Distance Learning courses reviewed: What can we see?

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Keywords: Quality Assurance, Course Evaluation, Teacher Training, Distance Education.

Abstract: The research project "Quality in Distance Education: a longitudinal survey of teachers training in federal programs" has prospected nine thousand teachers about critical achievements in distance learning courses. Our target public was students in a postgraduate course throughout 2006 to 2013. This article presents the results collected through the final survey instrument applied to 5,892 students. The data were analyzed and some constructs detected pointing to a quality setting from the student’s perspective, namely: teaching materials, pedagogical mediation, virtual learning environment, methodology, student academic and technical support. The qualitative assessment showed other aspects mentioned by the respondents. This paper also presents the analysis of an open question asking a free review of the course. Surprisingly, students nominated important aspects of the pedagogical process in distance learning such as teaching strategies, objectives, curricula content and their dynamics indicating that a distance learning mode course requires an active pedagogical mediation and the teaching-learning design must encourage collaboration.

1. INTRODUCTION

Brazilian institutions, governmental and private, have made major investments in undergraduate and post-graduate offered in the distance learning mode, increasing considerably the number of enrollments and courses in recent years. This rapid growth, especially when means of carrying out government goals with regard to increasing the number of enrollments in higher education, imposes the need to rethink the indicators used to evaluate the quality of distance courses. Gold (2010) points out that "it is fundamental to highlight the political action, organic or not, of different actors and institutional contexts, influenced by complex regulatory frameworks, sometimes contradictory, the result of guidelines, commitments and prospects - at local, national scale, regional and global".

The initial argument of this work is to evince authors that deal with the construction of the concept of quality in higher education on the assumption that education is a right and that the government should provide it for the society. We believe in the consolidation of national identity and the social and economic inclusion of marginalized groups. This principle of education guides a concept of quality articulated with the paradigm of relevance and social responsibility and is based on two other principles: democratization and the reconceptualization of the role of higher education institutions in the Network Society (CASTELLS; CARDOSO, 2005).

From this axis, we seek a reflection on the quality concept that has anchored the practices and perceptions of distance education. We consider three aspects: educational-learning, tutorial and technical-structural.
2. DISTANCE EDUCATION: WHAT ARE WE TALKING ABOUT QUALITY?

The diversity of views and the inexorable conceptual subjectivity of the term quality in education is not exempt from the constant referencing in speeches about educational policies and institutional practices (BERTOLIN, 2009a). The chameleon effect of the term “quality” when applied to higher education stems from the complexity of possible relationships that education may have in their technical, scientific, political, cultural and economic dimensions. Thus, talking about quality is always to seek reference “quality of what?”, "which social-historical moment?”, "defined by whom?". In this section, we will seek to bring some of these reflections.

Generically, the term quality can be defined as the satisfaction of a dynamic in which the effectiveness of the results is equivalent to the first placed expectations and, therefore, the processes should demonstrate efficiency.

The issue of quality in Brazilian higher education was studied by Bertolin (2009b) from qualitative indicators anchored in the socio-cultural and economic context, such as the effectiveness (achieve the basic functions of higher education and integral formation of individuals and society), relevance (development of the socio-cultural and economic areas of the country), fairness (opportunity to access and retention for all people from different regions and social classes) and diversity (meet the various demands and needs of education and training).

These qualitative indicators are related to the search for solutions to major national problems such as inequality and social exclusion, insufficient economic growth and qualitative and quantitatively deficient education systems. In this sense, the quality of higher education must be analyzed from the paradigm of relevance and social responsibility showing the ability to propose ways and coping alternatives of the national problems.

Debates about quality in higher education are centralized in the paradigm of relevance and social responsibility that clashes with the interests and expectations of another paradigm, derived from the neoliberal policy (BERTOLIN, 2009a and 2009b; DAYS NEPHEW, 2008 ; 2010; 2012). The paradigms of neoliberal policies and the relevance and social responsibility evoke three central themes on the agenda of higher education around the world: democratization, reconceptualization of higher education institutions and the quality.

