Use and Mastery of Virtual Learning Environment in Brazilian Open University

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This paper describes and analyses the dynamics of the use and/or mastery of Virtual Learning Environments (VLEs) by educators and students Open University, important part of the Brazilian Educational System. A questionnaire with 32 items was answered by 174 students/instructors/coordinates of the Media in Education and Physics courses, of two federal universities, between 2011 and early 2012. The interview with a coordinator was transcribed and related to the data systematised in tables and graphs. Interpretative analysis, in an open dialogue with the references and with the data from the Universidade Aberta do Brasil (UAB - Open University of Brazil) site resulted in the final considerations. These suggest that the use and/or mastery of VLEs by students are important, and the specificities of these uses subsidise studies and publications, still in a small number in the literature in this area of knowledge. The work reflects the development of the Open Distance Education System, conducted with strong popular participation, as a response to the challenge posed to the educational policies for expanding the public provision of higher education, also using VLEs for this purpose.

Keywords: Distance Education, Virtual Learning Environment, Higher Education, Teacher, Open University System, Brazil.

INTRODUCTION

Technological innovations (Castells, 1996) and the specific use of new devices have impacted the investigation to the extent of starting to respond to the challenges of science as an open enterprise. The Royal Society published the report (2012) Science as an open enterprise: open data for open Science, which systematised the facts that led to rethinking the science model of the laboratories closed to processes with little transparency and to inaccessible publications. Opening science may imply the use of free software, creative commons and BOI (Budapest Open Access Initiative), and the free culture of open source, among others, thinking of this movement in the area of education and, more specifically, in Brazil and in Latin America. How can we make use
of the network technological devices for researches and for capacity building in education involving social and educational changes in favour of citizenship?

We currently believe it is possible for science, technology and education to be affected by innovations, opening to popular needs and reflecting on the people who think of these uses in their own experience. It may be a total pantopia, as says Michel Serres (1995), yet universities are opening to provide the working class with capacity-building courses through Virtual Learning Environments (VLEs) and Open Educational Resources (OER) (Palloff & Pratt, 2007), which stand as an expression of the changes going beyond the instrumental aspect, since they are both cultural and educational.

In academic practice, some types of software are verified and used, such as toolbookII, WebCT, Universite, Topclass, Designe’s Edge, First Class, AulaNet, Learning Space, Teleduc, Moodle, which have allowed interacting and dialoguing, synchronously or asynchronously. However, we still consider we are at the beginning of era in which VLEs and OERs will be widely explored in favour of open and distance education (Moore & Kearsley, 2011; Stiles, 2007; OLnet-OER Research - 2013).

Universities re-territorialise lessons, laboratories, instructors and management towards virtual environments. By connecting pedagogical management, instructors, students, libraries, electronic publications, digitised learning objects, simulation laboratories, digital blackboard, Ipad, tablet and social networks, a new dynamic is provided to the learning process reflecting both in society and in public policies. Sharples, McAndrew, Ferguson, Whitelock, among others, presented a report in 2013, which updates the area of innovation in education: MOOCs (Massive open online courses); Badges to accredit learning; Seamless learning; Crowd learning; Geo-learning; Learning from gaming; Exploiting the power of digital games for learning; Digital Scholarship; Citizen inquiry.

In this quest to understand contemporary educational innovations better, in the 2011/2012 period, we systematised and analysed the dynamic of the use and/or mastery of the VLEs by educators and students in the Open Education higher education process, a relevant part of the Brazilian National Education System.

The study specificities may subsidise the design of proposals for provisions in Open Education, as well as cooperate with studies and publications still scarce in the literature in this area of knowledge. The work reflects the pedagogy of virtuality as regards understanding virtual education systems, which develop as a rhizome (Deleuze; Guattari, 1980), with extense popular participation responding to the challenge posed to educational policies.

CONTEXT AND REVIEW OF LITERATURE

The Open Distance Education System in Brazil counts on ample popular participation, constituting a challenge to educational policies. The UAB (2013) system articulates the provision of courses at Federal and State Universities as well as at Federal Institutes, aiming to open these institutions and to include more people in higher education.
Currently, in the higher education context, public, economic and pedagogical investment is considerable for developing the system (Costa, 2007).

