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Expanded School: Cultural Convergence and Teacher's Online Education

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Abstract: The presented work invites the reader to engage with the proposed *Expanded School*, deterritorialized from time and space of higher education institutions. The experience of the teacher training in the course "Methodology to quality in online learning" with the participation of five universities (one in North America, two in Latin America, and two in Europe) will be reported and analyzed in order to gather and understand the difficulties and advances in reference to teaching practice in online education and then propose new education systems and assess the quality of interaction in respect to online learning. The context of education in transition from industrial and post-industrial society and an online education proposal allowing the school expansion to have experiences that go beyond their territory delimited by the classroom and walls will be presented. By the school expansion to the Web 2.0, the virtual learning spaces potentiate also new pathways that lead teachers and students to review how learning occurs in cyberculture.

Keywords: Expanded School, Online Teacher Education, Collaborative Spaces for Education

1. Introduction

Web 2.0 brought online education to a new dimension of communication and stressed the need to weigh the deterritorialized school, which means it expanded its physical space and possibilities of sharing and collaboration. Web 2.0 provides a consistent educational space design with the ethics and aesthetics of cybergeneration and their social and cultural capital in dialogue with the formal knowledge. The school has a social function, it acts as a mediator of social interaction as it propagates institutional integration values between students and teachers within the world. It is this dialogic relationship that knowledge is built, which formerly happened in limited space, such as school, but now it also propagates in the cyberspace.

We think that the idea of school as a memory of humanity, as a building system of knowledge, moral and social enrichment, a space in which to consider each student as a human being searching for himself in collaborative reflection with others and with the world that surrounds ih, still has reason to exist in the beginning of the new millennium. There is a need to be deeply renewed and the current TIC *(Tecnologias de Informação e Comunicação – Information Technology in Education Study)* (emphasis added by author) contains the necessary ingredients to facilitate this change.[1] [1]

The use of the term *Expanded School* for education thought outside the formal school environment, virtual or not, proposes new learning pathways and teacher performance, states an ideological position regarding the continuities, changes and substitutions with respect to the educational process and teacher training. The school has been an important social institution in the formation of individuals throughout history, however it needs to be open to dialogue with the cultural, social and technological changes, particularly with the computer technology revolution.

The *Expanded School* is to emphasize the importance of

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1 "Pensamos que a ideia de escola como memória da humanidade, como sistema de construção do saber, de enriquecimento moral e social, um espaço em que se considere cada aluno como um ser humano a procura de si próprio, em reflexão conjunta com os demais e com o mundo que o rodeia, tem ainda razão de existir nesse início de novo milênio. Precisa sim é de ser profundamente renovada e as atuais TIC contém os ingredientes necessários para favorecer essa mudança."

school, but also the urgent need for changes required by the so called cybergeneration placed in the context of cyberculture that only connects with education when suitable with the changes in the 21st century. The architecture of the *Expanded School* has the form of a digital network, relying on the Web 2.0 technology. The use of the virtual social networks created as an extension of the school space expands the educational processes, temporarily and spatially, the school becomes ubiquitous, and thus, new meanings for the production of knowledge and learning arise, that is, if the proposal of using the expanded space brings innovational ideas for educational practice.

With reference to the possibilities of learning in collaborative spaces for online education and expanding the school boundaries, the group of universities from five countries – Universidade Presbiteriana Mackenzie (Brazil), Universidad Anauhac (Mexico), Universidad Santo Tomás (Colombia), Universidade de Évora (Portugal), and OBS - Business School (Spain) - gathered in order to achieve the school's expansion action. For this, the "Methodology to quality in online learning" was proposed for university teachers to attend the online continuing learning. The Universidade Presbiteriana Mackenzie in Brazil, based in São Paulo, had its group represented by the teachers from the Center for Education, Philosophy and Theology (CEFT – Centro de Educação, Filosofia e Teologia). Some of the disciplines and courses of CEFT began to be offered as distance learning manner, allowing teachers to prepare the teaching materials of their disciplines, and also try the "Methodology to quality in online learning" course as students.