The emerging paradigm of neoliberal policy considers that quality aims to be objective and universal, valuing the scientific rigor and the quantitative and measurable aspects. Criteria are identified with terms and economic schemes such as development indices, profitability, cost-benefit calculations, efficiency, innovation linked to economic income, growth in enrollment, teacher-student ratio, output indicators, expansion systems, measuring the performance of institutions, student performance, diversification of funding sources, among others (DIAS SOBRINHO, 2008). According to Bertolin (2009b), the neoliberal paradigm opens an economic vision of quality in higher education, in which the main mission of the universities must be the economic growth and the preparation of individuals for the labor market. Therefore, institutions should be organized efficiently and effectively so that their objectives are achieved quickly and at less cost, demonstrating an instrumental and productivist view of education. According to the author, the economic vision of quality in higher education is shared by the private sector, by some governments and multilateral organizations identified with the minimum state policy and fiscal adjustment.

The paradigm of relevance and social responsibility, though not despise many of the aspects mentioned above, perceives a different light, valuing the social and political realities of the institutions and education systems, the qualitative dimensions inserting the higher education in national and regional strategies for consolidating democracy. (DIAS SOBRINHO, 2008). The principle of this paradigm is that the mission of higher education goes beyond economic promotion and is also a way to promote cultural, social, political and scientific development. Thus, higher education quality must be able to promote equity and social cohesion, increasing the possibilities for access and retention.

It is in the 2000s that Brazil becomes a nation in transition to the so-called Network Society (Castells, 2005) and, therefore, the labor market has demanded new training requirements and training at a higher level in order to become the most dynamic and productive economy. Given this situation, it was necessary to increase the number of enrollments in public universities, which represented a challenge to the state, given that the public higher education institutions are located in urban areas, concentrating the supply of places
around 30% of the municipalities (MOTA, FILHO E CASSIANO, 2006).

As for teacher training, it was found that the training of teachers in the early years of the 2000s, was a sticking point in the implementation of public policies. The association of teacher education level with the quality of basic education was sufficient to realize the urgency of drawing initial training policies for those teachers already working or were working in basic education (MOTA, FILHO E CASSIANO, 2006).

The democratization of higher education initially demanded a basic education that boosts the expansion of higher education and teacher education represented a key part in this process, so that teacher training has become a determining factor in the quality offered in public networks. Obviously, one can not charge to the teachers all accountability for the quality of education provision, but it is undeniable that a well-established initial training is essential for the classroom.

In this context, the concept of quality in distance education in Brazil is perceived in the clash of interests between the neoliberal paradigm and the relevance and social responsibility in the teacher education, considering enhancing the cultural, political and scientific in remote areas of the country.

The data presented in Census 2011 (BRAZIL, INEP, 2013) and Synopsis of Higher Education (BRAZIL, INEP, 2012) allow us to make inferences about the relationship between the expansion of private higher education and the perception of the concept of quality as the proposed Bertolin (2007, 2009b) through a reference model in order to observe the behavior of the cited aspects.

Distance education in Brazil adopted some pedagogical models in which quality indicators are perceived as principles that can be compromising the educational process, such as: (a) pedagogical centrality of the tutor; (b) relationship and ratio between number of students and for each teacher; (c) lack of research projects in this field. In most part of the country, the tutor has academic training at the undergraduate level and is maintained by private institutions in part-time work scheme or hourly or with a public scholarship in federal institutions.

According to Leher (2010), the expansion of enrollment in the private sector has not democratized Brazilian higher education for the courses, mostly, are really tertiary education, to name the term appearing in the publications of the World Bank. These institutions focused on teaching and students do not have access to the benefits of research, generating negative impacts on competition in the workplace and society.

