generating an individual more familiar with the experience in the classroom and also an improvement in the level of education offered by the Higher Education Institution (IES) (NUNES, 2007).

Even with all the dissemination of the academic monitoring system, it can be seen that it has some flaws that become evident only to the individuals who are directly linked to this system, the monitors and students. Because of this fact, this article assumes that to get the best out of the program, more information is needed on how the program is viewed by its executors, the monitors.

In so reviewing, the target audience for this article received a form containing questions about their progress and their purpose upon joining this program, in order to receive feedback on how it is viewed by its performers.

Brazil is the world's largest consumer of pesticides. This is due to the tax incentives derived from public policies to the pesticide product, applying the policy that allows tax benefits to the use, marketing, production and importation of pesticides (MELO, 2016) as public policies to encourage agricultural poisons that occur through extrafiscality, which in turn are tax rules used as a means of influencing human conduct in the purchase of such products (VEIGA; MELO, 2016). Extrafiscality is negative when incentives, tax exemptions and subsidies in the marketing of pesticides are provided (CAVALCANTE, 2014).

Thus the objective of this research is to analyze the monitoring program, as a way to enable an understanding of the way it is being performed, what are the problems that individuals consider relevant and especially their opinions about possible improvements that the program needs.

## II. MATERIALS AND METHODS

This research was elaborated and applied at the São Camilo University Center in Espirito Santo, at campus I, located in Cachoeiro de Itapemirim, Paraiso neighborhood in Espirito Santo State, Brazil. a British educational institution as diverse areas of practice among Bachelor, Degree, Engineering and Technology offering 23 distinct courses.

In summary, the research has a descriptive and exploratory characteristic, because according to Gil (2004, p. 42) "Descriptive researches are, along with

exploratory ones, the ones that social researchers are usually concerned with about practical action. They are also the most requested by organizations such as educational institutions [...]. "Due to the practical performance developed during the Academic Monitoring Program of the aforementioned University Center, the target audience consists of academics enrolled in the institution, initially directed from of the 2nd period.

The method of collection was through a questionnaire developed on the Google platform, better known as Google Forms, enabling an interview with the academics involved. Were selected for research, academics who fulfilled in 2016 and 2017 or who is currently included in the monitoring program, ie in the 1st semester of 2018.

The questionnaire was made available to the monitors online from the platform mentioned. For this, the data collection process was performed directly in the approved registration forms, made available by the academic monitoring department of the University Center, where the data were collected in the attachment folders exposed by the sector.

The number of monitors present in the records made up a total of 171 individuals approved in the years mentioned above, but about 28 of them did not have enough data to contact them and another 02 could not participate in this research, as they were members of the current research team, remaining a sample of 141 individuals able to be contacted. Of this total, only 38 monitors answered the questions in the stipulated period, so this research will work with data provided by approximately 27% of monitors who were contacted throughout the survey, where 73% chose, for unknown reasons, not to participate in this survey.

For statistical purposes, the number of monitors who volunteered to answer this questionnaire, which represents the number of 38 individuals, will be used as 100%.

The questionnaire consisted of 7 personal data confirmation questions and 9 questions about the monitoring system itself, enabling the analyzes that will be contained during this research.

The interview consists of a questionnaire characterized by direct closed questions, and also containing discursive questions, developing qualitative and quantitative results.

The data are made in a quantitative and qualitative way, because the closed questions provide statistical data to be evaluated more directly obtaining quantitative result, through the percentage analysis, while the discursive one provides a qualitative result to be worked on their individuality and on their own the social aspect.

# III. RESULTS AND DISCUSSION

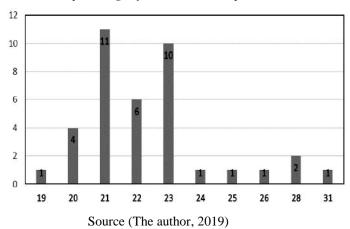
## 3.1 Research target profile analysis

The research on the Academic Monitoring System was designed to be carried out with all monitors from the years 2016, 2017 and the first semester of 2018, which were in the records of the São Camilo University Center – Espirito Santo, Brazil.

The participants who answered the questionnaire in their entirety are in the age group of 19 to 31 years, where most of them are from 21 to 23 years, about 71% of respondents, data that can be better analyzed in Graph 1.

