THE PRACTICE OF DISTANCE EDUCATION ORIENTATION ON TCCs

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SUMMARY

In distance education, the student is followed, accompanied by an instructor, who undertakes several roles and functions. On the case of this research, it is shown an evaluation of distance orientation practice for Course Conclusion Work (TCC, acronym in Portuguese) from two classes of distance learning latu sensu specialization courses, by Senac-CE. Even with positive results, there were problems during the phase of orientation on elaboration of TCCs, which provoked a work overload and stress for both students and instructors. Aiming to implement better practices to the next classes, this research was developed and reached its highest with recommendations for distance orientation practices for TCCs elaboration. Part of these recommendations have already been applied in three new classes, with positive outcomes for both students and instructors.

Key-words: distance education, elaboration of TCCs, methodology, distance education orientation.

1. Introduction

At the end of post graduation courses, the Education Federal Council demands a scientific work, which can be a dissertation or another type of course conclusion work, like an applied project or even an article. Its essence is scientific, demands discipline, method and procedures systematization. Therefore, the student must possess intellectual maturity and autonomy regarding the teaching process interferences. [1]

In distance post graduation courses, the TCC presentation to an examining board is one of the compulsory presential moments, when the student gets his/her specialist title. The works represent a valuable contribution for the production of knowledge applied in technological innovation and the solution of problems that can bring positive aspects and quality of life for the community.

The origin of this research was the evaluation of Works for Course Conclusion (TCC, acronym in Portuguese), during the period between April do June 2006, of two *latu sensu* specialization classes – one in Environmental Education (EA, in Portuguese) and the other in Distance Education (EAD, in Portuguese), delivered by Senac-CE, which started in 2006.

During the period of orientation on TCCs is common that tension arises, provoked by the student´s anxiety and overload of activities. However, on this journey it was flagrant that the amount of activities increased beyond the usual level, a fact that resulted in conflicts and stress for both the students and for the instructors, who also played, along the course, the roles of "educators", instructors and orientator of TCCs. The institution, which works in the competences model, decided to reflect upon and analyse that process, in order to implement betterments in the next classes. This decision was based on the premiss that educational actions must be evaluated, decisions must be revised and new positions must be taken, because they prove the compromise and competency of both the institution and its staff in the process of teaching learning [2].

The objective of this study is to propose a series of recommendations about orientation for the distance elaboration of TCC. The purpose is to search for solutions, which, applied to the future classes, may minimize the stress, reduce the time of finalization, therefore, optimizing the orientator work, allowing the orientator to focus on the improvement and on the deepening of the questions in order to raise the quality of the works.

2. The role of the Instructor on Distance Orientation

There is not yet a consensus about the nomenclature given to a teacher who works on distance education. Tutor, forming teacher, learning orientator, academic instructor? Each institution adopts the more appropriated designation, creating its meaning according to its internal policies. After explaining some concepts, a question arises on this research: which of those concepts and definitions are more adequate to the functions and/or roles of the tutor/teacher/orientator regarding orientation on TCCs?

According to Belloni [3], the teacher on EAD can execute from one to several functions which are likely to happen or not in a teaching experience. Three of them are related to this work and are the roles of:

- Formation teacher, who gives orientations about the study and learning process, give psychosocial support to the student, teach how to research, to process the information and to learn.
- Instructor teacher, who gives to the student orientations about discipline, for which she/he is responsible; dissipates doubts, gives answers pertaining to the contents of the course and takes part on the activities of evaluations.
- And for last, researcher teacher, who makes researches, always has update informations about his/her area of knowledge, reflects upon his/her teaching practices, gives orientations and takes part in his/her students researches.

Despite the author in her work does not make any reference to the instructor teacher, the function in itself of the giving orientation is part of the three functions mentioned above, which suggests a widening of his/her roles.

Masseto [4] discuss the new attitudes of a teacher of all types of learning processes facing the new technologies. Much more than a specialist who possess knowledge and experiences, his/her role will be that of giving orientation during the student´s actitivies, of that of a consultant, of that of who works as a part of team, pursuing the same objectives. To achieve that, during the learning process the techonology to be used will be varied and adequate to those objectives.

Although the focus is the technological aspect of the question, we believe that a good articulation between the orientator´s knowledge, his/her experiences and abilities in handling the environment tools as a means of mediation can contribute to a good flow of the work.