In the public sphere, the democratization of higher education via distance learning was made through the implementation of the System UAB, Open University of Brazil, and has been commonly associated with the commodification of higher education policies and targeted training for individualism, as a concept of a public good. It must be said that there are many ways to implement distance learning and, given the continental size of the country, it is important to reinforce the potential of this mode of education. The distance education model adopted by UAB focused on classroom support on determined places with tutors. This model has limitations and problems, but we agreed with Dias Sobrinho (2008; 2010; 2012) that no higher education can be considered having a good quality if it is not able to contemplate relevance, social responsibility and social equity.

In general point of view, democratization of brazilian higher education admits two interpretations: (1) the model increased enrollments in private institutions who restrict the knowledge construction to a training process and (2) Public higher education offered by UAB occurred in precarious shape, with an increase of enrollments but it was not accompanied by an increase of structural and human resources.

The issue of quality has been central in educational agendas of states ranging from increased economic competitiveness to improving the quality of citizenship indicators. What is at stake is the meaning of the term quality, stress field between those who believe that the quality of education is only achieved if oriented to few and those who believe that an education has to reach more people, seeking to achieve the citizenship.

In parallel, pragmatism is necessary to realize that for many young people the expansion of enrollment has a symbolic value and considering the economic vulnerability of this people each additional year of schooling represents the achievement of a better social position. Anyway, it is clear that public policies that have expanded and continue to expand enrollments in brazilian higher education have resulted in substantial improvements in the living conditions of young students although in general terms the structure remains polarized and stratified.

2.1. Quality in distance education in Mode 2 of knowledge production
In 1994, Gibbons, Limoges, Nowotny, Schwartzman, Scott and Trow published the book “The New Production of Knowledge” which discusses the dynamics of science and research in contemporary societies. The preface claims that there is a new knowledge of the production process in which not only the way it is produced, but it is organized, are considered elements of the process. Gibbons et al. point to two modes of the structure of science and teaching in higher education institutions: Mode 1 refers to the organization of teaching in structures with disciplines, that is, in the words of the authors, knowledge-based disciplines (1994, p.35). Mode 2, in turn, comprises a different and varied range of research, which changes the quality control, in which the focus is on transdisciplinarity and the production of knowledge is socially distributed. It involves, therefore, a constant interaction between the actors throughout the production process and that means a more socially responsible production. However, this new mode of production, according to the authors, will not replace the mode 1. Gibbons and his co-authors also emphasize that Mode 2 is necessarily dependent of communication technologies, because the interactions and interconnections that occur on the Internet make collaborative relationships and makes the production of knowledge an increasingly activity "less self-contained" (p.36). Quality control in this context is determined by a wide range of criteria and reflects a socially inclusive view.

In this context, Hase and Kanyon (2000) claim that the actual concept of autonomous and free learning feeds on humanistic theory from the theory of complexity and suggests an ontological basis for the dynamic approaches for learning and ability to handle the change.

3. QUALITY ASSURANCE: A FORMATION PROCESS

The whole evaluation process entails checking previously established indicators. To evaluate the quality of a distance learning course implies the definition of quality. This is the great challenge for higher education institutions when offering courses in distance learning.

Government competent bodies focus primarily in indicators related to infrastructure issues of the education institutions such as the faculty, the administrative and financial management. In addition to these issues, it is asked how the programs are being implemented, if these programs promote changes and if these changes are perceived by the participants in their professional and personal lives.

When working in course planning and production we need to consider two loci: (a) the course itself and (b) the apprentice. The evaluation of a course is always based on theoretical and philosophical assumptions underlying the understanding of teaching-learning process and the knowledge construction. As stated by Azevedo and Sathler (2008), the evaluation can not be isolated and restricted to the limits and measures of school performance and nor be perceived as bureaucratic control instrument. One must realize the different possibilities that permeate the evaluative action as well as its uses in the context of distance education, its influence in teaching activities, the role in educational policy-making and its social commitment besides the objectives to be achieved.