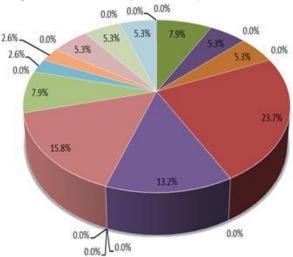
As stated in the introduction of this paper, academic monitoring is a program that allows students from various higher education courses to have an experience with the teaching area. In this research we collected data from monitors who belonged to a wide variety of courses.

Graph 1 - Age of Research Participants



In Graph 2, it can be observed that about 23.7% of respondents belonged to the Nursing course, 15.8% to the Pharmacy course and 13.2% to the Civil Engineering course. These three courses made up about 52.7% of respondents, ie more than half of the monitors in 2016, 2017 and 2018 were distributed among them.

Graph 2 - Distribution of Monitors by Course



- Administration
- Archetecture and Urbanism
- Biological Sciences
- Accounting Sciences
- Interior Design
- Law
- Physical Education
- Nursing
- Environmental Engeneering
- Civil Engeneering
- Computer Engeneering
- Production Engeneering
- Chemical Engeneering
- Pharmacy
- Physiotherapy
- Gastronomy
- History
- English
- Letters: Portuguese Language
- Mathematics
- Nutrition
- Pedagogy
- Psychology

Source (The author, 2019)

In addition to this fact we can see that other courses are represented in this chart, even with an inferred number of monitors, such as mathematics, letters, history, psychology and more.

In addition to the students' home courses, the subjects in which they conducted the academic monitoring program were collected. It can be observed that from the data collected that in relation to the monitoring subjects are very well distributed among the monitors, as there were few occurrences. double or triple monitoring in the same discipline, which was found in the disciplines of Semiology and semi-technique, with 4 monitors; Basic immunology, 3 monitors; Biochemistry and English Language: Oral and Written Expression with 2 monitors.

The other subjects covered with monitors were: Analysis of Isostatic Structures, Applied Biology, Cell Biology, Colony Brazil, Calculus III, Calculus II, Constitutional II, Advanced Accounting, Embryology, Stage I, Pharmacognosy, Physiology, Human Physiology, Fundamentals in Social Psychology Institutional, Genetics, Geriatrics and Gerontology, Clinical Hematology, Hydraulics, General History, **Basic** Mathematics in the courses of Biology and Accounting, Solid Mechanics, African World, Organic Chemistry and Dietary Technique.

About 90% of respondents said they had completed the monitoring program in previous years and only 10.5% said they were participating in the program during the semester, which makes it possible, in a cursory analysis, to say that the number of monitors has decreased considerably. When making the arithmetic average of the total sum of monitors and dividing by the 3 years that were used in the research, and considering a hypothetical reality that the inscriptions remained constant, the expected percentage would be approximately 34% each year, about 23%. below the arithmetic average in 2018.

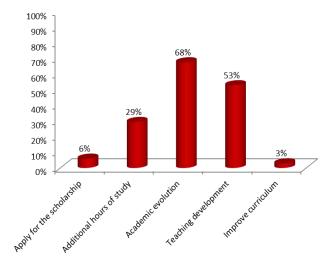
# 3.2 Expectations, relevance and possible developments

The search for entry into the academic monitoring program can be motivated by several aspects, which will be shown in Graph 3, where it aims to demonstrate the main reasons that led the students to participate in the monitoring program, which may be through the scholarship offered, academic development, recognition, complementary hours and among others. This multiple choice question enables the student to give his opinion on the alternatives he thinks fit.

Graph 3 shows the results of the students who have already completed the process. We see that 5.9% of the students wrote in the program to apply for the scholarship. However, 29.4% of the answers generated by 10 students answered that the reason was for deduction. of complementary hours. In the middle, 2.9% of the answers allowing a respondent, said that participated in the program to improve the academic curriculum.

With higher results we have the alternative of academic evolution, alternating for 67% of the answers, obtained by 23 students, according to Lins et al. (2018) being a monitor reflects an intellectual advance towards academic evolution, as it develops an exchange of knowledge between students. advisor and student monitor. In this way we make it possible for the majority of academics who were once monitors then in burqa of a development in knowledge, in the contribution made in knowledge exchange. And finally, the development option in the teaching area, thus 52% of the answers with 18 students.

