

Selection Process and Dropout in a Distance Education *Lato Sensu* Post-Graduation Course

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In this article, three models of the selection process for a *lato sensu* distance education course in computer education (PIE) were described and analyzed. The selection process, besides selecting students, aims to contribute to the democratization of access to continuing education of teachers according to the principles of the Open University of Brazil (UAB). This is an exploratory, descriptive, and qualitative study and the methods used are procedure documentary research and a survey to teachers and tutors. The results show that there was no relevant change in the percentage of dropout/school leaving and course failure in classes despite differentiated selection processes, but, still, the teachers consider that the last of the three selection process model, which includes two steps, should be maintained.

Keywords: selection process, dropout, higher education, distance education

Introduction

In today's society, it is evident the importance given to *lato sensu* post-graduation courses in the academic and social context, which is justified by the fact that they meet the demands that more specifically seek better scientific, ethical, and professional training geared to the labor market. According to Longo (2009), they should help:

(...) The creation of a scientific mindset, so that you can take an investigative attitude towards the phenomena, knowing, if necessary, how to intervene. It should also enable the full formation, catering not only to the cognitive level of the students, but as well to their interests and cultural needs, arousing their desire to browse and discover new paths (...). (p. 216)

The selection process for *lato sensu* post-graduation courses is a factor to achieve these goals and to contribute to the democratization of access to continuing training of teachers.

The establishment of an appropriate selection process has always been a major concern of the coordinating team responsible for managing the post-graduation distance education course in computer education (PIE), offered by the Federal Institute of Education, Science and Technology of the Espírito Santo (IFES) financed by the Open University of Brazil (UAB). The goal of the course is to train professionals/teachers to use technology

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in the teaching-learning process, in a multi- and inter- disciplinary manner, having primary and secondary education teachers and professors as target public, besides other professionals. The course provides 360 hours which aimed at theoretical and practical classes and 120 hours devoted to the final paper (IFES, 2009).

Distance education students are expected to have different study and communication skills from those required of students who attend traditional schools (Moore & Kearsley, 2007). Thus, the selection process of the course aims to select people who are committed, and who have conditions to complete the course.

In this context, this paper analyzes the four selection processes that have occurred for PIE to identify their differences, problems, and impacts on the course and dropout rate. This is an exploratory, descriptive, and qualitative study in which it was used a technical procedure documentary research based on the public announcement which contains the rules of the selection processes, course reports, and a survey of teachers and tutors.

The PIE Selection Processes

IFES, aiming at contributing to the democratization of access to continuous training of teachers and for the improvement of the quality of education, defines in Article 4 of its Rules of *Lato Sensu* Post-graduation Distance Education Courses (IFES, 2011) that:

(...) With all due respect for democratic principles of equal opportunities to all, the selection of candidates for admission to the courses will be conducted by process selection, preferably, or other way that IFES will adopt, according to the relevant legislation. (p. 2)

The PIE, based on this principle, started its first selection process in 2010, along with three other courses. The availability was 120 opportunities for students, which were distributed equally into four on-site centers for local support. Besides, we chose to call immediately 10% of alternates for each on-site support center, foreseeing a future dropout, which was also done in the following selection processes.

In 2011, there was a substantial increase in availability—250 for five on-site centers, i.e., 50 per on-site center. In the classes of 2012 and 2013, the availability for each was 160, 40 for each of the four on-site centers. Table 1 summarizes the most relevant data for each of the selection processes.

Table 1

Information Vacancies, Candidates, and Enrollments of PIE

Selection process	On-site centers	Places per on-site center	Total	Total number of candidates	Candidate/places	Total number of enrollments
2010	4	30	120	214	1.8	128
2011	5	50	250	412	1.6	265
2012	4	40	160	284	1.8	164
2013	4	40	160	408	2.6	174

The first three selection processes were different. Only the last (2013) had the same configuration as the previous (2012). The characteristics of these selection processes are discussed below.

