



**SUSTAINABLE AND INNOVATIVE MODEL FOR DISTANCE EDUCATION IN AN
INTERNATIONAL NETWORK**

**UM MODELO INOVADOR E SUSTENTÁVEL PARA EDUCAÇÃO A DISTÂNCIA
EM UMA REDE INTERNACIONAL**

📍 Susane Garrido

Doutora em Informática na Educação (com ênfase em Neurocognição) pela Universidade Federal do Rio Grande do Sul (2006); Mestre em Educação pela Pontifícia Universidade Católica do Rio Grande do Sul (1995) e Graduada em Química (Bacharelado e Licenciatura) pela Pontifícia Universidade Católica do Rio Grande do Sul (1989). Atualmente é professora na Fundação Dom Cabral (MG) e na Universidade Anhembi Morumbi (SP). Integrou os Programas de Pós Graduação stricto sensu em Educação e em Psicologia da UTP -Universidade TUIUTI do Paraná de 2015 à 2017/1. E integra a Pós graduação Lato sensu da Anhembi Morumbi. Faz parte das Comissões de Educação a Distância do CNE (Conselho Nacional de Educação) e do INEP (Instituto de Pesquisas Anísio Teixeira - MEC). É Membro da ABED e das Comissões científicas do CIAED (Congresso Internacional de Educação a Distância e da RBAAD (Revista Brasileira de Aprendizagem Aberta e a Distância. Os principais interesses de Pesquisa e de Palestras compreendem os Processos de Gestão e de Políticas Públicas em Educação a Distância Superior, e os Processos neurocognitivos inclusos em atividades digitais e virtuais. Nos últimos 4 anos foi Reitora da Estácio em SP, Diretora Nacional de Regulação e Suporte da Estácio no RJ e Diretora de Operações e Acadêmica da Estácio em Porto Alegre. Atuou na Assessoria/Representação na Diretoria de Relações Institucionais e de Sustentabilidade do Grupo Estácio (Brasil). Em 2017 e 2018 como Diretora de Gestão Acadêmica e de Virtualização da Rede ILUMNO no Brasil.



ABSTRACT

The purpose of this document is to describe an institutional case for higher education managed and implemented by this author and her team while academic and online courses principal by perspectives as cooperation and innovative processes, in a company of education in Brazil, in the last 3 years. The *Company* will be called here as *Company X*, in order to ethically preserve its identity. It is a pan-regional higher education network of universities in the Latin America and Caribbean region, but a medium group in Brazil with 55 thousand students and it has two universities in Brazil. The role of this Board is organized into three responsibilities: creation of contents and methodologies for all the courses of the two universities; the training of the professors to act in the courses and the monitoring of the whole process (of production and operational) of the distance modality. For a sustainable and innovative model it was necessary to carry out a vast study on the *status quo* of the model in force at the time and, from this evaluation, to detect problems and strengths in order to create dimensions and indicators for necessary changes throughout the world. Based on assumptions from *Company X* such as regulation in Brazil for higher education and academic quality, we started with a process to understand and to promote what could be the ideal for the institutional context, which will be described here. It was considered the Brazilian context, critical rates of poverty, low demographic and basic education indexes and other aspects, and with this it was verified the necessity of the balance among three pillars, low price – distance education/hybrid courses – high quality in education. Then, from more macro considerations, and from the identification of what should be improved, such as the abandonment rates, boring subjects, inefficient capacities, costs and long delays in production, we set out to model co-creation with the academic community students, teachers, authors and technical and administrative staff. The design of the sustainable model involved the resizing of the roles of the *Company's* different teams, partnerships with technology companies, the use of open and free resources, continuous training based on active and innovative methodologies, global trends and the autonomy of teachers and of authors for creations, provided that in accordance with the Brazilian regulation and the brand of *Company X*.

Keywords: innovative management, flexible learning, learning objects.