Oliveira [5] states that there is a process of (re)signifying the role of the teacher or academic instructor who uses the TICs as a means of dialogical interlocution between students and formation teacher. They are parts of a time and a space of cooperation and exchange of care, generosity and compassion, attributes which humanize virtual environments.

In her work she emphasizes the need to humanize the relation bertween instructor and student, which can be seen cold when comes to exchanging messages. We believe that it must be taken into consideration that the student´s anxiety regarding orientation can jeopardize his/her autonomy. With this in mind, a message asking for a reflection about a certain aspect of the work can be understood as a failure and result in frustration, which, if not identified by the instructor, will reflect negatively in the work result.

Moran [6] classifies the teacher who uses the ITs as instructor/manager of the learning process integrating, in a balanced manner, the intelectual, emotional and managerial types of orientation. He adds that she/he is "a researcher on duty. Learns with the practice and with the research and teaches what he then learns."

As "researcher on duty", sometimes she/he see him/herself isolated and counting only on his/her empiricism to systematize his/her knowledge, given that there are only few references about orientation in EAD, with scientific basis. Besides, the pressure from many actitivies which are urgent can make him/her to postpone a reflection about his/her performance.

According to Freire [7], it makes part of the teacher practice to question, to seek, to research. In his/her ongoing formation, she/he must see and assume him/herself as a researcher.

Although the research makes part of the scholar life, it is necessary to be aware to develop this path given that the amount of tasks can restrain this instructor´s ability, who also plays the role of the person responsible for the orientations, and to make him/her to activily follow the path of research.

Last but not least, Severino [1] defines the role of the instructor as that of "an educator, whose more matured experience interacts with the student´s building experience". Far from being an instructional learning process, the relation must be of dialogue between the parts that interact, but maintaining the respect to the autonomy and to individual personalities. It is necessary a dialetical interaction without any form of repression or submission.

Besides these contributions regarding tutorial and orientation, it is necessary also to think about the nature of the work to be performed, in this case, the course conclusion.

2.1 Reflections about Distance Orientation

When trying to answer the initial question about which concepts and positions, from the mentioned authors, are more appropriated to the tutor/teacher/instructor´s functions and/or roles that can be related to TCCs orientation, the source used were the decisive positions taken by Neder [8], Menezes [9] e Emereciano, Souza e Freitas [10]:

Neder [8] discussed the academic instructor formation in EAD projects, indicating that she/he must have a background of especial knowledge about political-pedagogical aspects of distance education and the theoretical-methodological aspects of the proposal that she/he will pursue. The author indicates that the selection process and the background of the instructor combined guarantee the quality of the educational work that is intended to obtain. His criticism is focused on the conception that some authores consider that once assured the least conditions to deliver the course (dialogicity, instructors, interactivity, individual learning, technological means and teaching material), the objectives of education will become a reality. Despite supporting his considerations, the present study sustains that the instructor can go through a process of development combining the political-pedagogical aspects, of methodology and technology, given that rare are the professionals who gather all those attributes.

Menezes [9] listed the academic instructor roles on EAD, on the learning teaching process and on the curricular evaluation spheres. Although the roles are similar to those of the present study, among the roles it was not mentioned the creation and monitoring of projects or works, as happens in the situation which is analysed. On the other hand, the author mentioned, based on his experience, that the proportion is 20 to 25 students for each instructor. This is a point that deserves attention when analysing this research.

In Emereciano, Souza and Freitas [10] study, it is highlighted the characterization of the nature of the work to be developed by the student, which is similar to the case of this research. According to the author of the present study, the instructor is responsible for the guidance of application projects, in which the student must present "a theoretical fundamentalness to something concrete to be operational." Personally, we believe that this clarity is important and must be put in evidence since the beginning.

2.2 Examples of Distance Orientation and Research Methodology Subject-matters

Orosz [11] cites the experience gathered during a distance orientation on a master degree in Information Techonology, in Campinas (SP), which had a more positive outcome than its face to face version. The orientation was via eletronic mail, chats and video conference. The author´s study does not mention problems neither brings reference to the quality of the student´s works, but it is said that the teacher spent more time doing virtual work than presential work. This happened due to the new activities been added and they were performed out after the working hours scheduled for presential classes – for example, answering the e-mails, chats and designing of the on line material. It is perceived that time can be a help or a hindrance and it is up to the instructor to manage his/her time in a manner that will optimize her/his actions.