Expanded communication brings together individuals with common interests and different views, and exposes the difficulties and resistances towards the new educational design. That given, it is possible to assert that the experience of the *Expanded School* was interesting, because many teachers could understand how the path of individual and group learning in an virtual environment is difficult. The ethics and aesthetics of the hybrid language cyberculture available on the Web 2.0 can bring educators to their learners, enable the exchange of roles and allow the learner to be in the position of protagonist of his own learning process and to develop skills that dialogue with the contemporary society and, thus, act as professionals and citizens, as asserted by Gómez (2015). To use knowledge creatively by features that require flexibility, to deal with uncertainty of mental pathways which invites the learner to experiment, make mistakes, and investigate all the time.

Also, the ethics and aesthetic will not make sense to the teachers who have studied and worked in a more traditional educational environment, whereas teaching was centered exclusively in activities in the process of transmission, and this is felt when experiencing, in the role of student and as a teacher.

The development of communication skills requires a cultivation of diverse and complex competences: an information culture that allows efficient access, critical and agile evaluation, rigorous and creative use of the media that will help to understand and critically analyze the role of media in society and its communication possibilities; an expressive culture that encourages the use of digital tools to search, communicate, express, and create.^{2} [2]

Digital technology does not guarantee changes in education, the investment in machinery proved itself ineffective since the 90's when computers, smart data projectors and whiteboards invaded universities. Distance learning also did not bring a new concept of education, we have digitalized tangible resources and transformed the teacher to an actor of his classroom. These questions guided the course so that, collaboratively, each university could share their experiences and studies to the network and therefore to be discussed.

The education structure is still the foundation of disconnected information with no questioning, making the school knowledge a jumble of concepts with no application, the theory and practice unsteady, and there is no switchover to innovation in education.

We seek to chart new paths for the continuity of learning for teachers and bring to the online course hybrid languages and knowledge, and new learning and communication proposals that brings together new generations of academic knowledge.

The 21st century provided with the technological revolution possibilities of access to places, information and communication through the Internet that before wasn't even possible to imagine. We know of events across the world synchronously, we can attend courses at prestigious universities in contact with teachers from all over the world.

The purpose of the "Methodology to quality in online learning" course is to experience and realize new educational scenarios, based on the teacher role in the online and hybrid course. By the *Expanded School* experience, teachers have provided interactions and reflections on their professional development and of the student.

Diversity, optionality and commitment the real life of the community are the keys to the personal development of each individual, passionate about what he does and satisfied with his interactions. There won't be two kids alike that experience a situation exactly in the same way. We can not expect children to simply discover the life we offer them, fossilized in educational programs and books. We also have to let them act, experiment and create.^{3} [3]

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2 "O desenvolvimento da capacidade de comunicação requer cultivar competências diversas e complexas: uma cultura informacional que permite um acesso eficiente, avaliação crítica e utilização ágil, rigorosa e criativa dos meios de comunicação que ajude a como compreender e a analisar criticamente o papel da mídia na sociedade e as possibilidades comunicativas dos meios de comunicação; uma cultura expressiva que incentive a utilização de ferramentas digitais para pesquisar, comunicar, expressar e criar."

3"Diversidade, opcionalidade e compromisso com a vida real da comunidade são as chaves para o desenvolvimento pessoal de cada sujeito, apaixonado pelo que faz e satisfeito com as suas interações Não há duas crianças iguais, nem que experimentem uma situação exatamente da mesma forma. Não podemos esperar que as crianças simplesmente descubram a vida que lhes oferecemos fossilizada

The encouragement of autonomy for school courses and learning tools arise as a proposal to make contrast with the didactic model uniformity, which equals to a hampered *curriculum*, techniques and technologies with no connection to the current generation. The choice of an education based on diversity, hybridization and customization requires from the teacher a complex professional work and to be careful to promote to himself and his students self-determination that involves responsibility with freedom. It is not a very difficult task for teachers, managers and students, as the uniform and directed model is part of our school and organizational culture; we are not self-organized and self-regulated in our actions.

We have to understand the importance of education and its expansion capacity in the real world of work dimension constantly under transformation.