RESUMO

O objetivo deste artigo é descrever um caso institucional em educação superior gerenciado e implementado pela autora e sua equipe, enquanto reitora de cursos acadêmicos e online, a partir de perspectivas como cooperação e processo de inovação, em um grupo educacional no Brasil, nos últimos três anos. O grupo será chamado de Company X, como forma de preservar sua identidade. Se trata de uma rede de universidades pan-regional atuante na América Latina e Caribe, cujo porte no Brasil é médio, contando com 55 mil alunos e duas universidades no país. O papel desta equipe é organizado em três responsabilidades: criação de conteúdo e metodologia para todos os cursos das duas universidades; treinamento de professores para atuarem nesses cursos; e monitoramento de todo o processo (produção e operacional) da modalidade a distância. Para um modelo sustentável e inovador, foi preciso realizar um grande estudo sobre o status quo do modelo em funcionamento naquele período e, a partir desta avaliação, detectar seus pontos fortes e fracos como forma de criar dimensões e indicadores para mudanças necessárias. Baseada em algumas premissas como a regulação do ensino superior no Brasil e qualidade acadêmico, demos início a um processo para entender e promover o que seria ideal naquele modelo institucional, que será descrito aqui. Consideramos o contexto brasileiro, os índices de pobreza, dados demográficos e de educação básica, entre outros aspectos, e a partir deles verificamos a necessidade de um equilíbrio de três pilares: preço baixo, educação a distância/cursos híbridos e alta qualidade da educação. A partir de considerações macro e da identificação do que deveria ser aprimorado, como as taxas de evasão, assuntos desinteressantes, instalações ineficientes, custos e atrasos na produção, criamos o modelo de co-criação com os membros da comunidade acadêmica, professores, alunos, autores e a equipe de técnicos-administrativos. O desenho do modelo envolveu a reestruturação dos papéis de diferentes equipes dentro da instituição, o uso de ferramentas gratuitas e open-source, tendências globais e a autonomia de professores e autores para a criação, desde que em acordo com a legislação brasileira e a marca da Company X.

Palavras-chave: gestão inovadora, aprendizado flexível, objetos de aprendizado.



1 THE MARKET OF HIGHER EDUCATION IN BRASIL

In 2014 I wrote an article in which I mention the necessity of a big change on Brazilian educational and economic policies due the expressive negative results in world rankings of illiteracy for example, which brings consequences such as doubts about the quality of higher education.

The numbers do not lie, but even so we remain in the same paradigm:

(...) As Brazilian culture is closely attached to its historical heritage whose outdated paradigms have resulted in stagnation and inability to assess behaviors that challenge the difference between 'real politics' and 'mised politics', we are led to infer that we will have unacceptably low individual and country development indices. The same will happen to investment in technology, teacher qualification and development, research and the rate of students going to higher education courses, which shall remain below 17% of the population. The willingness to change the status quo and the way to address public policies that may leverage better life quality for Brazilian people is the key to Brazil being viewed as a really serious country and to attracting equally serious partners, best practices, models and projects (Garrido: 2014, p.4).

At the same time that we have this kind of inertia about this subject, in the last 10 years the higher education system in Brazil has been target of many national and international educational groups with interest in purchases or fusions, what is going to create a big business for this segment.

According to INEP¹ data, in Brazil there are around 2.152 private universities (including faculties and university centers with different sizes and regulations), which represents almost 75% of all enrollments of students; the other 25% are in public institutions. However, of these 75% enrollments, about 30% are within the large educational private groups and another part is with confessional, community and philanthropic universities.

Citing only the large and medium groups of higher education in Brazil, we have companies as Kroton (around 850 thousand students), Estácio (440 thousand students), UNIP (420 thousand), Laureate (300 thousand), Cruzeiro do Sul (150 thousand), Universidade Brasil (120 thousand), Adtalem (120 thousand), Ser Educacional (140 thousand), Uninove (140 thousand), Ânima (80 thousand) and Ilumno (50 thousand).

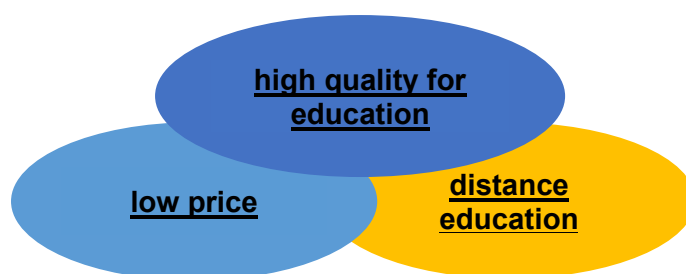
¹ INEP: Instituto Anísio Teixeira: Instituto Nacional de Estudos e Pesquisas educacionais do MEC; In <http://portal.inep.gov.br/web/guest/inicio>



There are many different opinions about this growth in Brazil once it did not necessarily generate high quality education, but certainly it has created opportunities for students that could not access higher education before.