Besides the orientation experiences previously mentioned, it is worth to add that research methodology and elaboration of academic works are subject-matters taught on graduation and *strict sensu* post graduation courses and have being long offered by distance education. Silva [12] presented experiences of this kind. One of them took place at Federal University of Santa Catarina (UFSC), during 2000-2001. A virtual environment was used, the interaction was via e-mail and chat. There were also face to face moments, for presentations and to solve doubts, with positive results. Another experience mentioned happened in 2006 on Federal Center of Technological Education of Ceara (Cefet), which also offers this subject-matter on its graduation courses. The evaluation report showed positive aspects, like the students satisfaction with the knowledge acquired, the widening of the student´s autonomy regarding the definition and development of his/her TCC, the distance education advantages, among others. Aspects to be improved were: to increase the number of text production evaluations; more presential classes for presentation of themes propositions, in order to have more feedback from the teachers and to allow more knowledge and experience sharings about what the students are producing [12]. Those contributions are important because they reinforce the need to have a parallel work on the *latu sensus* post graduation courses, with the purpose to improve the productions.

From the bibliographical revision, there are some points to be addressed: the definition of the instructor´s role and the nature of the conclusion course work developed with the students; proportion of time, workload and number of students for the development of activities; and the instructor´s capacitation in IT, in research methodology, in emotional education in a new context of distance education.

With these references, it is possible to analyse the case which triggered the present study, which will be presented next.

2.3. The Course Conclusion Work by Senac-CE

The courses on this case study had an allotted time of 360 hours each, all of them long distance, with three presential moments: the opening class, the presential evaluation and the conclusion work presentation. The courses were developed following the competences model. The type of evaluation applied was the formative one during the process and the "somativo" (building up marks) for the closing modules. The least mark required for approval was 7,0.

The works were projects to be implemented in the studied areas. The time allotted to the elaboration, under the supervision of the instructor, was 60 hours, corresponding approximately to two and half months. The documents containing orientations and the manual about how to format academic work and work structure containing specific information for each area were made available on the virtual environment Aulanet [13] to be accessed by the students.

During the period of elaboration there was an activities schedule for the students to send every week the topics of their projects using the virtual environment resources. But the majority of the communication between instructor and student happened via electronic mail.

The TCCs instructors had a master degree in the areas they were working, had previous experience in providing orientation to students about academic work, but only in presential courses. Along the course, they also acted as formative teacher.

The students were from Piaui, Maranhao, cities from the Interior of Ceara and the vast majority from Fortaleza, who chose distance education for several reasons like: non-existence of similar institutions or programmes in the areas where they live; impossibility to commute to where the course takes place, problems to comply schedules of presential appointments and the possibility to gain further education through internet. For instance: in the group there was an Environmental Education course student from the hinterland who used a telecenter to access the learning environment and, therefore, to interact with her colleagues and to send course modules activities.

An examining board with three members (the instructor and two others with a master degree or specialist) examined each of the 40 works during a period of a month. To make the analysis, the board was informed about the courses, their objectives and the profile of the future specialist, a copy of the orientations list handed out to the students, and a list of criteria suggestions to be observed during the work analysis.

2.4 The TCCs results

Forty works were submitted to analysis: 26 from the Environmental Education (EE) course and 14 from the Distance Education (DE) course, which contained known relevant proposals. Because the proposals were meant to be applied, after the course conclusion some students presented their works to the managers of company they worked for, they were approved and now are being implemented on their workplace, both EE and DE.

Out of the 26 EE projects, 38% of the students got mark 7,5. Despite there is no scientific evidence to support it, such outcome must derive from the fact that the students were not familiar with the development of such type of work, given that a good part of the students perform managerial and administrative activities. Besides, they were coming back to school after a long period far from the academic environment.

Regarding the DE course, 36% of the students got mark 8,0. Those students already had some experience in developing academic works, hence a higher percentage of mark 8,0 in comparison with EE. In Annex A, graphics 1 shows the results according to the students´ marks in both courses.

