

The Contribution of Monitoring for Academic Education

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Abstract. Monitoring in universities and university centers aims to initiate students in teaching and contribute to the improvement of undergraduate education through the articulation of theoretical and practical content, thus favoring the production of knowledge under the guidance of the teacher responsible for a specific curricular component. Monitoring allows students to develop skills associated with teaching and deepening their knowledge; however, there are elements that can hinder this practice, such as the conciliation of monitoring activities with regular academic activities. The objective of this study is to analyze the contribution of monitoring to learning and academic training in the Dentistry Course at UFBA. The sample of this research was composed of 34 students of both sexes, all in the condition of student-monitors of the Faculty of Dentistry at the Federal University of Bahia (UFBA), city of Salvador, Bahia, Brazil. A quantitative questionnaire was applied to students in order to analyze various aspects on the monitoring practice. Students interviewed believed that monitoring is relevant for academic training and that this activity brings greater learning during its performance. Of all respondents, 94% believe that monitoring is relevant in initiating students in higher education teaching. Most interviewees reported that they have good relationship with the Advisor Teacher and with monitored students. Monitoring gives the student the opportunity to develop skills and competences associated with teaching, provides personal and professional growth and qualifies the curriculum of those who participate in this process.

Keywords: Academic performance, teaching, higher education.

INTRODUCTION

Higher Education requires long and difficult training, since it is related to scientific and professional practice, with

elements that can greatly facilitate such development, as is the case of the teacher-student relationship, since the

teacher presents students information from the professional life, thus contributing to their learning and training (Santos and Lins, 2007)

Monitoring was implemented in Higher Education Institutions in order to initiate students in teaching activities, thus contributing to the improvement of Undergraduate Education (Matoso, 2014). Therefore, the student-monitor must be one who shows interest in developing activities in a specific curricular component or area of knowledge and, thus, having the possibility of directing his / her professional life since then (Matoso, 2014).

The Monitoring Program was initiated in Brazilian universities with the application of Law 5.540, of November 28, 1968, whose Article 41 stipulated that universities should create the functions of monitor for students of undergraduate courses who must be submitted to specific tests (Official Diary of the Union, 1968).

In the 2000s, the Monitoring Program was reformulated with the objective of improving the quality of teaching at universities (Santos and Lins, 2007). With the articulation between teachers and academic centers, the new monitoring approach focused on interdisciplinarity (Santos and Lins, 2007). With this reformulation, the Program started to have the characteristics of stimulating the training of higher education students, providing a pedagogical dimension of collective work, encouraging the development of innovative experiences and favoring the exchange of experiences in the elaboration and execution of pedagogical planning with advisors (Santos and Lins, 2007).

Monitoring represents an opportunity for student training, since the student is daily trained in a specific area with the teacher, thus obtaining a more in-depth knowledge and also contributing to a better level of higher education (Santos and Lins, 2007; Frison, 2016). There is also the learning of the Advisor Teacher himself, who leaves the culture of individualism characterized by the isolated teacher in his classroom (Santos and Lins, 2007). Advising the student-monitor becomes a stimulus for sharing ideas, doubts and suggestions from both parties to be discussed¹. The monitor in the position of apprentice in partnership with his / her advisor can contribute to the improvement of teaching, since the teacher develops a point of view from the same perspective of the monitored student, considering that the teacher has already been in that position as a student during his / her regular undergraduate training (Santos and Lins, 2007; Frison, 2016).

During academic monitoring, there is a relationship of exchange of knowledge between teacher and student-monitor, in which the student experiences the teacher's activities and has direct contact with teaching, pedagogically contributing to the learning of monitored students (Lins *et al.* (2009). In the presence of large classes, the teacher is unable to provide the same

assistance to all students individually. In such cases, student-monitors help the teacher to enhance the learning of monitored students, and this monitoring applicability is especially highlighted in the articulation between theory, practice and curricular integration (Frison, 2016).