When a big market installs itself in a segment, the high competitiveness is eminent, but in a country with critical rates of poverty, low demographic and basic education indexes in many regions, two phenomena happen: the need of low prices and the rise of distance education as the main option of many students.

However, the distance education is a complex and expensive modality to start, despite being a good solution for contexts like the Brazilian one; so, we have, perhaps, the most important challenge to survival of Brazilian universities, the balance of the tripod:



Pillars of the Balance of Higher education in Brazil. Source: the authors.

The modality is an innovation, but only if it carries along technological needs and possibilities, and students. Under this view, when thinking in medium or long terms, the models separating the two of them is not innovative, but it simply solves a short-term problem, leaving out that sustainability is no longer portrayed that way.

Therefore, a possibility of solution is to treat the modalities combined, face to face and online, as blended courses. The dissemination of self-customized offers are an imminent reality we have to think about now. They also need to be aligned with the Rules and the Assessment, because when we brake paradigms from hampered syllabus, in which, still today, we cannot draw according to student's interests regarding modalities, we will keep having simple courses, training activities, programs, subjects or whatever we may call them, either face to face or virtual ones.

This scenario predicts in part what was necessary to solve inside the cases demonstrated here.



2 REGULATION/LAW IN BRAZIL

The last decree for distance education in Brazil is the Decree 9057/2017² and, among other things, it points for a new opening, more flexible than before, for initiatives in distance education. The decree perspective is very important because the old decree had closed initiatives hybrids, for example, just as it became compulsory the existence of the “polos”, physical centers for academic practices or simply bureaucratic aspects of the students.

It is important to mention that the regulation of higher education in Brazil is very vast, with a large number of laws, decrees, ordinances and resolutions, which keeps universities in a constant process of adaptation to these laws, as well as in the process of preparation for evaluations of the Ministry of Education regarding institutional aspects (every 5 years) and the courses, in the authorization of the same and in the recognitions and renewals of recognitions.

One of the innovations approved in the Decree is the possibility of the existence of a virtual university, that is, without any on-site course necessary (which was the prerogative of the previous Decree); with this opening, there is a real possibility of courses without classroom activities, without the need of physical spaces and therefore of heavy physical infrastructure, unless this is an option of the course projects, obviously.

3 THE CONTEXT OF THE CASE

This case was treated by the author and her team when she had been Academic and Distance Education Principal of the *Company X* in Brazil, a pan-regional higher education network of universities in Latin America and Caribbean region. The *Company X* has two universities in Brazil in two different states with around 55 thousand students between face to face and online courses distributed in undergrad and postgrad courses.

Until 2017 the Company produced about 100 online subjects created every 4 months considering every part of process, since Company goals, demand from each course’s curriculum, authorship creation of contents, learning objects production, design adjustments, packaging of subjects and offers on the platforms for students with the respective affiliation in each university, once Brazil does not allow students belong at educational groups, but only at each university even if these universities are from educational groups.

² Decree 9057. Available in: http://www.planalto.gov.br/ccivil_03/_Ato2015-2018/2017/Decreto/D9057.htm



Therefore, the process was done but was not analyzed and reasoned for path correction or resource optimization. So, when of the new management started on May 2017.³

Based on assumptions, needs and problems found at the 2 universities belong the group, the new Model began to be built.

3.1 Assumptions

Regulatory Assumptions: Attendance to regulation/evaluation of undergraduate courses from the Ministry of Education regarding national curricular guidelines (DCNs), interaction (user with user), interactivity (user and technology), multidisciplinary team (authorship team, design, production and mentoring) and teacher training.

Company X Assumptions: To implement technology and innovation to partners, to increase access to quality education, while improving student outcomes and the lives in the communities we serve.

Academic Quality Assumptions: To create interactive, updated, efficient and attractive courses, for training for the students.

The needs and problems mentioned below were detected by institutional evaluations, analysis from universities (locus of implementations), and acting by own academic and distance education Principal.

3.2 Students evasion

Historically in Brazil the evasion or abandonment inside online courses has presented high numbers at universities, around 70% per 2005-2007, when was necessary a strong changing in distance learning regulation from Ministry of Education including directed supervision at universities, mainly in “polos”, centers intended for practices and bureaucratic processes; the evasion fell to around 50% between 2008-2011 and nowadays it is around 40%, similar with face to face courses.