UAB was established by Decree N° 5800 (June 8 2006) and, as a method, distance education was chosen, keeping it as a face-to-face/virtual system, and accessibility as a political option. This system, in principle, is not a university, since it is a system which is not even open as it requires an exam for acceptance in the courses, but is somehow opposed to higher education restricted to certain sectors in public and free of charge higher education institutions. The system for selecting and granting access to UAB abides by the procedures of the face-to-face modality with an entrance exam, specific didactic procedures, along with the principles and guidelines of the “Quality Referential for Distance Courses” (Brasil, 2007).

Brazil, with about 200 million inhabitants, counts on 11% of young people in its population, between 18 and 24, who enter higher education. UAB is among the actions started by the federal government to improve this situation and to aid in achieving the goals of the National Education Plan, i.e., providing access to higher education to at least 33% of the population in this age group by 2020.

The data of the official portal of UAB report that by 2010, it already counted on 774 presential poles in 92 institutions. In the higher education expansion and dissemination process, 923 courses were offered at the time, encompassing about 220 thousand enrolments. The ample popular participation confers a certain particularity to the enterprise. For 2012, the aim was to have 500,000 students, but we still do not count on reliable data. (Cf. Capes Communication Advisory, Brazil, Sept. 2011).

The Open Education concept was created by the historian and Cambridge University professor, John Clarke Stobart (1878-1933). He was a school inspector and was the first director in the London BBC in the Education area (1925). With the programs *Children's Hour* and *The Epilogue* the motto "Nation shall speak peace unto Nation" was launched and the creation of a cultural network by open radio broadcast was proposed. Open education is currently an education modality that, in higher education, organises distance provision so as to expand access to those interested and to the less favoured sectors, to people of any social class or type of housing.

In its pedagogical proposal, it uses printed, audiovisual and information didactic systems. The elaboration of didactic material occurs in printed text, audio, video, in video-lessons, in programs and radio broadcast along with the Internet. Traditional correspondence, radio waves, video-lessons, television, specific courses, seminars, online courses, among others, can be employed specifically. The open education assessment meets the pedagogical and methodological proposal adopted by the institution.

It consists in a modality, which requires autonomy and self-discipline on the part of the student. The methodological, gnosiological, cultural and political opening permits students to obtain a degree similar to the one granted by a presential university to act in the market.
Open Education originated in the industrial movement of the 1960s and 1970s, and found in the United Kingdom Open University (1969) the expression of the first university offering open higher education, in the distance modality, to the working class.

Virtual Learning Environments (VLEs)

In this universe, it is necessary to understand that the use and mastery of VLEs by both educators and students, considering that the environment, as everything surrounding or involving living beings and/or things in an open learning process, generates differentiated space and academic culture.

When describing the higher education process that, going beyond the coastal region, seeks to democratise education in Brazil and to take it everywhere in the country, when the connections of this Open Education with social demands are identified, some questions are posed concerning the de-territorialisation of education towards virtuality. The analysis of this educational process reveals some little known data which provide experiences, uses and knowledge that are articulated in the use of VLEs aiming at capacity-building. This implies the notion of distance open education as a support to this practice intended to be democratic and manifested in the courses offered by the UAB.

For being a current theme in the Brazilian educational debate, the use of VLEs for forming instructors in the open and distance modality implies considering the experience of the instructors and the pedagogical, technological and cultural factors involved and which deserved a reinterpretation as from the Cultural Studies.

Hence, the study with those participating in the courses mentioned herein, involved understanding education as a cultural action conducted in the praxis and in the dialogue of educators/students who seek to understand the VLE, in initial or in continued education, to provide a sort of education which somehow requires resorting to them.

Virtual Learning Environments (VLEs) - free or proprietary - are software to develop and to manage online courses which allow involving people and/or artifacts in the distance learning process, or aiding presential activities. The most widely known environments are: Moodle, Teleduc, Sakai, ProInfo and WebCT. VLEs are digital cyberculture devices (Levy, 1997) and are part of the educators’ life.

The VLE environment supports objects or Open Educational Resources (OER) which, as in a didactic unit, contributes to learning and, on the whole, builds a repository that can be reused. Both the environment and the objects are digitally improved by technological and cultural artifacts, and are currently very well articulated in pedagogical proposals for distance education.