2. Building Pathways to Learning

The contact with the university teachers that participated in the collaborative action of a distance learning course for teacher training indicates the failure of education for teachers focused on higher education in the contemporary world. One of the main issues is the difficulty in tracking the social and cultural changes with reflection in education, as to accompany them requires study and constant research in education and openness to dialogue with the students in order to understand their concerns and difficulties regarding life project of those who will be future professionals working in the market.

The open communication provided by the Internet, especially after Web 2.0, has redesigned the form of participation and access to information with a concept of network communication and constant interaction, which leads to new practices that reconfigure the educational spaces. This is visible at any place or situation: the relationship with art, politics, consumption, economy, and especially the relationship between people which radically transformed.

The training experience of distance learning of teachers who attended the course and contact with other realities signalized the existence of a gap in respect to a new educational paradigm with opportunities to diversify activities, tools, languages, and to expand the territory of the school yet by concrete foundation designed in the 20th century which prevails in most countries.

Young people learn all day long all over the world. They have access to videos, social networking, different content, and the exchange of information changes the way of writing, reading, producing and disseminating the ways of thinking. This should be an educational concern, as the student must be prepared to act professionally in the cyberculture reality.

The object of this study, the course "Methodology to quality in online learning", has a conception of a network

communication and of building collaborative spaces. Groups and individuals may be the architects of collaborative education through their participation.

The school expansion walks a path of learning that is deterritorialized, flexible when encouraging self-organization and self-regulation and, therefore, it is possible to strengthen and deepen the dialogue between technology - machine and man that results in cognitive interaction which enhances learning and production of knowledge and the development of skills that were resignified for the 21st century.

The new design presented with the experience of the "Methodology to quality in online learning" course opens to learning free routes that emphasize the autonomy of teacher and student, and is not an easy acceptance proposal in the field of higher education, because quality control is more difficult and the traditional assessments should be reviewed or we may have a cascade of changes that reinforce the need of found for a complex, systemic and transdisciplinary school.

The computational technology revolution enables ways of rethinking the work, communication and access to information in all areas. New jobs have appeared, others died, and companies were forced to reformulate their strategies and business. The education that is at the frontline to form professional knowledge which reflects these changes can not keep up: there is a mismatch that demands projects and urgent actions to take synchronized steps.

To redesign the classroom emphasizing collaboration and information sharing, converging media and adding to that the hybrid languages as mediators for learning is scenario the teacher must realize which facilitates his work and the student education. To give up the role of being the protagonist is to share responsibility for the learning pathway with the student. By emphasizing the *autopoiesi* (a Greek term having the etymology *auto* meaning own and *poiein*, to do, or the noun *poiesis* as self-evaluation, self-assessment, and self-engendering) it is signalized a possible bridge between intentionality levels of self-organizational life. [4]

The expansion of the school takes into account the routes which values cultural and historical characteristics of its actors. It is, therefore, necessary to have a look at the creation of collaborative spaces between teachers so they can share experiences in the context of teaching in virtual environments that enhance communication and interaction, since the initial training does not offer conditions for this type of learning. The "Methodology to quality in online learning" course was designed with the perspective of training with diverse realities allowing exchanges of information and experiences.

It is worth mentioning that collaborative spaces with media convergence are emerging also in the context of interactional collaboration, since the technology allows an expansion to international territories opening space for dialogue about what the challenges of this form of learning means in the contemporary educational setting. It is about appropriating languages that enable dialogue, exchange of experience, and collaborative actions to rethink and to reorganize the teaching action for this new *Expanded School* setting.

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em programas e livros didáticos. Temos também que deixá-las atuar, experimentar e criar."