However, this number inside the two universities of study was about 46% demonstrating a lack of satisfaction on the part of the courses.

³ May 2017: Starting of the new Principal of the Company responsible for Distance Education (Online Courses) and Academic Development



3.3 Non-visualization of some resources and the need of interactive educational resources by students

The last 3 Horizon Reports editions has presented the relevance of the interactive objects as capable resources of more learning besides promoters of the innovative methodologies, even though the resources were produced with the structure containing very long videos, a few interactive features and inductive texts in a behaviorist perspective.

In analyzing the activities we observed that the long videos were not watched until the end, and the interaction in the discussion forums was minimal and in some cases, nonexistent, what denoted waste and inefficiency in the production of videos, for example, poor communication, which are contributing factors for evasion.

It is important to consider that the occurrence of the disciplines in these institutions happens with a workload of 70 hours to be taken by the students in 3 months, that is, about 23 hours per month, per discipline - the offer occurs with a maximum of 3 disciplines at a time. Thus, it was found that most of the resources found in the subjects in these formats were .pdf texts and videos; in rare cases, depending on the author, the subject presented some more interactive resource.

For the Company's brand, the fact that the resources and methodologies were out of date or deficient represented a very serious problem, since the Company excelled precisely because of these aspects in order to make its university sustainable and innovative. So, there was a huge discrepancy between what was being done and what should be done.

3.4 Non-agile production

The production team almost always had delays in delivering about 100 disciplines per month; she was notoriously tired; was not clear about the flow of the production conveyor; has no control over the selection and delivery of the author and pleaded for an increase in the number of people in the team, which would denote an increase in the cost of production and not necessarily the agility and effectiveness required.

There was also a gap in the production process: *there was no production of interactive resources*, just videos and texts; In addition, the authors did not respect the deadlines for evaluating the delivery of their written material, often not going through the screening process and the evaluation of the team, which often collided with the new productions in the running



machine; in short, the lack of management of the team was notorious, overwhelming the team as a whole and produced dissatisfaction at all stages of the production chain.

At the time of the remodeling of the academic process and the production of contents, the team responsible for production was responsible for the entire production chain, from hiring the authors, usually professors of the two universities, until the production itself, including design and posting of subjects in the platform and the control of student's enrollment.

These assignments were confusing in relation to other sectors of the two universities, such as the courses coordinating departments and the more operational departments such as enrollment.

3.5 Standardization of layout and outdated design

When it comes to something we usually call "academic freedom", a very important concept on the academic world, disciplines of completely different courses such as architecture and pedagogy, for example, were produced in the same way, with the same design, plot, quantity of inductive questions and the methodological line, which did not only made the disciplines "exhaustive and uninteresting" but rendered them inefficient due to repetitions and non-attendance to the specificities of each knowledge field.

From a questionnaire about the disciplines in course in the first semester of 2017, it was possible to identify the dissatisfaction of students and teachers in relation to the current model. Many answers have pointed that, the fact that all the disciplines of all areas of knowledge have the same methodological characteristics, including textual formats and sizes, style and size of videos, made them extremely tedious and demotivating.

The teachers of the subjects/disciplines were usually the authors of the discipline's contents as well, and this also gave them a lack of motivation to write the subjects since they could not create or modify.

While this bothered the authors and teachers, this created a certain accommodation in the authorship process, making them automatically resist training or updates in their constructions because there was no belief that they would learn something new with the team.



3.6 High operating cost

The authorship of the courses and the size of the production team was the biggest offender in terms of costs. In the authorship, however, there were no guarantees for the deliveries and neither in the production team.

In addition, several authors had more than 2 disciplines to produce at the same time, which generated an overload to them, and still a lot of difficulty of receiving these deliveries, since these authors were the professors of the disciplines themselves and therefore had a course coordinator responsible for them; this action created a hierarchical problem for the production team.