The act of evaluating as emphasized by Cardinet (1990 cited Bonniol and Vial, 2001, p.107), “is one of the essential procedures of the entire management activity” to the extent that composes the core process regulation of a system, which presupposes read reality through observation, a confrontation with the goals previously established and do the corrective action. In other words, it is a feedback mechanism that begins with the strategic planning of the course, followed by a decision-making about teaching and evaluative devices, ending with possible course corrections. Throughout the course, this feedback should be strengthened through formative assessment, understood as a process in which not only seeks to rectify mistakes but understand their occurrences and causes that enable consistent pedagogical actions.

One of the main characteristics of formative assessment is the simultaneity to the course delivery. It happens from observation and collection of data about the object that is being evaluated. Thus, we understand formative assessment as a permanent and inclusive process, which requires flexibility to carry out necessary adjustments to achieve the desired quality. Formative assessment interfere in the process, being considered as a regulatory evaluation since it allows stakeholders adjust their strategies. The essence of formative assessment is the presence of feedback.

As pointed out by Carlini and Ramos (2009), "evaluate a course is to diagnose the performance of each of its components - teachers, students, support staff, teaching materials, teaching project, virtual
environment” in order to verify the contribution and fitness to achieve the proposed objectives.

The research group “Evaluation and cooperation in distance education”, group in which we are attached with, has, over the years, established quality indicators for courses in order to promote the expected quality of the courses offered. We consider that it is essential that the institution has an evaluation methodology to achieve excellence in its processes and ongoing projects. Rethinking the indicators used in the evaluation of distance learning courses was the starting point of this research and we wanted to listen what the students consider quality in distance courses.

4. A LONGITUDINAL STUDY OF QUALITY IN DISTANCE EDUCATION COURSES: ANALYSIS OF RESULTS

The study was conducted based on what the students - teachers of public education-thought about quality in distance learning courses. They were participants of an postgraduate course and we sent a digital questionnaire available to all participants and we obtained 2,124 responses, representing 68.67% of the students enrolled at the time.

The quality was seen as a set of factors in different perspectives and ranges, which aimed to meet the student of the distance mode in a range of possibilities. Quality for the development of assessment tools were defined based on indicators found in the literature and discussed the following basic factors: pedagogical mediation, usability, instructional design, virtual learning environment, teaching materials, content and pedagogical architectures and was consisted of four open questions and 25 closed. Open questions sought the following evidence:

- How Pedagogical Mediation held throughout the course contribut to their academic performance?
- How the final work orientation contributed to your writing?
- Highlight of three (3) major improvements for a next course.
- a space for a free review of the course was offered demanding about its objectives, the content, pedagogical strategies, dynamics or any other relevant topic.

In other articles (Campos et all, 2011; 2013 and Roque, 2013) presented results of quantitative research that pointed to the reliability of the data collection instrument. It was possible to realize an equal distribution among the items showing a self-assessment of student. Interestingly, since almost 50% believes it can improve its commitment to the course and about 98% believes that the knowledge acquired throughout the course has improved their professional performance. Regarding the students’ opinions about the performance of the pedagogical mediator, we found an approval of the way in which mediators developed their work. The complexity of the pedagogical mediator performance in distance learning courses represents a bridge between the learner and the tutor and contributes to the possibility for the learner to reach its objectives (Moran, MASETTO and BEHRENS, 2008).

When designing the mediation as a global guiding action, the role of the mediator should prioritize the development and the enhancement of skills and competencies that promote the dialogue of students with the study materials, with the teachers-authors, fostering study practices characterized by the binomial autonomy-cooperation. Students also pointed to the importance of the mediator coupled with the students’ commitment. Finally, the quantitative research showed that the teaching should work the contents to provide a link from education to social practice, understood as a starting point and arrival of the educational work. Exercises should be privileged choosing subjects taken from reality, as integrative axes for pedagogical work and the link between theory and practice.