3. Teacher Education: Collaborative Spaces for Immersion Experience

If we consider the world we live in, in which uncertainty and changes became uncontrollable, teacher education brings with it great challenges of updating and strategies that meet all these demands which are in constant transformation. It is essential to assist teachers in their new path meeting a new student profile. According to Cosmas and Trinity (2015), nowadays, it is important to "recognize the traditional centers of teaching reference ceased to be the heritage of information, procedures, and attitudes [...] before electing the relationship that establish with that heritage as the center of the educational concerns of teachers."[4] [5]

This displacement of the teacher's role in which his practice is to be focused on problem solving, encouraging critical thinking that encourages the active participation of students - much needed for the contemporary society - sets the teacher in a new position which becomes a challenge to establish a dialogue. According to the authors,

"the teacher would occupy a strategically vital place as someone that attempts to offer an object of knowledge in which the other can seize in order to examine it, take it in his hands, manipulate it, appropriate it or misrepresenting it and, therefore, 'to have something of him in it.'"[5] [6]

Thus, to address these very challenges of contemporary society on the teaching action, we corroborate with the statement of the authors who emphasize the importance of the teacher reflexivity and the sharing of knowledge and experiences among teachers and, today, a necessary condition to the assertion of a more rewarding teaching activity and exercise a consistent professionalism with the existence of an increasingly demanding school because it is becoming more and more complex.[6] [7]

It is notable that teachers will not be able to avoid reflection on challenges, as well as the school and the public policies authorities, since changes do not depend solely on the teacher's action.

4. Methodology to Quality in Online Learning

The "Methodology to quality in online learning" course was conceived in a virtual learning environment and classic

tools were used in order to bring about a new form of communication and to intensify the interaction between teachers working in distance learning. All tools are available and their functions and potentials are explained to the group: synchronous functions such as video conferencing and chat, and asynchronous such as forum and study material. Teachers have access to the course using the Internet and were able to participate having as support the principle of ubiquity, from any accessible place for interaction.

The course was one month long (June 1st to 28th, 2016), contained four modules totalizing 20 hours long, and was held in two languages: Portuguese and Spanish. Each module lasted a week and included synchronous moments (videoconferences) and asynchronous (reading, forum, chat, and other online activities) which ensured greater dynamism and a possibility of interaction and interpersonal relationships among all participants. It was offered 10 spaces for each participating institution in order for them to invite their teachers.

The proposed methodology by module had two synchronous moments: an opening videoconference and a closure lasting – one hour long each. At this time, it was possible the participation of teachers by chat or video which ensured relevant moments of dynamism and group participation through comments and questions to teachers and participants. The program also conducted a chat activity in the third module which provided a moment of interaction and the use of the present tool by teachers. In synchronous moments, readings were indicated in the discussion forum and online activities, one of them collaborative by the use of the Wikki tool.

The modules were organized from each institution proposition and was considered the relevance of the subject to the organizing group. Thus, the modules addressed the following issues: 1. development of educational content based on quality instruments; 2. collaborative learning strategies; 3. affective language: interfaces with online teaching; and 4. key points of the online methodology. It was presented: 7 videoconferences, two for each module (opening and closing); 1 chat activity; and 4 synchronous activities (forum, wikki, analysis and readings). The course was attended by 31 teachers.

The virtual learning environment used was the BlackBord and the main tools were: forum, chat, wikki, and videoconferencing. The teaching materials were organized by teachers and posted in the virtual environment. It is worth to mention that the construction of the course was held through monthly videoconferences with the participation of teachers from the 5 countries, so that the organization of the course proposed took place as an international collaborative process, in which the group needed to consider aspects such as time zone, language, and even the decision to propose a course in two languages. The materials were organized by module according to the language.

From the assumptions discussed so far, it was some relevant considerations regarding the "Methodology to quality in online learning" that aims to be a proposal for

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4 "reconhecer que os polos tradicionais de referencia do trabalho docente deixam de ser o patrimônio de informações, procedimentos e atitudes (...) trata-se antes de eleger a relação que esses últimos estabelecem com aquele patrimônio como o centro das preocupações educativas dos professores."

5 "o professor passaria a ocupar um lugar estrategicamente imprescindível como o de alguém que "tenta oferecer um objeto de saber de que o outro possa apoderar-se, para examiná-lo, para pegá-lo nas mãos, para manipulá-lo, para apropriar-se dele ou desvirtuá-lo, enfim para 'por algo de si nele'."

6 "a reflexidade docente e da partilha de saberes e experiências entre os professores e, hoje, uma condição necessária à afirmação de uma atividade docente mais gratificante e no exercício de uma profissionalidade congruente com a existência de uma Escola cada vez mais exigente porque cada vez mais complexa."

international collaborative work experience as a distance learning for teacher training.