4 ANALYSIS AND PROPOSAL FOR THE MODEL

Since these evaluations, analysis dimensions were identified and indicators were created for the reconstruction of the model, making it more attractive and effective for student learning and more sustainable to universities, this is what I intend to show in terms of dimensions, indicators and implementation of actions/solutions, according to the table:

DIMENSION	INDICATOR	ACCOUNTING OF RESULTS
PRODUCTION (MATERIAL BUILDING)	* AUTHORSHIP * SOURCES * TECHNOLOGY	* CO CREATION FOR AGILITY * AUTHORSHIP WITH FLEXIBILITY TO CREATE * VIDEOS SHORTER AND PLUS LEARNING OBJECTS
TEACHERS	TRAINING	* 3 TRAINING ONLINE FOR TUTORING * CREATION OF COMMUNITY ONLINE FOR ATTENDANCE
COST	INTERNAL TEAM X PRODUCTION CAPACITY	* PARTNERSHIP FOR PRODUCTION * OUTSOURCING
BRAND	QUALITY EDUCATION	* EDUCATIONAL SOURCES * CREATION IN REPOSITORY FOR USING OF THE NETWORK



DIMENSION	INDICATOR	ACCOUNTING OF RESULTS
ACADEMIC QUALITY	<ul style="list-style-type: none"> * SUBJECTS * COURSES * METHODOLOGIES 	<ul style="list-style-type: none"> * DIFFERENT SUBJECTS, CONSIDERING SINGULARITY OF KNOWLEDGE AREAS * SUBJECTS BUILDING WITH SPECIFICITY OF KNOWLEDGE AREAS * ACTIVE AND INNOVATIVE METHODOLOGIES

Table Dimensions/Indicators/Solutions-Results

5 SUSTAINABLE AND INNOVATIVE MODEL PROPOSED

The treatment for each dimension/indicator, which on corroborate a sustainable and innovative model for distance education in the Company X generated the following implementations:

5.1 Outsourcing in production of the sources/learning objects and Using of the interactive sources, including open sources' repository

The partnership created with 3 technology companies became responsible for about 33% of the total production of the courses, while the remaining 66% of production was at the discretion of around 33% for the use of open or free resources, and the other 33 % were left to the Company X own production team to perform. This generated speed, a more robust feedback look in that it acted with a dynamic of co-creation in the process, in addition to bringing a lot of innovation, since the decay started having characteristics of diversity, in fact.

Therefore, the management for all of the production was with the Distance Education Principal in cooperation with the administrations of the two universities.

5.2 Interface of the Production Team with other teams of the Universities

Production and operations assignments were separated from the Department of Distance Education; thus, the production team had no more involvement with the teachers of the disciplines nor with the enrollments of the students; the distance education operation team began to operate only with the accompaniment of students and teachers in the platform of online



courses, while enrollments and other bureaucratic processes were in charge of the department responsible for this in each university.

In addition, the interaction of the production team with the course corrections was strengthened, which began to assume academic control of the authors' performances, focusing on the team, commitment only to materials and instructive design.

5.3 Creation of the “methodological model no standard” for subject to respect the knowledge areas/Teachers acting like authors and tutors

The authorship was diverse, with many more authors from outside the two universities and limiting the creation of disciplines to only two, by author. The authorship of the disciplines by the professors from within the universities was treated as the exception to the rule of authorship from external ones.

The teachers of the two institutions began to have a certain autonomy to create the most appropriate methodologies for their areas of knowledge, only using "the material produced by the authors", but not transforming this material "in the classroom itself" as previously done.

An online community was created to assist teachers' teams.

5.4 Online training/attendance of teachers and students in two levels of awareness and updating

A Training Program for teachers/authors was created by the Distance Education Board in an online format, based on and updated by Horizon Report Trends and other references already mentioned here.

5.5 Active and innovative methodologies

In the training, both authors and teachers came to know how to apply in their subjects different innovative methodologies such as flipped classroom, peer instruction, problem-based learning (PBL), team-based learning (TBL), conceptual maps and others.



6 FIRST CONCLUSIONS

Objectively understanding online or blended courses as a possible educational path, facilitating a great part of the population, who otherwise would not enroll in Higher Education studies, should guide the choice of a University, due to a complex arsenal involving virtualized Education (different from the face-to-face), with different models, specialized trainings, resources, as well as targeting where and how one wants to reach, and mainly, from people who are engaged on a very peculiar academic and administrative culture, working with autonomy after being installed.

I believe we are very close to have the university of the future, not by abandoning its past beliefs, but by moving on to reinvent itself to serve the target public.

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