With regard to the qualitative research, we found through the results achieved by content analysis four categorizations (Roque et al., 2012) distributed in the following classes:

- **Class 1**: Improvement of the professional student achievement, composed of the responses of those who identified the participation of educational mediator as important for their professional development.
- **Class 2** and **Class 3**: Support in relation to questions and assistance in carrying out the activities and forums, respectively. Classes 2 and 3 are related to the tutor’s practice, that is, its dynamic function of the discussions in the forum, learning assessment, correction and feedback of their activities, a bridge between the students and the contents of disciplines, among others.
- **Class 4**: Permanency and succes on the course, highlighting the importance of educational mediator for this result and, more emphatically, as critical to the retention and graduation.
These data confirmed and reaffirmed the answers to quantitative analysis. Campos, Ziviani, Castro and Roque (2013) pointed out that the pedagogical mediator and the student do not have a static situation, forming a mediator-student dyad in the context of cooperation throughout the course towards a professional qualification and change of meaning which can be produced from this cooperation.

4.1. Quality from the perspective of students

The analysis of the discursive question concerning the request free comments from respondents was performed using the software ALCESTE - Analyse Lexicale par Contexte d’un Ensemblement de Segment de Texte, which verifies the co-occurrence of words in the statements that constitute the corpus of the research in order to organize and summarize the information considered most relevant. To perform the analysis of the responses were used successives descendants classifications in the text units found by Alceste software. In order to achieve a stability in the classes founded, the context units vary in size slightly. The comparison between the classifications allows the extraction the intersection classes between the classifications made, so that the found classes represent the ideas of the dominant themes in the responses of the students. These classes consist of text units configured from the KHI2 the association between classes.

The primary forms reveal what was found in the text analyzed by the software where 75,013 different words were analysed showing the initial connection units. These units, when segmented, form the text units or elemental context units. 98.97% of the text available for content analysis were analyzed, resulting in five classes as shown in Figure 1.

The last tree downward rating shows the distribution of grades and their implications. The upward classification highlights the words and the association between classes. There is a dendrogram by two arrays: Classes of 1 to 5 and Class 2, 3 and 4, showing a close-way between them.

According to Class 1, which associated the largest number of responses (30%), some subjects have been highlighted: delivery of activities, time associated with this delivery, stability of the learning environment and, finally, monitoring provided by the mediator. We named the Class 1 as related to teaching practices throughout the course.

We can notice in the individual’s statement #422 that the issue of a stable and informative learning environment was crucial for the achievement of activities.

The course was very good for me but I have a very intense daily schedule and it was difficult, but I managed. I think if the environment had a space to warn about the student activities it will be good. I didn’t find it. Sometimes I did not know what I had done and sent and I often could not see my works after sent it. (Khi2=21 Ind_422 Gen_F Turma_RS04).

Note the review #1361 in relation to the position of the mediator and the issue of affection.

(...) sometimes, I was wondering how to keep the class calm without losing the affection of students (Khi2 = 17 Ind_1361 Gen_F Turma_AM04).

The same applies to the # 270, which stands out as an important aspect collaboration between peers and the mediator.

(...) I never felt alone, when I had doubts and discuss it with the mediator and the companions of the class, we created a very good link, intensely live every
moment and life relationships (Khi2 = 14 Ind_270 Gen_F Turma_ES05).

The good evaluation of the course, highlighted in the statements related to Class 1, is reinforced in Class 5, which refers to thank for the opportunity to be part of the course.

Class 2, which we named "The knowledge society Vision", is related to the change that occurs in teacher education towards a society permeated by technology. This change lies in the use of technology in the classroom and in activities that students take in their professional life, that is, in Educational Technology Centers of states or municipalities, as the students were teachers of public schools.

The course was essential to my academic training and performance in technologies applied in education. It gave me a vision of my role as multiplier in the training of teachers regarding the pedagogical use of various media in our schools and in the improvement in the teaching-learning process. (Khi2 = 32 Ind_618 Gen_M Turma_AC04).

(...) Before the transformation that is happening in our society, we can consider that we are live discussion times that allow us to reflect on the information and communication technologies in the context of distance education (Khi2 = 31 Ind_1073 Gen_M Turma_SP07).