These cultural artifacts have been studied from the cultural perspective as an interdisciplinary-character field which allows some methodological flexibility to analyse the cultural mastery, the creation of meanings, the transformation and the
dissemination of this process in distance open higher education, a process affecting the face-to-face system, still not knowing the reach of this effect very well. The English cultural studies understand that any object that may be considered cultural deserves to be analysed and criticised. Williams (1957), Hoggart (1958) and Hall (1997) are some of the representatives of this thought, and who contributed to meeting this challenge.

Education open to the community expands through VLEs, as a rhizome (Deleuze & Guattari, 1980; Sharples et.al, 2013), in its diversity and heterogeneity, with multiple methodologies and themes. Communication explores the digital means and develops through technological and discursive devices, demanding new skills and competencies towards organizing experiences deriving from thought and learning.

Education thus opens to culture and is hence understood as a production and cultural action, which allows understanding its use and mastering VLEs. The idea of education as an act of knowledge and a political act is inseparable from the quest for social transformation (Freire, 1970, Henry Giroux e Peter McLaren, 1997), inserted in the movement towards generating a learning community based on digital culture. We believe that education is a cultural action and Freire’s pedagogy has specific contributions to reinvent learning. Brazil is one of the few countries in Latin America in which the relationship between Pedagogy and Culture have developed with a certain presence and consistency. Likewise, Brazilian educator and educational thinker Paulo Freire (1921-1997) is one of the few in South America acknowledged by authors in other continents, recognized as a source and as a Master. Freire contributes to thinking of this cybercultural process (Levy, 1997). From the pedagogy of virtuality (Romo, Castañeda, Orozco, Gomez, 2006), we believe it necessary to speak about new territorialisies where education occurs or, in other words, about information and communication society, about networking society. For the future of virtual learning, this perspective it is fundamental to understand this process and education as dialogue and communication. This dialogue is where women and men make themselves present; they are not cast out from communication and dialogue. Freire (1970a) has already raised the question of technology for teaching adults how to read and to write in the first cultural circles held in Pernambuco (Brazil). These were circles formed within charitable societies, soccer clubs, district associations, and in churches. The educators were in charge of preparing the creation of a circle, visiting the congregation club or the parochial church or the district association and of talking about the idea of a pedagogical work. Once the proposal was accepted, a large promotion effort was made in the area, using popular resources (…) when two or three circles had been created, the educator made a thematic survey among the participants, which was studied by us, in a team, at the home office of the action group. Once the themes had been “treated’ they were organized in a program to be discussed with the participants of the circle (…) we prepared the material for the discussions, taking into consideration the resources available (…) (1996). In this sense, VLE can operate as a cultural artifact generating others, besides creating a learning community.

The study with the participating teaching staff allowed identifying who those seeking Open Education courses are and how the use and mastery of VLEs occurs along
undergraduate and specialization courses in the perspective of both educators and students. For this, it was necessary to know what they considered to be VLEs potentialities, to know the teaching competencies for acting in this virtual learning environment and to recognize the adequate elements for reinventing culture in this digital context. By systemising and analysing what instructors think and the meaning of using VLEs, in initial and continued education, of those taking courses in Brazilian public universities connected to the UAB system, one can perceive another pedagogy about to bloom.

METHOD

As a result of research, we present the description and the analysis of the data concerning the participating population and qualitative aspects (attitudes and opinions likely to be considered and which reveal important aspects to understand how these people are thinking or mastering virtual environments in their education process).

Specifically, participants in the Course Media in Education and of a Physics Course, of two federal universities, shared their experiences with us, which allowed us to know specificities of the phenomenon as from the data collected. These, as compared to the literature, with the data from the Universidade Aberta do Brasil (UAB) site and with those of the very participants, resulted in this analysis which shows that students and instructors use and master the devices. The uses and mastery of VLE was an attempt to understand the changes in the student and in the lecturer culture in higher education. It has been described as a landmark in the public perception of digital culture and academic orientation.

The participating population started with 187 people responding to a questionnaire, and closed with 174, representing 93.05% of those invited and involved in the courses, that is, instructors, monitors and students. The respondents were selected by means of invitation, considering that the questionnaire was responded by those who agreed to participate, via Internet or face-to-face and individually. An interview was also conducted with a course coordinator based on the same instrument. Sections of the interviewee statement were related to the data systematised in tables and graphs, along with the interpretation.