In the 2nd International Seminar on online higher education in management, organized by OBS Business School (Spain), proposed to create a group of collaborative studies focused on the emerging teaching practices in the contemporary scenario. They associated to this group 5 universities of great international recognition from 5 countries: Universidade Presbiteriana Mackenzie (Brazil), Univeridad Anauhac (Mexico), Universidad Santo Tomás (Colombia), Universidade de Évora (Portugal), and OBS - Business School (Spain).

The main idea of this group was to offer collaborative spaces for teachers so they could have access to a space for interaction and construction of proposals that would make sense to the participants dialoguing with the teaching reality needs in different educational settings of the participating countries. Thus, the course can be considered a milestone as a collective work effort between the teachers from the institutions which gathered together to envision a pilot project that culminated in the proposal to hold a course, in which the methodology and preparation was carried out in a democratic and collaborative way between everyone involved in the project.

However, it is relevant to highlight some important points regarding the participation and ownership of the offered proposal. We provide the links of the virtual environment and videoconferences that were accessed from any place. The group of teachers could stay in their offices at work, at home participating in videoconferences, and participate in forums that are asynchronous. However, most Brazilian teachers preferred to meet in a classroom, sit on desks and have an in person interaction with their partners from foreign universities. The expansion of the learning environment, the forum interaction or the chat with different realities was little explored. It is notable the difficulty of being part of a new educational culture provided by cyberculture, leaving the real and transit the virtual in order to break the paradigm of time and limited space and, therefore, to expand the school. We offer the tools, show its potential, but we are still stuck and feel safe by the real, as stated Weissberg: "the virtual does not replace the real, it helps to give it a meaning"[7] [8]. At this point, we understand that the process of virtualization is slow because when the teacher understand the meaning of virtual learning, he will give his "real" job a new meaning.

The idea of paradigm in science is that the 'paradigms are the scientific achievements universally recognized that, for some time, provide model problems and solutions to a community of practitioners of a science' (Kuhn). By placing the delimitation *some time*, Kuhn could not imagine that the time dimension is crucial in the society of 21st century, where time and space in the cyberculture society, and the digital culture were resized."[8] [9]

We have a paradox that can metaphorically be a great wall that separates the post-industrial society with all new technological tools, new practices and knowledge, and on the other hand an institution that preserves the logic of the industrial society from the 19th and 20th centuries. In this paradoxical path, we have higher education which the mission is to train professionals with an industrial education model which does not fit with the transformation of post-industrial society.

However, to think of an education that not only stimulate the use of available technologies but can create opportunities to experience, becomes the great challenge of global educational contemporary settings.

"[…] It is necessary to create opportunities for them to experience this potential in real classes situations. Therefore, it is essential to believe on types of training based on peer collaboration and professional problems that enable teachers to reflect, question, learn, share and develop new teaching methods with digital technologies."[9] [10]

Thus, we understand that the teacher development should occur from collaborative models through communication and sharing of knowledge, resources and practical examples that, in an international context, can enhance more the teaching action, in order to extent the multicultural experiences and learn different ways of appropriation of communication languages for education. Motivated by this scenario, not so harmonious, but provocative, we glimpse many possibilities for innovation and creation of diverse learning pathways the group consisting of the universities in Brazil, Colombia, Spain, Mexico, and Portugal have joined together to develop collaboratively the training course for higher education teachers: "Methodology to quality in online learning".

The course aimed to provide for the teachers an online learning experience in a space for a collaborative experience and immersion in the international scenario and, at the same time, to provide ownership opportunities of knowledge about the potential of technology to their own teaching practice, the *learning by doing*, in order to cause the teacher to take ownership of digital resources giving it a meaning.

The materials developed for each module were produced by teachers of each country and ensured a multicultural character that enabled the exchange of experiences as the theories and methodologies of learning used by teachers of different countries contributed to the enrichment of the debates.

The initiative is based on the enhancement of the collaborative work of an international perspective, originated by a group of teachers involved in online courses, in which

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7 "O virtual não substitui o real, ele ajuda a lhe dar sentido".