The Selection Process of 2010 Class

The coordination team chose to have a selection process that would select candidates who had less difficulty in writing, in order to facilitate the last stage of the course, that is the final paper, and prioritize public school teachers, meeting the proposal of UAB.

Therefore, the selection process of 2010 class consisted of two mandatory steps: (a) written test (classificatory and eliminatory character), which was a written assessment based on literature informed in the announcement; and (b) analysis of documentation (classificatory character). In that same announcement, 50% of the availability for each on-site center was designed for all teachers who were teaching at public schools.

The written test at the on-site centers was the biggest challenge. This step required a major effort by the responsible for the committee selection process, as well as a support team of IFES, with experience in conducting selection processes.

The Selection Process of 2011 Class

Due to the difficulties in the former selective process and the fact of having a great availability, we chose not to offer the written assesment. Thus, the selection process of 2011 had only one step: analysis of documentation (classificatory character).

Considering only a single step, the committee has reviewed the scores and the maximum points considered in the analysis of the documentation. Vocational training and work experience were considered. The score for work experience in public institutions was higher than the score for professional experience in private institutions.

Furthermore, the coordination team judged that it was necessary to review the score for work experience in order to favor also the entry of teachers who were at the beginning of their career, since the content in PIE is presented as a reflection on the use of technology in education, an important subject in teacher training.

It is worth mentioning the fact that the selection process scores training and work experience meets the student profile required for distance education and motivates students to seek these type of courses, as described by Moore and Kearsley (2007), who claimed that “(...) The most common reason for doing a distance education course is to develop or improve the knowledge needed for the job” (p. 175).

The Selection Process of 2012 and 2013 Classes

Due to the dropout rate presented in previous classes, which will be discussed later, so often caused by the difficulty some students have in dealing with technology and distance education, and even difficulty in writing, we opted for a different selection process consisting of two steps: (a) analysis of the documentation (the classificatory process); and (b) analysis of performance in the virtual learning environment (classificatory and eliminatory process).

In the first step, the students were classified to participate in the second step of the selection process. In the case of on-site centers where there was availability, there was a period that alternates should inform if they were interested in running for these positions. The score of the first stage was used only for classifying the candidate for the second phase and was not considered for the final ranking.

The second step lasted three weeks. The contents covered in this second step dealt with aspects related to distance education, the course and its methodology, and the virtual learning environment. Evaluations of this phase were conducted in Modular Object-Oriented Dynamic Learning Environment (Moodle) (worth 40 points) and there was a written assessment (worth 60 points). The cutoff score was 60 points and non-eliminated candidates were ranked in descending order.

Dropout and Other Causes

Dropout, either in regular or distance education, is a constant problem. According to Longo (2009), in distance education:

(...) It is usually much higher due to the characteristics of the public that looks for this type of education, to the lack of more intense emotional bonds with the class and also because of peer pressure and other mechanisms of social interaction that physical contact generally provides, in addition to the difficulties caused by technological mediation. (p. 219)

In order to analyze the possible causes that lead to dropout and school leaving, it is necessary to consider the profile of students in the course, as well the dropout/school leaving and course failure rates during the course.

Concerning Students Profile

Whenever new students start the course, the course coordination submits a questionnaire which aims to identify the students' profile. In Table 2, we can see a summary of key aspects of the four classes.

Table 2

Main Characteristics of PIE Classes of 2010-2013

Group	Gender	Age group	Higher graduation	Do another course?	Belongs to the municipal school
2010	Female (65%) Male (35%)	20-30 (47%)	Master degree (4%)	33%	34%
		31-40 (38%)	Post-graduation (38%)		
		Other (15%)	Graduation (58%)		
2011	Female (67%) Male (33%)	20-30 (32%)	Master degree (3%)	45%	34%
		31-40 (42%)	Post-graduation (53%)		
		Other (26%)	Graduation (44%)		
2012	-	-	-	-	-
2013	Female (66%) Male (34%)	20-30 (40%)	Master degree (1%)	45%	28%
		31-40 (45%)	Post-graduation (46%)		
		Other (15%)	Graduation (53%)		

In the class of 2012, the survey form to the student's profile was posted on the virtual learning environment subject step of the selection process. This fact made it difficult to establish the student's profile, since it included all the students of Step I.