Although the result of both classes were satisfactory, there was a massive effort to reach that point, which could had been lower. For this reason,

the staff decided to investigate in order to adopt new actions that will rise the marks, as well as to increase the projects quality on the next classes and to reduce the workload. The steps of this research will be described next.

3. Investigation Methodology

The exploratory type research was developed in accordance to the inductive approach, based on the observation of registers, selection of questions, bibliographical research and information analysis, according to the following steps: 1. Tabulation of the TCCs final marks for both 2005 courses; 2. Graphics elaboration; 3. Previous analysis; 4. Gathering of the considerations registered by the members of the examining board about the TCC; 5. Registrations of the non-conformities (based on the orientations passed on to the students) or mistakes registered by the examining board divided by topics of the project structure: Summary, Introduction, Justification, Objectives, Main Target, Theoretical Fundamentalness, Methodology, Schedule, Resources (Human, Financial, Material and Technological), Bibliography, Annexes and other aspects (non-conformities that did not fit in to those on the project structure); 6. Analysis of the registers that match the topics structure on item "Other Aspects", which created new topics like: Writting and Language Style, Patterns and Formats, Distractions and especific items pertaning distance education; 7. Elaboration of TCC Outcomes Report – gathering of non-conformities; 8. Outcomes analysis by the technical body (instructors and pedagogical coordination) responsible for the orientation, according to the following steps: 8.1. Documents analysis (lists containing marks, graphics and non-conformities); 8.2. Filling in a formulary with questions which demands reflection and answered individually about the following topics: difficulties faced by the instructor, difficulties perceived or mentioned by the students, possible causes, abilities the student must develop to elaborate the TCC, abilities the instructor must develop to give orientation/analyze the TCC and how the instructor can help on this process; 8.3. Discussions about the outcomes and the individual reflections, which resulted in a summary of opinions, suggestions and follow ups; 9. Bibliographical research in distance education area, scientific methodology and Educational Technology; 10. Elaboration of the recomendations; 11. Pre-test (experiment) to be applied on 2006 classes; 12. Analysis of the new classes outcomes; 13. Elaboration of considerations and conclusions.

Next it will be presented the first considerations about the informations collected among 2005 classes

4. Synthesis of the Results

From the information gathered, the technical body divided it into four main topics: difficulties the students faced and their possible causes and also the difficulties the instructors had and their causes, according to figure 2 (Annex B). The points reflect the observations raised by the instructors, who were efectively involved in the process.

Those results confirm the observations made in the bibliographical revision, which are related to the definition of the instructor´s roles and the TCC nature, the instructor capacitation and also the proportion time x number of students x workload. Besides, new points were added, like the students´ formation, the lack of personal discipline to study on distance education, the

deficiencies on planning and the difficulties on the virtual environment. Based on those topics, some suggestions will be listed.

5. Recommendations for the Practice of Distance Orientation

The objective of the suggested recommendations is to better the practice of distance orientation and they will be reevaluated during their implementation to improve and feedback. They are:

Instructor capacitation or specialization on the following topics: planning, scientific methodology, technology, TCC specificities, methodological procedures in distance education, use of of virtual environment tools and emotional education. The instructor must understand the course in its wholeness, given she/he can be hired as formation instructor for one or more modules. Therefore, she/he should, as responsible for orientation, be capable to make the necessary connections which involve all course modules.

During the course: to think the TCC since its first module, the first ideas that will be matured along the course; to create links between the modules contents and the TCC; to use references and quotations according to the patterns during the activities; at the end of each module to add a reflection in a form of activity, in order to make a connection between the module studied and the TCC, thus allowing the student to have a solid basis for theoretical fundamentalness; to create colaborative spaces in the virtual environment for brainstorms, "ideas data bank" and interesting news, with the content being that of problems and needs that can turn into topics; to create affinity groups to allow the students to discuss and share commom interests related to TCC; to establish a schedule of summarized presentations showing the development of the TCC because the elaborations of presentations help to sort out the ideas; to recommend aditional studies in oder to reduce existing gaps (writing, use of applications, among others); to use models; to encourage the students to elaborate a TCC development plan with timetable; to promote the collaboration in spreading the sources of information.

The propositon will be tested in the three ongoing classes. The start will be May 2007, when the students will effectively begin the elaboration of the TCC. Several recommendations were already put into practice and are on test. Some positive results were already registered. Thanks to the idea data bank, around 60% of those students have already defined a topic. This means that the instructor efforts will be on the remaining 40%, which in practice means an otimization of time flow.