The questionnaire included 32 questions, most of them closed. Some questionnaires were applied semi-face-to-face, which resulted in an interesting debate, as we started from the premise that this methodology would challenge the legitimacy of the virtual and of the face-to-face response. Of course different relationships are established with the questions; however, the legitimacy is the same. In the two cases, people opted for identifying themselves with the questions presented; the respondents were interested in seeing that most are teachers thinking of issues that will serve to reflect about the area in which they work or study.

Therefore, be it on paper or virtually, the attitude of the respondent faced with this area cannot be measured. Respondents might fail to respond, but if they respond, if they lie
when answering, this is because they have an ideal model they want to correspond to, yet that provided information likely to be analysed. We are discussing a de facto behaviour or a behaviour they believe in. Individuals responded because they have some involvement with what they are responding to. It does not matter whether it is true, but the [respondent’s] attitude before it; it is not a question of checking truths, but ways of thinking about the response. The issue was checking a thought, was to know how these people think of it.

The application of the research instruments was preceded by a pre-test and, after the necessary adjustments, it was made available in the networks pertinent to the courses so that those interested in participating could respond. The method for analysing the data meant to evidence the existing relations between the phenomenon studied and the factors surveyed.

These and other systematised data as from the research instruments are configured in blocks:

Block 1: Identification (age, gender); education (bachelor degree; second bachelor degree; year the degree was granted, specialisation and others; names of the institutions and of the courses attended); professional actuation (main one and others; places of work; public or private; work regime; full or partial dedication; function; performs or not another paid activity; length of actuation).

Block 2: Motivation and information technology facilities.

Block 3: Use of VLEs (opinion; preparation for using the tool; platform used; time has used the tool for professional capacity building; regularity of use; time spent in capacity building activities; number of students involved; whether using VLE is compulsory regarding the course programme; respondent’s role in the course: coordinator, instructor, monitor, student, others; VLE technical characteristics in the semi-face-to-face education; most important ends for using VLE in education; impact of using VLEs in education/actuation as an instructor).

Block 4: Instructor’s competencies; contents that could favour and expand the use of VLE; problem situation found in the education received; VLE contribution to learning and to the educator’s work; importance of the course pedagogical proposal with VLE; assessment of the monitor/instructor in the semi-face-to-face modality.

Block 5: Professional aspiration as from this formation and their perception of the reach of the UAB programme.

Identification and context of the study

The data obtained are presented with the interpretations and indications for the final considerations and are provided as a contribution to other researchers in the area. The research was conducted in two years, in the late 2011 and early 2012, using an interview and the application of a semi-face-to-face questionnaire to the instructors and students of the two public universities involved, one of them in São Paulo and the other in Rio de Janeiro. The online questionnaire, in the questionPro software, totalled 514 visualisations, out of which 187 started to respond and 174 concluded (93.05%).
Identification: From the data obtained from the 93.05% respondents who concluded the responses to the questionnaire: 50% were from São Paulo and 43.5% from Rio de Janeiro. The student that enrolls has to be aware that in this semi-face-to-face modality, he has to go to the pole every other week.

The respondents live outside the capital of the State of São Paulo and of Rio de Janeiro. This information is important for showing that higher education left the capital in the states, reaching people who would otherwise have difficulties in getting included in the higher education system: *I think that, for the 1st time in the history of this country there was the decision to establish a network of universities with distance education (DE); in each micro-region in this country, there is poles.* (E1)

The age prevailing among the respondents was between 30 and 40 (60 people); between 40 and 50 (52 people); between 20 and 30 (31 people); between 51 and 60 (23 people) and over 60 (2 people). Regarding gender, 171 out of the total responded, 25.73% male and 74.27% female.

The research asked questions regarding the respondents’ education: they said they had taken elementary education mostly in state schools and higher education at private institutions and that, for being of a lower social class, they studied at state schools up to their secondary education, but did not manage to enter a state university. Concerning the distribution per type of Secondary Education institution, 74.17% had attended state schools and 19.87% attended private schools.

According to one interviewee: *The public is very diversified, there are teachers with secondary education, technical degrees, people with higher education who decided to take a specific course, students from the state learning network.* (E1)

Regarding distribution per type of undergraduate course institution, inversely to secondary education, in their first higher education degree, 64.81% attended private institutions and 35.19% attended a state institution. For their second higher education degree, this percentage increases in private institutions, with 71.05 %; 28.95% attended state institutions. The same occurs for specialization, with 66.02% attending private institutions and 33.98% attending state institutions.