Concerning Dropout, School Leaving, and Course Failure

Next, there is an analysis of dropout, school leaving, and course failure of students from 2010 to 2013 classes. It is worth mentioning that 2013 class is in progress and its data reflect a partial collecting data. Dropout, school leaving, and course failure data collecting is displayed in Table 3.

Table 3

School Leaving /Dropout/Course Failure

Group	Students enrolled	School leaving/dropout /course failure	Total of students who finished the course subjects	% of school leaving/dropout/ course failure	Final paper	% final paper conclusions in relation to enrollments
2010	128	44	84	34.3%	83	64.8%
2011	265	97	168	36.6%	125	47.1%
2012	164	63	101	38.4%	84	51.21%
2013	175	59	101	33.7%	-	-

It is possible to observe that, despite the different selection process, with two steps and one analysis of documentation stage, and other virtual learning environment subject used in 2012 and 2013, the percentages of

dropouts, school leaving, and course failure are close to those obtained in the classes of 2010 and 2011.

It is also important to analyze the data relating to the effective completion of the course, i.e., those who were able to write and defend their final papers. The data do not help us relate the defense of final paper percentage to the type of selection process performed.

Based on the student's profile, we can observe that a significant percentage of the students take other courses simultaneously to PIE, and that, among the difficulties to study, many mentioned the lack of available time to perform all the tasks of the course and the lack of discipline for performing activities and meeting deadlines. These indicators favor the school leaving and dropout of the students in the course.

We can say that a distance education course should be neither easier nor more difficult, but should require dedication as any other course. The truth is that some students intend to study using distance education, but they lack the organization needed to face the challenge of managing their own learning, and to establish their autonomy as learners.

Reflections on the Selection Processes Conducted

In the first time the course was offered, the selection process included a written assessment in order to select candidates who had less difficulty in writing, and a curriculum analysis that prioritizes public school teachers. However, still, we observed that many pupils had problems with writing, especially in the process of writing the final paper. Furthermore, dropout was 34.3%, due to difficulty with the use of technology, and due to the distance education methodology or for personal reasons, as already mentioned.

In 2011 class, there was a substantial increase in availability (120-250), and also considering that the previous dropout rate was relatively high and that students also showed difficulties with writing, we opted to offer a more simplified selection, only with curriculum analysis, prioritizing public school teachers. Here, however, a new feature has been detected: the students of this group were relatively older than the previous class. The dropout rate of this group was 36.6%, slightly higher than the previous class, and many of students that failed or left school reported difficulties with the use of technology and adapt to the distance education, since they were used to a traditional education. According to Moore and Kearsley (2007), "(...) If students are not familiar with technology, they will be reluctant to use it in a creative and risky manner, which will affect their experience very seriously (...)" (p. 190). Students, once again, presented many difficulties when writing of the final paper.

Thus, in the 2012 class, the entire selection process was revised and now included a step to make students acquainted to Moodle. This step included, besides the activities in Moodle, a written test. It is worth mentioning that despite the selection process was different, dropout rate for this class was 38.4%. In 2013 class, the selection was identical to 2012 class and the students are still studying the subjects.

Still aiming to reflect on the changes made in the selection processes, after the inclusion of the subject "Moodle Familiarization", the surveys were carried out with teachers and tutors of the course. Altogether 10 teachers reported their opinions, which are summarized in Table 4.

The main positive point mentioned (for 6 of the 10 teachers) was the fact that the "Moodle Familiarization" subject "filter" students with difficulty in the use of technology or methodology adaptation to distance education.