Graph 3- interests in the program

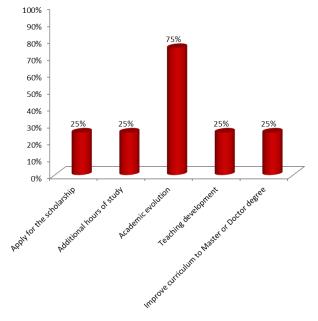


Source (The author, 2019)

Already the graph 4, has the same purpose of the graph mentioned above, but the target audience intended for monitors in process in progress in the period 2018/1.

You can see in this Chart that we get four of the five alternatives with the same 25% percentage rate referring only for one answer, they are the alternatives, apply for the scholarship, deduction of complementary hours, development in the area of teaching and lastly improvement of the curriculum. academic. And as we see the most voted again and the alternative that is attributed to academic evolution. We can buy graphs 3 and 4, and their consistent relationship between the most voted alternative among monitors is evident.

Graph 4- interest in monitoring 2018/1



Source (The author, 2019)

<u>www.ijaers.com</u> Page | 236

Already the graph below representing (Graph 5), referring to the second question of the questionnaire, reveals the importance of monitoring projects in the academic formation, emphasizing yes 100% of the answer of the 34 academics who will conclude the program said it was relevant to the formation as presented in Graphic.

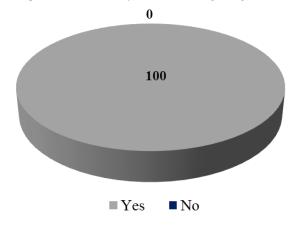
Graph 5 - Importance of the Program



Source (The author, 2019)

We can analyze that in Graph 6 presents the answers of the students who are still in the process of progress in the program and they 100% believe that the monitoring will be relevant to their formation. Therefore we can compare the result analytically, because who is with the process in progress realizes that the program will be important for its formation, and as a validation validating the result of Graph 5 that are monitors who have already completed the process and said it was well relevant.

Graph 6 - Relevance of the Monitoring Program



Source (The author, 2019)

Finally, one of the questions with emphasis on the expectations and relevance of the monitoring process, dialogues on the way the program has aroused or is arousing interest in the area of teaching. It develops methodological practices that it attributes to teacher development. The role of the monitor in the teaching and

learning process enables the student skills and competences to arouse the incentive to teaching, says Oliveira and Maziero (2013).

Thus, we can evidence that the monitoring process at the University Center arouses a look at teaching, because due to the results obtained we get as a response that 79.4% corresponding to 27 interviewed, will state that during the performance aroused interest in the teaching career and About 20.6% corresponding to 7 students stated the opposite, which did not arouse interest. According to Nunes (2007), this lack of interest can be triggered by the devaluation of the monitor within the educational institution, leaving the student restricted to the teaching functions and the teaching-learning process.

As a comparison we see that the ongoing process monitors that 75% being 3 students are developing an interest for teaching and only 1 respondent constituting 25% is not developing any interest in teaching.

It can be pointed out that the development and exceptional practices of the project are being very favorable for a good performance due to the questions and answers obtained above. According to Oliveira and Maziero (2007, p.1823.) "[...] the monitoring substantially favors teaching, so as to positively assist in the teaching and learning process, which denotes an activity rooted in the precepts of extension activity [...] ". Such action for the relevance of the project attributes to the development of practices influenced by the monitoring project.

# 3.3 Influences generated by the academic monitoring program

In addition to all development achieved from the program itself, attention should be paid to the evolution that the program should lead to the individuals who are inserted in it, the monitors themselves and also the students who make use of it.

According to researchers Haag et al. [...] Monitoring is a space where students can work at their own pace, as the number of hours available is not limited. In addition, monitoring tends to provide reception by monitors [...]. In this way, students experience an environment that provides freedom to question and perform practical activities. (2008, p.217)

Thus, the counselor acts autonomously in his process, thus enabling him to develop aspects in academic development during monitoring, obtaining an improvement in their social development.

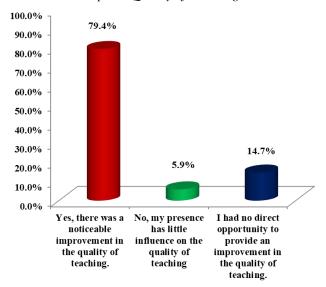
A possible aspect to identify the influence of monitoring is whether the respondents consider that their participation enabled an improvement in the quality of education offered. Most respondents answered positively,

<u>www.ijaers.com</u> Page | 237

with 79.4% who have already completed the process answered "yes, there was a noticeable improvement in the quality of teaching", 14.7% realized that "my presence had little influence on the quality of teaching". And the 5.9% minority "had no direct opportunity to provide an improvement in teaching quality." We can better visualize this data exposed in Graph 7 below.