Out of the total participants, 90.96% are verified to be students and 10.04% are monitors, instructors, coordinators and/or perform other non-specified functions in the two courses researched. These students’ elementary education occurred in state schools, where 79.87% work; 13.23% work in private schools and 6.9% work in other activities.

Out of these, 33.65% act mainly as teachers in EF1 – Fundamental (Elementary) Teaching I; 24.04% in EF2 - Fundamental (Elementary) Teaching II; 22.12% in Secondary Teaching (EM); 13.94% in pre-school education and 6.25% in higher education.
Concerning the work regime, 70.69% have taken a public selection exam to occupy a post; 20.11% are hired 2.87% [of the courses monitors] have a research grant and 6.32% have other activities as internal and monitor.

As to hour load, the 174 respondents’ dedication to work was: 41.50% full time - 40h (at one institution); 15.65% - 40h (at more than one institution); 24.49% Part Time – less than 40h (in one institution); 18.37% - less than 40h (in more than one institution).

How long he/she has been an educator: 147 of the respondents said they had acted as educators and 49.66% had over 12-year experience.

Motivation to take the course: most say they want a free graduate course; 4.25% want their salaries raised; 25.47% want specific education for their present job; 15.09% want to obtain formal degrees and certificates; 16.51% want to have formal promotion in their teaching or management career; 9.91% say it is the best continued education; 18.63% like its being free; 3.77% are close to the presence poles; for 1.18%, there is a lack of options; 5.19% chose other reasons (course at a federal institution; renowned institution; improvement; time flexibilisation; knowledge of new media aiming at capacity building for teaching distance education; updating the terms and uses of the “media” surrounding us; the theme). According to the interviewee: Students who seek DE, except for the local education teacher, are people who use the name [status] of the university to print in their curricula. (E1)

Despite being a radical statement, it demonstrates a certain mobilisation, which is causing changes in the cultural matrix in both personal and institutional spheres. This unknown area will lead the institution to seek other possibilities.

Concerning computer use, 99, or 41% have one and use it. Regarding place to access the Internet, the major one is their home with 76.92%; workplace, 18.93%; Ian house 1.18%; telecentre, 0.59%; others, 2.37%.

They effectively use the Internet: 99.41% have a computer at home; out of these, 76.92% are connected to the Internet. They use it for communication with others via e-mail; to access VLE; for the news; entertainment; school researches and social networks. Really, there is a concern for the situation generated by the open distance modality and a quest for new solutions for expanding, disseminating and democratizing higher education in Brazil.

Using VLE in the training process

The survey revealed that instructors/coordinators have positive expectations about VLEs facilitating the sharing of material and ideas. The data regarding VLE use presented issues related to its structural elements. Out of the 17.95% respondents saying they use the Internet to access the platform as a means to generate room for education, 79.76% agree that VLE is a device for performing activities that cannot be performed via e-mail; 89.82% think it is a repository of didactic resources (texts, videos, images etc.); 87.27% think it is software serving to assemble and to manage accessible courses via Internet; 93.37% think it promotes interaction between instructors and students and 98.19% think it allows sharing knowledge by using e-mail, chat, forum.
Although the respondents agree with these potentialities of VLE, only 59.52% had formal training for using it, and 58.91% were trained in the Course Media in Education (percentually, these were the ones who responded the most). The respondents who used other environments said they would also introduce VLE in other courses and institutions and mentioned Proinfo, Moodle, Thinkquest and the Freire Platform. They say they use the environment indicating priority with numbers, 1 being the most important and 4 the least important; Moodle, ProInfo, Freire Platform were the most widely used, besides the own institutional platform.

VLEs are of recent use in the ambit of higher education and this is somehow expressed in the responses. 58.33% have used it for over a year; 19.64% started to use it from eight months to one year ago; 6.55% have used it from four to seven months and 1.79% have used it for less than three months. Other spans of use mentioned are 11 years (1); 6 years (4); 5 years (6); 4 years (5); over 3 years (3); over 2 years (2). One respondent says “It is my second DE course; the first one was a requirement to take a position/selection examination; 360 hours in 4 months” and other respondents say “I don’t use it.”