Monitoring contributes to the growth of students at the university, developing their pedagogical capacity, providing them with greater resourcefulness for presenting scientific papers (Vicenzi *et al.*, 2016). As in the monitoring process, students choose a curricular component of their preference, awakening their interest to areas of greater vocation and assisting them in choosing an area of activity within the undergraduate course (Vicenzi *et al.*, 2016).

During monitoring activities, there are times when the Advisor Teacher requests the interference of the student-monitor in the teaching process, which brings need for updating and deepening scientific knowledge, improving learning in a true teaching experience (Vicenzi *et al.*, 2016). But for this to occur, it is also necessary to stimulate the Advisor so that the student-monitor participates in the planning of classes, leading to a deeper understanding of the subject, thus improving the teaching-learning process (Assis *et al.*, 2006).

The student in the role of monitor finds situations that prepare him / her for practice such as interdisciplinary work, group work, problem solving, which leads to personal development, learning attitudes and assimilation of postures in the academic environment, in addition to expansion of the possibility of insertion in professional experiences (Santos and Batista, 2015).

Although academic monitoring has its relevance regarding the initiation to the teaching activity, this program has some elements that can hinder its performance such as combining regular academic training with monitoring activities, in addition to undervaluation of some higher education institutions about monitoring programs (Santos and Lins, 2007).

Monitoring favors the integration between theory and practice, creating a fertile space for discussion and review of contents, techniques and procedures, in conjunction with the Undergraduate Teaching process, enabling the construction of knowledge between teachers and students, and making both feel responsible for the teaching-learning process (De Andrade *et al.*, 2018).

This study aims to analyze the contribution of monitoring to learning and academic training, in addition to determining the level of influence that such practice has on the choice of the student's field of action in his / her professional life.

MATERIALS AND METHODS

The sample of this research was composed of 34 students of the Undergraduate Dentistry Course of the

1. Do you believe that monitoring is relevant to your academic background?

a) Yes
b) No

2. Do you think the student-monitor has higher learning during monitoring?

a) Yes
b) No

3. On a scale from 0 to 5: 0 = very poor, 1 = poor, 2 = regular, 3 = medium, 4 = good and 5 = very good, how do you rate the student-monitor's learning during monitoring?

1 2 3 4 5

4. Do you believe that monitoring is successful in your exercise of initiating students in higher education?

a) Yes
b) No

5. On a scale from 0 to 5 with 0 = very poor 1 = poor, 2 = regular, 3 = medium, 4 = good and, 5 = very good, how do you rate the relationship between the student-monitor and the teacher?

1 2 3 4 5

6. On a scale from 0 to 5 with 0 = very poor 1 = poor, 2 = regular, 3 = medium, 4 = good and, 5 = very good, how do you rate the relationship between the student-monitor and monitored students?

1 2 3 4 5

7. Do you think monitored students learn better if they are helped with the presence of the monitor?

a) Yes
b) No

8. Do you believe that monitoring influences the choice in the area of professional interest?

a) Yes
b) No

9. Do you think that the student-monitor has its importance recognized and valued by the higher education institution?

a) Yes
b) No

10. On a scale from 0 to 5 with 0 = very poor 1 = poor, 2 = regular, 3 = medium, 4 = good and, 5 = very good, how do you rate the conciliation of monitoring activities with your regular academic training?

1 2 3 4 5

Figure 1. Questionnaire applied to monitors

Faculty of Dentistry - Federal University of Bahia (UFBA), city of Salvador, Bahia, Brazil.

The inclusion criterion of students was the condition of having already carried out or currently carrying out monitoring activities in curricular components of the dentistry course, regardless of course semester. The research was approved by the Human Research Ethics

Committee of the Institute of Health Sciences - Federal University of Bahia on July 4, 2018, under No. 2.753.706. Only student who accepted to be part of the study were included, having signed the Free and Informed Consent Form.