6. Conclusion

The tutorial practice in distance learning is by itself a hard task. When it comes to TCC orientation, besides the new functions and roles on the pedagogical sphere and also the specialist on a certain matter, and that of a motivator and technical and administrator helper, it has to be added the function of giving personalized attention to the student. The relations between instructor/student with the knowledge change. Besides the cognitive support, there is also the affective support; the sense of belonging must exist in distance learning to help to diminish the feeling of absence and isolation.

During writing the TCC, the student has singular and private needs and difficulties. The instructor cannot refrain from his/her responsibilities as provider and counsellor. It is necessary to make very clear his/her functions and to do

his/her best, in order to act properly and with responsibility for the student´s well being, better learning outcomes and better conclusion course works.

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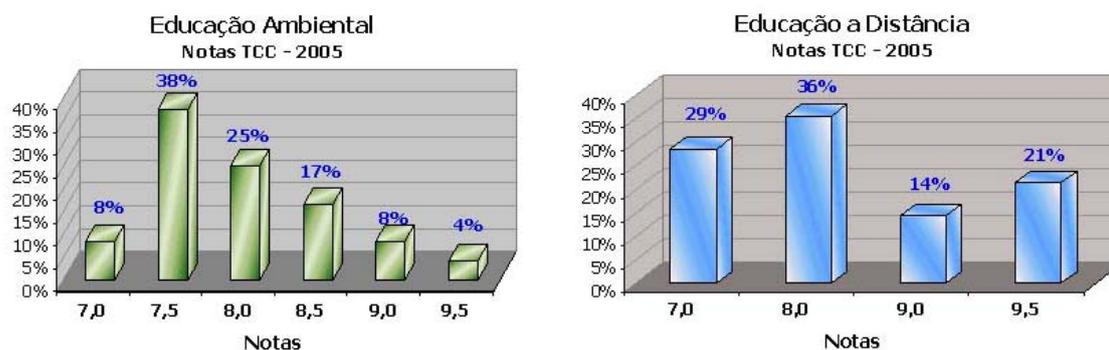## 8. Attachments
Annex A – Results of TCCs marks

Figure 1 – Results of Environmental and Distance Education TCCs marks.

Annex B – Results of the gathered observations

Students difficulties (according to the instructors views or expressed by the students)	Possible causes for the students difficulties
- Students lack of discipline in managing their time. - Not enough time to develop the TCC. - Reading the proposed texts (and others). - Interferences that affected the comprehension of the TCC (misundestanting about project and dissertation) and its elaboration (how to develop it?). - Lack of experience in research or in elaborating academic work (for the majority it was their first time). - Confirmation of deficiencies from early education for writing the work (problems with writing, foundation, articulation of ideas, ellaboration of justifications, among others). - Difficulties to follow the course. One part of the students did only the activities without taking part nor getting involved on a more profound manner.	- The information available were not clear nor easy to be understood by the students. - The deadlines not met by the students postponed the activities and provoked rushings and a delay on the schedule. - There was change in the tutorial team, what demanded to more time for adaptation to the course and to the students pace. - Short time to elaborate the TCC with quality. - Lack of a more efficiente planning by the group (instructor and students). - Lack of basic orientation for the students about scientific methodology. - During the period of elaboration of the TCC, lack of coordination to give orientation to facilitate the process of alignment of actions and communication between instructor and student.
Instructors difficulties	**Possible causes for the instructors difficulties**
- Insufficiente time to attend all the students during attending hours. - Overload of activities and too many works to read in a short period of time. - Lack of definition about the TCC project. - Lack of criteria to follow through. - Lack of coordination for orientations during the process of the TCC construction. - Difficulty to accompany individually each student. - Lack of qualification of the instructor regarding certain aspects of the TCC. - A not so friendly virtual environment.	- Provoked by the volume of works to be analysed and feedbacks. - Deadlines not met by the students provoked delays. - Wrong dimmension regarding about time/student x time to conclusion. - Re-work because the changes asked were not made. - Lack of clarity on the orientations given to the instructors for the development of the process of following the TCC.

Figure 2 – Observations about the information gathered