Currently, the frequency in VLE use is mostly weekly (50.00%) and daily (44.64%). 92.12% of the respondents state that VLE use is compulsory for the course. 7.88% say it is not compulsory, which suggests they use e-mail to communicate with the instructor and, sometimes, with colleagues. Specifically, regarding the weekly average time used for education activities, they declare: 1 to 12 hours (84.76%); 13 to 20 hours (12.20%); over 20 hours (3.05%).

In the respondents’ opinion, the key VLE technical characteristics contribute to the development of semi-face-to-face higher education proposal.

<table>
<thead>
<tr>
<th>Technical characteristics of VLE</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Being a virtual environment promoting development and the control of the lesson, discussions</td>
<td>138</td>
<td>22.33</td>
</tr>
<tr>
<td>and assessments</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Integrating chats, forums and video-lessons</td>
<td>81</td>
<td>13.11</td>
</tr>
<tr>
<td>Stimulating collaborative group and teamwork</td>
<td>89</td>
<td>14.40</td>
</tr>
<tr>
<td>Counting on a good system for managing both instructor’s and student’s activities</td>
<td>80</td>
<td>12.94</td>
</tr>
<tr>
<td>Promoting external channels for web interaction: portal, Domínio Público, e-proInfo</td>
<td>64</td>
<td>10.36</td>
</tr>
<tr>
<td>Promoting spaces for reading and writing</td>
<td>62</td>
<td>10.03</td>
</tr>
<tr>
<td>Being a support to a good interaction between people /good wideband</td>
<td>48</td>
<td>7.77</td>
</tr>
<tr>
<td>Allowing transferring variable size files (among x and x Kb or MB)</td>
<td>10</td>
<td>1.62</td>
</tr>
<tr>
<td>Others _ Specify</td>
<td>5</td>
<td>0.81</td>
</tr>
</tbody>
</table>

As the importance of easy access, they specified APs; integrating chat, forum and libraries; providing continuous education for those not counting on time to attend face-to-face courses; promoting interaction between students and instructor. The respondents consider the first 5 most important ends of using VLE in education:
Table 2: Purpose of VLE.

<table>
<thead>
<tr>
<th>Purpose of VLE</th>
<th>n</th>
<th>%</th>
</tr>
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<tbody>
<tr>
<td>Managing contents</td>
<td>134</td>
<td>17.56</td>
</tr>
<tr>
<td>Managing the course</td>
<td>83</td>
<td>10.88</td>
</tr>
<tr>
<td>Following students’ progress</td>
<td>81</td>
<td>10.62</td>
</tr>
<tr>
<td>Designing online activities to complement to in-class work</td>
<td>74</td>
<td>9.70</td>
</tr>
<tr>
<td>Consulting tutors</td>
<td>61</td>
<td>7.99</td>
</tr>
<tr>
<td>Talking to colleagues</td>
<td>57</td>
<td>7.47</td>
</tr>
<tr>
<td>Stimulating collaborative learning</td>
<td>52</td>
<td>6.82</td>
</tr>
<tr>
<td>Forming learning communities</td>
<td>50</td>
<td>6.55</td>
</tr>
<tr>
<td>Propitiating teamwork</td>
<td>45</td>
<td>5.90</td>
</tr>
<tr>
<td>Flexibilising the hours to access the course</td>
<td>42</td>
<td>5.50</td>
</tr>
<tr>
<td>Flexibilising the place to access the course</td>
<td>32</td>
<td>4.19</td>
</tr>
<tr>
<td>Lowering the costs of the higher education course</td>
<td>26</td>
<td>3.41</td>
</tr>
<tr>
<td>Using repositories of learning objects</td>
<td>26</td>
<td>3.41</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>763</strong></td>
<td></td>
</tr>
</tbody>
</table>

The positive impact of using VLEs in instructors’ education/actuation was mentioned, per decreasing order of importance, on work/study conditions (163); pedagogical innovations (162); better planning quality (161); democratising the access to online education (160); organisation of teaching/curricular integration (160); collective knowledge construction (160); using the digital library (159); participating in the design of activities (158); infrastructure of the institution (157); satisfaction of mutual interests (157); decentralisation of higher education (157)

The interviewee states: *In the discipline I teach, there are some widely used tools, such as the tutorial room; it is the classroom; it is used intensively in VLE and it is where students interact with the tutors at a distance as well as with the coordination.* (E1)

Data regarding teacher’s competencies

In the respondents’ opinion, the relevant and necessary competencies for the instructor’s didactic work with VLE, per decreasing order of importance, are: methodology for building online proposal (lesson, course, programme); technical-scientific knowledge of pedagogical methodologies (e.g. constructivism); pedagogical mediation; skill for using communication tools; knowledge of basic information concepts; fostering strategies for analysis and critical reflection; sensitisation towards considering personal and technological differences; knowledge of assessment for the semi-face-to-face modality; ability for teamwork; respect to colleagues’ production; respect to others; ability for group work and openness to learn from others.