The applied work instrument was a questionnaire (Figure 1) containing 10 multiple-choice objective questions

that addressed the relevance of monitoring for their learning and academic training and the interaction between teacher and student, the positive and negative points in the monitoring process and the level of influence it has on the choice of the area of activity in his / her professional life.

FIGURE 1 - Questionnaire applied to monitors

Answer the questions about academic monitoring listed below that deal with the relevance of monitoring activities for academic training, learning, teaching encouragement, relationship of the student-monitor with the teacher and monitored students, choosing the area of professional interest, valuation of the monitor by the higher education institution and the conciliation of monitoring activities with regular academic training.

Questionnaires were applied by a single duly calibrated researcher to monitors who attended the UFBA Undergraduate Dentistry Course in 2019. The application was carried out in classrooms and in the university's living spaces.

RESULTS AND DISCUSSION

Data obtained in this study were entered and stored in a Microsoft Excel version 2010 spreadsheet, and grouped in Table 1, followed by information analysis.

It was found that there was 100% agreement on the part of respondents with regard to the relevance to academic training, which increases the learning level and consequent knowledge absorbed by students. Regarding the quality of teaching observed during the monitoring process using scale from 1 to 5 (1 = very poor, 2 = poor, 3 = regular, 4 = good and 5 = very good), 68% reported good learning.

Of the 34 students interviewed, only two did not agree that the monitoring activity was able to result in successful initiation to higher education teaching; 91% of monitors reported that this experience facilitates the choice of the area of professional interest, while 59% of students reported that they had very good relationship with their advisors or supervised students. It is noteworthy that 1/3 of the students reported they did not feel the real recognition for their work by the higher education institution to which they are linked. According to data, all respondents believed that their presence in classroom increases students' learning by being facilitators during class activities.

Regarding the conciliation of monitoring activities with regular academic training activities based on the numerical rating scale - 1 = very poor, 2 = poor, 3 = regular, 4 = good and 5 = very good, 6% declared it to be poor, 21% regular, 41% rated good and 32% rated very good.

TABLE 1 - Students' responses to the monitoring questionnaire

All interviewees revealed that monitoring is relevant to their academic training, obtaining greater learning during the process and adding value to their professional life. This finding corroborates results by Vicenzi *et al.* (2016), who observed that monitoring is a great tool in the teaching-learning process whose importance is perceived in different ways in addition to the growth of students, as well as in the contribution to monitored students and the exchange of knowledge in the academic environment. This understanding was further reinforced by all respondents who reported that monitoring plays the role of improving learning during the undergraduate course.

By having individualized relationship with the student-monitor, the teacher can directly pass on his / her experience with the planning and conduction of the course, thus stimulating the student's interest in teaching, providing the opportunity to deepen knowledge and narrow relationships in teaching activities (Borsatto *et al.*, 2006). This result was verified during data collection, since 94% of interviewed individuals believed that monitoring is relevant in initiating students in higher education teaching.

Therefore, it is possible to observe that monitoring brings the student closer to teaching, which was confirmed by data obtained from the study sample, in which the majority of participants reported that this tool has fulfilled the objective of starting teaching yet during undergraduate studies. Initial training for teaching is the moment when the student is prepared to acquire the necessary skills and knowledge and better understands the profession that he / she will practice or already exercises as a layman. Monitoring plays this role of training professionals interested in performing quality higher education (Dantas, 2014).

Interviewees reported that they had a "good" and "very good" relationship with the Advisor Teacher, respectively, (35% and 59%) and with monitored students (26% and 59%), whose data become more relevant from the moment when this friendly relationship allows for greater academic development, considering that the advisor is a key-element in the teaching-learning process, which allows us inferring that learning would not flow with the same success without the Advisor Teacher's participation (De Andrade *et al.*, 2018). For an exchange of knowledge and greater learning to occur, the undergraduate teaching environment must present good relationship among components of the team involved, which can be confirmed based on data obtained.