However, a teacher, contrary to this opinion, pointed out something very relevant and that deserves attention not only in this course, but in all that work with continuing education of teachers:

I do not think the focus should be the exclusion of candidates who have not “savvy” with technology, otherwise (we) lose the opportunity to contribute to the growth of those colleagues who have most need. (...) Why do we have to select and want to work only with the ideal student? To improve our statistics? To have less work? For what and for whom? After all, what is the contribution of our course for teachers and consequently for society?

Table 4

Considerations of PIE Team as the New Selection Process

	Considerations	<i>N</i>
Positive aspects	The subject “Moodle Familiarization” contributed to filtering students with much difficulty in the use of technology or the methodology of distance education;	6
	The selection process should continue as it is today;	3
	The subject “Moodle Familiarization” allows the selection of more committed students with course proposal;	3
	The selection process as it stands today tends to reduce the dropout;	2
	The discipline of setting allows students who have difficulty with technology can demystify it, even if they have an initial shock.	1
Negative aspects	The subject “Moodle Familiarization” does not collaborate to select students with higher ability to produce texts;	2
	It considers that the form of selection does not impact so directly on evasion;	2
	The subject “Moodle Familiarization” can exclude candidates with less skill with technology and who are the ones who most need help;	1
	The selection should be (the subject “Moodle Familiarization”), to select the truly committed students.	1

Three people mentioned that the Moodle Familiarization subject enables the selection of more committed students, as it is explicit in the speech of a tutor:

The selection process is important and aggregator to join the class, so they study together and thereafter form a cohesive and responsible group (...).

Other positive points mentioned were: It tends to reduce dropout rate and demystify the technology for many who have difficulties and aversion; and that the selection process should continue as currently conducted.

Two teachers, however, mentioned that the selection processes were not able to select students who can produce texts satisfactorily, as it is explicit in the following speech of a teacher and mentor of final paper:

I had hard time in the TCC (final work of course) stage with the last group. The students were too weak, without proactivity and without knowledge of the methodology. (...) I think we need a selection process with greater rigor in this aspect: writing.

Other teachers, however, speculated that this problem of difficulty in writing is much more general and happens not only in this course, but that this complaint has been ongoing in several institutions.

It is also worth mentioning that some teachers believe that the selection process does not contribute to reducing dropout and that dropout occurs mainly due to lack of commitment from students or prioritization of personal life.

A fact that should be taken into consideration in this discussion is that while some distance education on-site centers had a great number of candidates, other on-site centers still had availability, so alternates were selected. Competition average was between 1.6 and 2.6 candidates per vacancy. A few students were interested in the courses. Even if the selection process is improved, students still show a range of difficulties and problems that will become evident during the course.

On the other hand, a well-formulated and appropriate selection process may contribute, as mentioned for some teachers, to selecting most committed students. The “Moodle Familiarization” subject may also favor students so that they become immediately aware of the proposal of the course and its methodology, avoiding that they only realize they did not fit the course or it was different than they expected. Thus, it is possible to give up during the selection process, which shall not be counted as dropout.

Final Considerations

This work aimed to analyze the impacts of dropout and course failure rates in classes of PIE, regarding the changes made in the selection process.

In data collecting concerning the percentages of dropout, school leaving, and course failure during the entries, the analysis of quantitative data indicated that there was no relevant change in the rates raised despite the different selection processes.

We also observed that there is still considerable difficulty in students’ writing, even though the current selection process includes a written test, a fact that was evidenced when the students were writing final papers.

Despite all the effort required by different selective processes, with two steps, we realized that this is not a predominant factor to increase the rates relating to dropout and school leaving. Actually, the lack of time to perform the tasks and assessments, and the fact that many students are doing other courses simultaneously to PIE, contributes to these rates, and can be observed through the profile of the students.

Even so, even if it is controversial, most teachers believe that a process selection step meant to make students familiar with Moodle favors the selection of students with less difficulty regarding the distance education methodology and the use of technology. They also believe that if there was no written assessment, students would have even more difficulty in writing the final paper.

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