The technologies ongoing education provided me with a unique learning regarding the use of ICT in schools. Moreover, it enabled me to review ideas and educational strategies, accompanied by a new educational view (Khi2 = 29 Ind_1437 Gen_F Turma_AL01).

(...) The way of working with projects. Even I have suggested to the next show our school boards the title: Professor in the digital age. Based on this theme we will develop our action plan (Khi2 = 24 Ind_549 Gen_F Turma_MG03).

Class 3, which appears grouped with the Class 2, refers to the use of technology in the classroom and the improvement of didactic situations in the classroom with the use of technology. The students’ statements in this class pointed to the teachers training and the possibility of modifying their teaching in the classroom. The # 350 explains the change in its attitude in the classroom, while the # 1350 highlights the possibility of change in the methods used, showing the questioning methodology is good for the class.

(...) Everyone should go through this experience to grow professionally and modify their attitudes and methodologies (Khi2 = 21 Ind_350 Gen_F Turma_DF02).

It is a very rich current knowledge and as unique opportunity in the professional life of teachers, contributing to a rethink in pedagogical practice (Khi2 = 16 Ind_1350 Gen_F Turma_CE05).

(...) I consider very productive this course, with its structure that greatly contributed to my teaching practice, because I learned and experienced situations that I already dominate and it makes me think about it. (Khi2 = 26 Ind_399 Gen_F Turma_PR03).

(...) Really liked the course, I think it helped me in my professional and personal trajectory. I learned a lot and I want to pass this knowledge to my students and does not keep them to myself (Khi2 = 17 Ind_1887 Gen_F Turma_SC05).

In Class 4, related Classes 2 and 3, students pointed to the content and its presentation, using various situations and educational structures and emphasizing the importance of these elements in your professional life. We name this class as a “Teaching and Methodology”.

(...) The contents of the courses were great and easy to understand. The strategies and the dynamics contributed greatly to my education (Khi2 = 59 Ind_1971 Gen_F Turma_AP04).

(...) The content addressed were always very good. Dynamic and used teaching strategies were extremely important for the development of the course and for their understanding (Khi2 = 42 Ind_543 Gen_F Turma_DF02).

(...) The content and goals of each discipline are clear, easy to understand. The dynamics used in activities are very interesting (Khi2 = 41 Ind_1967 Gen_F Turma_MA01).

Important to note that the five classes found by analysis, (1) Teaching practices, (2) The Knowledge Society Vision, (3) The use of technology in the classroom, (4) Teaching and Methodology (5) Thanks to the staff course, show a concern for students beyond the course held.

5. FINAL COMMENTS

We did not present in this paper the factor analysis on coordinated or in correspondence. The important thing here was to verify as of the content analysis how classes are formed from the responses of the students, so that we could understand what emerged as ongoing quality concept for students in distance learning courses. We emphasized the question about
the course, its objectives, the discipline content, pedagogical strategies, dynamics, or any other topic that the student consider as relevant. We look for upward rating because this shows a complementary results and aid in the representation of local relations between the forms of the same class. We can observe this classification the Khi2 of each word within the class helping us to name it since the nomination of the class comes the concept of quality in the view of the students. So what can be considered as quality of a distance learning course on students’ view? If we return to the beginning of this article where one takes the quality as a set of factors in different perspectives and ranges from the paradigm of relevance and social responsibility, there are some factors in the free issue analysis, namely: teaching strategies, objectives, syllabus and its dynamics.

However, the pedagogical strategies need activities that can be defined as vehicles used by teachers to work the concepts. This will allow the student to live the experiences necessary for self transformation. One of the pedagogical mediator role is use pedagogical strategies in order to help the group find their rhythm of interaction and work, his style and personality in the learning community.

Important to realize that the five classes indicate the course applicability, the professional development, the engagement in obtaining the necessary skills to meet the demand of public policies. Therefore, the quality of a course can only be determined in a given context and analyzed from the perspective of different actors involved in the process. This paper presented the perspective of students, public school teachers, and seeked to show the concept of quality linked to the context where the course occurs.

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