In a way, it could be said that the Monitoring Program fulfills its role since it is recognized by teachers and students as a facilitating instrument for Higher Education for both the monitor being supervised by the teacher and for the monitored student, which was confirmed by the totality of interviewees who had the feeling of being

Table 1. Students' responses to the monitoring questionnaire

Respondent	Question 1	Question 2	Question 3	Question 4	Question 5	Question 6	Question 7	Question 8	Question 9	Question 10
1	Yes	Yes	4	Yes	5	5	Yes	Yes	Yes	4
2	Yes	Yes	5	Yes	5	5	Yes	Yes	No	5
3	Yes	Yes	5	Yes	5	5	Yes	Yes	Yes	5
4	Yes	Yes	5	Yes	5	4	Yes	Yes	No	5
5	Yes	Yes	4	Yes	5	4	Yes	Yes	No	3
6	Yes	Yes	4	Yes	4	5	Yes	Yes	Yes	2
7	Yes	Yes	5	Yes	4	5	Yes	Yes	Yes	4
8	Yes	Yes	4	Yes	5	3	Yes	Yes	No	3
9	Yes	Yes	5	Yes	5	5	Yes	Yes	Yes	4
10	Yes	Yes	5	Yes	4	5	Yes	No	No	3
11	Yes	Yes	4	Yes	5	4	Yes	Yes	Yes	3
12	Yes	Yes	5	Yes	5	4	Yes	Yes	Yes	5
13	Yes	Yes	5	Yes	5	5	Yes	Yes	No	4
14	Yes	Yes	4	Yes	5	3	Yes	Yes	Yes	4
15	Yes	Yes	5	Yes	4	5	Yes	Yes	Yes	5
16	Yes	Yes	3	Yes	4	4	Yes	Yes	No	2
17	Yes	Yes	5	Yes	3	3	Yes	No	Yes	5
18	Yes	Yes	4	No	3	3	Yes	Yes	No	3
19	Yes	Yes	3	Yes	4	5	Yes	No	Yes	3
20	Yes	Yes	4	Yes	5	5	Yes	Yes	No	4
21	Yes	Yes	5	Yes	4	5	Yes	Yes	Yes	4
22	Yes	Yes	5	Yes	4	4	Yes	Yes	Yes	4
23	Yes	Yes	5	Yes	5	5	Yes	Yes	Yes	4
24	Yes	Yes	5	Yes	4	4	Yes	Yes	No	3
25	Yes	Yes	5	Yes	5	5	Yes	Yes	Yes	4
26	Yes	Yes	5	Yes	5	5	Yes	Yes	Yes	5
27	Yes	Yes	5	Yes	5	5	Yes	Yes	Yes	5
28	Yes	Yes	5	Yes	5	5	Yes	Yes	Yes	5
29	Yes	Yes	5	Yes	5	5	Yes	Yes	Yes	5
30	Yes	Yes	5	Yes	5	5	Yes	Yes	Yes	5
31	Yes	Yes	5	Yes	4	3	Yes	Yes	Yes	4
32	Yes	Yes	5	Yes	4	4	Yes	Yes	Yes	4
33	Yes	Yes	5	Yes	4	4	Yes	Yes	No	4
34	Yes	Yes	4	No	5	5	Yes	Yes	No	4

Source: Research data.

greatly contributing to the learning process (De Andrade *et al.*, 2018). However, monitors should not replace teachers, since being apprentices, as they have not yet acquired the knowledge, skills and experience of a teacher required by higher education (Dantas, 2014). However the positive results of the presence of the

monitor in the teaching-learning process emphasize the importance of monitoring in academic training procedures.

Regarding the conciliation of monitoring activities with regular curricular components of participants in the undergraduate course, 21% reported being able to

achieve it. The conciliation of monitoring activities can be more complex in full-time courses in which the student has greater difficulty in fulfilling the program load and accompanying advisors in all the days and times established for the discipline to be administered (Assis *et al.*, 2006). It is noteworthy that in all situations, the student should not impair his / her regular academic activities due to the work as a monitor, which rather should add quality to the students' academic life, providing situations that prepare them for professional training, such as case discussions and teamwork. The difficulties found must be assimilated as a way to prepare them for future professional practice.