There was also the same interview related question above for students in progress with the monitoring, the answer was very satisfactory because 100% of the answers obtained answered that they noticed a noticeable improvement in the quality of teaching.

Graph 7 - Quality of Teaching



Source (The author, 2019)

Throughout this research we sought information about the academic evolution of the monitors who participated in the monitoring program, if they had produced anything scientific, such as expanded abstracts, articles, research or similar, since the implementation of research and extensions as part of the academic formation are of extreme necessity for the undergraduate student (MARTINS, 2007, p. 33).

As results were collected that 5.26% of respondents developed some line of research that totaled 2 people out of a total of 38 respondents, which shows that, currently, the program has no major influence on the scientific field, being partially unable generate the desire in the monitors to conduct research in the areas in which they are inserted.

# 3.4 Academic developments and monitoring program analysis

The academic monitoring program, like any other program, has undergone numerous changes and refinements since its inception, its changes from its methodology even to the monitors who develop this program. According to Santos and Lins (2007, p. 67),

The whole evolution of the program demonstrates that this was not always so: from a simple collaborator, the monitor became an active participant in the teachinglearning process, in which it plays a catalytic educational function in the dissemination of knowledge.

The central point of the monitoring program, as stated by Santos and Lins (2007) is the monitor, which performs the tasks and builds the knowledge of students outside the classroom, where they would not have a support, since the presence of a teacher out of the classroom and somehow unfeasible.

So nothing more plausible than analyzing how the monitor views this program and thinks it should undergo some modifications and improvements. For the undergraduate student to develop and improve their practice, there is an extreme need for guidance in the educational field (MARTINS, 2007), allowing for a better resourcefulness in the role to be performed.

Regarding the teacher guiding the course, throughout the survey, it was found that about 82.4% of respondents said that their teacher provided assistance, and remained asked to help throughout the monitoring program, but 17.6% said the reverse, who did not receive accessory from their teacher, which did not generate a good experience with that program.

Regarding overall satisfaction about the program, 100% said they would re-enroll in the Academic Monitoring Program selection process and 97.1% would recommend a program to a friend.

When asked if the program should undergo any modification or enhancement, 32.5% consider that the program does not need to undergo improvements, in contrast, 67.5% consider that the program should undergo improvements such as:

- Greater incentive for student participation in monitoring;
  - Easier to book rooms;
- Greater availability of scholarships as an incentive, in addition to other benefits;
- Availability of new materials in the lab for students to practice, or even make available to students all materials to perform nursing practices;
- Better organization in the disclosure of vacancies and also in meeting deadlines for results;
- Prohibition of monitoring on the eve of evaluation, as it ends up overloading the monitor, making quality care impossible;
  - A training for the monitors;

<u>www.ijaers.com</u> Page | 238

- Increased teacher involvement with the monitor and greater concern for the teacher to expose information to the monitor.
- Greater dissemination of monitoring, because many students do not participate, not taking the tests because there is no necessary disclosure of the selection process.
- Enable online reporting without protocol at the office.
- Better clarification on the issue of earning additional hours even when there was no demand for monitoring by students.

Among these points listed above, there were some points with higher incidence, making it clear that there is a great need for offering a quality monitoring program.

The first and most mentioned was related to possible training before starting the activities of the monitoring program, because according to reports, it is very difficult for a student in the middle of his graduation to be able to teach a class with the necessary efficiency, according to Silva e Oliveira (2014), continuing education is extremely important, because it is a time where knowledge is expanded, leads to reflection, problem solving, learns and teaches, skills that when linked to the monitoring program can further improve your results.

After the training, it was found that better dissemination of the screening process of monitors and greater dialogue about the monitoring program is necessary, so that there are more monitors and students themselves may be more willing to participate in monitoring classes.

### IV. CONCUSIONS

From this study, it can be evidenced that the importance of the Monitoring Program at the São Camilo University Center allowed the students included in the program a greater teaching practice, obtaining positive as well as negative responses, generally evaluating the majority of respondents, Regardless of who has already concluded how many were still in the process, most showed satisfaction in the process, as well as the expectations as to the relevance to their formation.