8 "A ideia de paradigma na ciência é a de que os "paradigmas são as realizações científicas universalmente reconhecidas que, durante algum tempo, fornece problemas e soluções modelares para uma comunidade de praticantes de uma

ciência" (Kuhn). Ao colocar a delimitação algum tempo, Kuhn não poderia imaginar que a dimensão de tempo é determinante na sociedade do século XXI, onde tempo e espaço, na sociedade da cibercultura, da cultura digital foram redimensionados".

9 "[...] é necessário criar oportunidades para que experimentem tal potencial em situações concretas de aulas. É portanto, fundamental apostar em tipos de formação assentes na colaboração entre pares e em problemas da realizada profissional que possibilitem aos professores refletirem, questionarem, aprenderem, partilharem, e desenvolverem novos métodos de ensino com as tecnologias digitais."

the need to expand territories and training spaces, a chance to build a new collaboratively training process for teaching practice is now shared in the collective and discussed by different cultures. The purpose of this course is a new teaching design, in which collective participation experiences and theories can be shared.

As previously stated, the Universidade Presbiteriana Mackenzie is deploying and expanding their online courses, their teachers had the experience of acting as producers of digital material and received over a long period training for teaching in Moodle, a virtual learning environment widely used in Brazil in e-learning.

The experience in participating in the "Methodology to quality in online learning" course was very important for the analysis of the process of these teachers in cyberculture, in order to understand their concerns and restrictions of interaction in the online learning world and the insertion process in the new paradigm expanding the learning spaces and languages. The exchange of information between universities was rich and comforting, as the Brazilian teachers were able to dialogue on issues that were previously treated as local, but began to be recognized and understood them as global.

"Therefore, it is necessary to recognize the extraordinary potential of the instructor and of the training offered by the electronic revolution which allowed intercultural communication and enabled individuals and social groups to be focused not only on their own and limited contexts."[10] [11]

We understand that the process of training university teachers to work in the 21st century in a culture that is predominantly cyber, analog and uses the virtual environment as priority for to bring changes in strategies, activities and teaching resources because they cause more interaction, autonomy, creativity, and sharing possibilities.

We have pointed out that the safe territory for teachers is still the classroom. We can provide many features and digital information but the synchronous time and the limited space of the classroom represents the permanence of strategies mediated by the teacher as the protagonist gives the idea of a security that new routes with different scenarios are still being analyzed. Only by trying and the contact with the cyberculture can cause the breakdown of the Cartesian paradigm to a complex and systemic education. The reported experience is very important to value the continuity of training of teachers in higher education, especially when it occurs with peers who bring different realities to be discussed and analyzed.

By analyzing this experiences that use regarding network communication, time and ubiquitous space, and different languages it is possible to assert that the course of globalization within university in America and Europe can be higher. The expectation of the management group with the groups of each university might be greater than the reality

which we live in that reveals the paradox. The education of the 21st century, the cyberculture, and education that is still under construction are guided by the industrial revolution and not in computer, digital.

5. Final Considerations

It is essential to promote and offer collaborative spaces for innovation practices and developing methodologies to meet the needs of the relationship between teacher and student from the educational scenarios of hybrid languages point of view as mediators of a contemporary educational and learning scenario.

Our working hypothesis is that it is necessary to have continuity educational programs that take into account the potential of meaningful learning approach and collaboratively from immersion experiences that enable them to acquire new knowledge, ownership of hybrid languages and that can reframe the teaching practice.

Progress and difficulties experienced in the training process are being worked out by the universities from a macro perspective because the group of teachers who attended the course was not large, but they were representative and new proposals are being considered from this experience.

We see the *Expanded School* as a new space for online learning, hybrid and ubiquitous, that represents the generation of cyberculture and post-industrial society.

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10 "É necessário reconhecer, portanto o extraordinário potencial instrutor e inclusive formador oferecido pela revolução eletrônica ao permitir a comunicação intercultural e possibilitar que os indivíduos e os grupos sociais não fiquem centrados apenas nos seus próprios e limitados contextos."

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