CONCLUSION

The present findings suggest the relevance of monitoring activities in the academic education of students who live this experience, in the opportunity to develop skills and competences associated with teaching, in the possibility of deepening knowledge of the specific area chosen by the student as an aggregating experience for the professional future, in higher quality of the learning of monitored students, since they are individually assisted in classes, also contributing to the valorization of the curriculum construction.

REFERENCES

- Assis F, Borsatto AZ, Silva PDDP, Lima P, Rocha PR, Lopes GT (2006).** Programa de monitoria acadêmica: percepções de monitores e orientadores. *R. Enferm. UERJ*, Rio de Janeiro, 14(3):391-397. Disponível em: <http://www.revenf.bvs.br/pdf/reuerj/v14n3/v14n3a10.pdf>. Acesso em: 05 jun. 2020.
- Borsatto AZ, Silva PDD, Assis F, De Oliveira NCC, Da Rocha PR, Lopes GT, Peres PL (2006).** Processo de implantação e consolidação da monitoria acadêmica na UERJ e na Faculdade de Enfermagem (1985-2000). *Esc. Anna Nery*, Rio de Janeiro, 10(2):187-194.
- Dantas OM (2014).** Monitoria: fonte de saberes à docência superior. *Rev. Bras. Estud. Pedagog.*, Brasília, 95(241):567-589. Disponível em: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S217666812014000300007&lng=en&nrm=iso. Acesso em: 08 jun. 2020.
- De Andrade EGR, Rodrigues ILA, Nogueira LMV, De Souza DF (2018).** Contribuição da monitoria acadêmica para o processo ensino-aprendizagem na graduação em enfermagem. *Rev. Bras. Enferm.*, Brasília, 71(supl.4):1596-1603. Disponível em: Disponível em: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S1414-81452006000200004&lng=en&nrm=iso. Acesso em: 08 jun. 2020.
- Frison LMB (2016).** Monitoria: uma modalidade de ensino que potencializa a aprendizagem colaborativa e autorregulada. **Pro-Posições**, Campinas. 27(1): 133-153. Disponível em: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S010373072016000100133&lng=en&nrm=iso. Acesso em 08 jun. 2020. https://www.scielo.br/scielo.php?script=sci_arttext&pid=S0034-71672018001001596&lng=pt&nrm=iso&tlng=pt. Acesso em: 08 jun. 2020.
- Lins LF, Ferreira LMC, Ferraz LV, Carvalho SSGA (2009).** A importância da monitoria na formação acadêmica do monitor. IX Jornada de Ensino, Pesquisa e Extensão. SEMANA NACIONAL DE CIÊNCIA E TECNOLOGIA, VI, 2009, Pernambuco. **Anais [...]** Recife: SNCT.
- Matoso LML (2014).** A importância da monitoria na formação acadêmica do monitor: um relato de experiência. **Catussaba**, Mossoró, 3(2):77-83. Disponível em: <https://repositorio.unp.br/index.php/catussaba/article/view/567>. Acesso em: 08 jun. 2020.
- Santos GM, Batista SHSS (2015).** Monitoria acadêmica na formação em/para a saúde: desafios e possibilidades no âmbito de um currículo interprofissional em saúde. *ABCS Health Sciences*, Santos, 40(3):203-207.
- Santos MM, Lins NM (2007).** A monitoria como espaço de iniciação à docência: possibilidades e trajetórias. *EDUFRRN*, Natal, 9:45-58.
- Vicenzi CB, Conto F, Flores ME, Rovani G, Ferraz SCC, Marostega MGA (2016).** A monitoria e seu papel no desenvolvimento da formação acadêmica. *Rev. Ciênc. Ext.*, Passo Fundo, 12(3):88-94.