From the data collected throughout this research we can consider that the program has some deficiencies in its particularities, which constitute primarily the availability of information about the program, as well as the incentive for it; the lack of proper guidance to future monitors regarding the program structure and also obtaining as an emergency need the training of monitors before performing the function. Training in the areas of classroom conflicts, pedagogical didactic aspects to be

experienced by the monitors, the principles of human rights and environmental education in a transversal way.

Finally, it can be seen that the research was stable, but with a smaller than expected sample by the existing population, making up the amount of 27% of the total found. So, even with this quantitative it was possible to establish all the parameters contained throughout this research.

### REFERENCES

- [1] COSTA, Jefferson Silva; BALTAR, ARAÚJO, Solma Lúcia Souto Maior de. A importância E Concepção Da Monitoria De Estágio Supervisionado Para Alunos Do Curso De Licenciatura Em Biologia. Revista Iniciação & Formação Docente, Formação Docente: Múltiplos olhares, v. 1, n. 2, novembro/2014 – Julho/2015. Available in:<a href="http://seer.uftm.edu.br/revistaeletronica/index.php/revistagedeles/article/view/811">http://seer.uftm.edu.br/revistaeletronica/index.php/revistagedeles/article/view/811</a>. Acess on 23 jul. 2018.
- [2] DIAS, Ana Maria Lorio. A Monitoria Como Elemento De Iniciação À Docência: Idéias Para Uma Reflexão. In: SANTOS, Mirza Medeiros dos; LINS, Nostradamus de Medeiros. A monitoria como espaço de iniciação à docência: possibilidades e trajetórias. Natal: EDUFRN, 2007. 37 – 44.
- [3] GIL, Antônio Carlos. Como elaborar projetos de pesquisa.4. ed. São Paulo: Atlas, 2002. 171 f.
- [4] HAAG, Guadalupe Scarparo et al. Contribuições da monitoria no processo ensino-aprendizagem em enfermagem. Revista Brasileira de Enfermagem, [s.l.], v. 61, n. 2, p.215-220, abr. 2008. FapUNIFESP (SciELO). http://dx.doi.org/10.1590/s0034-71672008000200011.
- [5] LINS, Leandro Fragoso et al. A Importância Da Monitoria Na Formação Acadêmica Do Monitor. 2018. Disponível em: <a href="http://www.eventosufrpe.com.br/jepex2009/cd/resumos/R0147-1.pdf">http://www.eventosufrpe.com.br/jepex2009/cd/resumos/R0147-1.pdf</a>>. Acesso em 23 jul. 2018.
- [6] MARTINS, Iguatemy Maria de Lucena. Graduação: desafios da formação acadêmica. In: SANTOS, Mirza Medeiros dos; LINS, Nostradamus de Medeiros. A monitoria como espaço de iniciação à docência: possibilidades e trajetórias. Natal: EDUFRN, 2007. 27 – 35.
- [7] NUNES, João Batista Carvalho. Monitoria Acadêmica: Espaço De Formação. In: SANTOS, Mirza Medeiros dos; LINS, Nostradamus de Medeiros. A monitoria como espaço de iniciação à docência: possibilidades e trajetórias. Natal: EDUFRN, 2007. 45 – 46.
- [8] OLIVEIRA, Suellen Rodrigues de; MAZIERO, Andressa Merlin. Vivenciando a docência: participação ativa do monitor nas aulas teóricas. Revista Eletrônica Gestão & Saúde, [s.l.], v. 1, n. 1, p.1817-1824, 5 mar. 2013. Revista Gestão e Saúde/NESPROM. http://dx.doi.org/10.18673/gs.v1i1.22979.
- [9] SANTOS, Mirza Medeiros dos; LINS, Nostradamos de Medeiros. A Monitoria na Universidade Federal do Rio Grande do Norte: Um Resgate Histórico. In: SANTOS,

Mirza Medeiros dos; LINS, Nostradamus de Medeiros. A monitoria como espaço de iniciação à docência: possibilidades e trajetórias. Natal: EDUFRN, 2007. 59 – 69.

[10] SILVA, Ana Maria; OLIVEIRA, Marta Regina Furlan de. A relevância da formação continuada do (a) professor (a) de Educação infantil para uma prática reflexiva. 2014. Disponível em < encurtador.com.br/kyEPW. Acess on 25 jul. 2018.