From a list presented, the respondents suggested situations that are or not a problem to education, i.e. participating in face-to-face sessions.

Table 3: Problems in education.

<table>
<thead>
<tr>
<th>Problem</th>
<th>%</th>
</tr>
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<tbody>
<tr>
<td>Participating in face-to-face moments</td>
<td>44.81</td>
</tr>
<tr>
<td>Time available for designing, correcting and proposing other activities</td>
<td>36.08</td>
</tr>
<tr>
<td>Keeping discipline and regularity of access and use</td>
<td>32.91</td>
</tr>
</tbody>
</table>

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Guidance regarding the correct use of VLE 25.32
Articulating the work in an interdisciplinary fashion 20.89
Integrating VLE in the contents and curricular school time 19.88
Integrating use of virtual laboratory 19.61
Adequate use of learning objects supported by VLE 18.99
Integrated use of the virtual library 15.58

Concerning the VLE contribution to learning and the educator’s work, the respondents agree with important aspects.

Table 4: Contributions of VLE to education

| Will contribute to teachers’ higher education | 96.88 |
| Will act as a facilitator of learning for students | 96.84 |
| Will contribute to the teachers’ work in the classroom | 96.79 |
| Will promote access to new technologies and knowledge to improve education | 95.54 |
| Will contribute to forming virtual learning communities | 92.36 |
| Will promote the use of learning repositories (Learning objects) | 91.08 |
| Will contribute to internationalise education | 81.29 |
| Will promote the precarisation of teachers’ education | 25.81 |

For the respondents, what matters in the design of an education proposal using VLE is: The quality of the material/learning objects (80.65%); knowing the possibilities provided by VLE (74.52%); pedagogical and technological mediation (76.97%); curricular adequacy to the students’ universe (73.20%); interest and the pertinence of associated themes (70.34%); integration between traditional and distance education (50.64%); promoting a totally online modality (47.37%); the proposal design (41.56%): Here (in the platform) you will find the use of the video-lessons I produced; it is a constant feedback, one helps the other. (E1)

For the respondents, those teaching through VLE should be a good educator connected to the institution.

Table 5: Open education instructor.

| Educator, connected to the institution, with education and experience in the teaching area and in distance education | 97 | 60.63 |
| Tutor with a BA/BSc degree who is concerned with the teaching and learning processes, who follows and assesses the activities | 57 | 35.63 |
| Monitor - student who monitors and is concerned with the execution of activities | 5 | 3.13 |
| Others/Specify | 1 | 0.63 |
| Total | 160 |

The competence of the monitor/educator/coordinator requires knowing DE technology. The interviewee considers that 98% of this total do not: I am one of the few who uses the platform and seek solutions, but 98% do not; they place the test and correct it. (E1) When required to mention at least three concepts of what being a good instructor in the semi-face-to-face higher education modality is, participants mostly responded: Knowledgeable in the subject and experienced in what he/she teaches.
Table 6: What it means to be a good educator in open education.

<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good communicator</td>
<td>85</td>
<td>17.24</td>
</tr>
<tr>
<td>Knowledge transmitter</td>
<td>31</td>
<td>6.29</td>
</tr>
<tr>
<td>Concerned with learning and not showing off knowledge</td>
<td>70</td>
<td>14.20</td>
</tr>
<tr>
<td>Learning facilitator</td>
<td>131</td>
<td>26.57</td>
</tr>
<tr>
<td>Knowledgeable in the subject and experient in what he/she teaches</td>
<td>75</td>
<td>15.21</td>
</tr>
<tr>
<td>Knowing how to listen</td>
<td>21</td>
<td>4.26</td>
</tr>
<tr>
<td>Knowing how to relate the themes with the social and the student’s reality</td>
<td>80</td>
<td>16.23</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>493</strong></td>
<td></td>
</tr>
</tbody>
</table>

The interviewee – course coordinator considers that: the group of monitors is composed of people not regularly hired, with no professional stability and with little time to be trained. Thus, this is not a stable professional. (E1)

At the same time she makes these statements, the interviewee shows to be committed with her work and admits that there is some dissatisfaction with the conditions for acting as an instructor. DE is being built by face-to-face instructors and, as says the interviewee, it is a long process.

About the major professional aspiration for the coming years, after this course, 166 expressed, in decreasing order of importance: acting as an instructor/monitor in distance education (33.13%); remaining in the present position, at the same institution (22.29%); conducting another professional activity in the educational area (19.28%); occupying school board and management positions (14.46%); getting a better job away from the school (7.23%); keep the same position, but at a different school (1.81%) and retiring (1.81%)

The emergence of the open university system, in the attempt to take higher education everywhere in the country, to expand and to democratise the access to it, provides higher education to teachers and to people in general. A large popular demand for higher education is verified, which constitutes a challenge to educational policies that cannot meet it presentially.

**DISCUSSION**

After over five years since activities began, this experience compels us to know and to give a new meaning to the use of VLEs and of Open Educational Resources to understand that the culture generated is an integral part of the learning process and that educating is creating new spaces for higher education.

Therefore, distance open education studies as a cultural action lead us to incorporate the people culture into the learning process. VLEs, as elements integrating the teacher’s education, act as agents of culture and of subjectivities. Evidently, in a cybercultural universe, educators/students use computers and work in a network to solve educational and capacity building problems increasingly more complex (Romo, Castaneda, Orozco, Gomez, 2006).

Retaking the blocks or analysis matrixes presented herein, we verify some resonance in the survey participants who admit that education combining face-to-face and distance moments generated imbalances in its practices, but provided them with new reflections and learning. In these new educational arrangements, new educator functions are incorporated, such as
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Instructors, monitors, and supervisors, which raise quite a debate, due to the conditions at work.

The questionings lead us to observe that educators and students are mastering VLEs which, formerly, were not even a part of their daily life. They attempt to articulate their needs with the potentialities of VLE use, faced with the lack of higher education institutions near them, of time and conditions to travel and to attend face-to-face lessons.

If we ask them whether they conduct research, whether they form communities of culture, learning and knowledge in this ambit, one thing is certain: they use the devices, reflect about technical, didactic and collaboration strategies in the courses and, especially, they are open to learn.

By means of VLEs, some people, knowledge, experiences, practices and methodologies circulated which, in turn, allowed inclusions, interactions and social uses of education and communication technologies, mediating relationships among instructors, students, learning managers and community in the VLE.

VLEs support and expand initial or continued education in the Internet, de-territorialising this process, which is only possible from discovering and rediscovering the traditions of education and of virtual learning environments, not through the discourse that promotes repetition, but rather by means of transformation and critique by the very participants in the courses. In this sense, instructors and students are rediscovering themselves, relating and using (either by their own initiative, or supervised by tutors and the latter by the official bodies) VLE educational possibilities, be it to respond, to seek information or to create and to innovate.

Besides the technical and logistic potentialities of virtual learning environments, the use of free software for education is in agreement with an era of free access, which leads us to perceive some issues that point to VLEs as a substantial part of contemporary culture and education.

Concerning higher education, we can say that: it is actually the same conventional university, faced with the pressures of information society and of knowledge, takes a position; students seek Open Education for its being public and free, besides granting them a degree or a certificate to act in the market; also, students come from different backgrounds, but they mostly seek distance education, at the moment, for continued education.

When instructors and students take the position of those who learn, this confers them a certain authority and autonomy because of and for the use they make of cultural artifacts. The experimental, conceptual and practical perspectives of the respondents contribute to the researches implicit in this educational dynamic in a context which open higher education is entering.

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Turkish Abstract

Brezilya Açık Üniversitesinde Sanal Öğrenme Ortamlarının Kullanımı ve Hakimiyeti

Bu çalışma Brezilya Eğitim Sisteminin önemli bir parçasını oluşturan Open Üniversite’nin eğitmcileri ve öğrencileri tarafından Sanal Öğrenme Ortamlarının kullanım ve uzmanlaşma dinamiklerini tanımlamakta ve analiz etmektedir. 2011 ve 2012 başlarında iki devlet üniversitesinde Eğitim ve Medya
Use and Mastery of Virtual Learning...