# Navigate is needed to know how: A Teacher Training in the use of Virtual Teaching and Learning Environment

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## Abstract:

This article aims to report the results obtained from research performed at Higher Education Institution (HEI) Unifebe, Centro Universitario de Brusque, in which, from 2008.21 to 2009.12, trainings were held for teachers of the institution on the use of Virtual Teaching & Learning Environment Moodle (Moodle AVEA)3 in the daily teaching practice in higher education in terms of attendance and semi-distance education. This research intended to know how the training was and analyze its concrete results through the obtained responses of the participating teachers and their students, comparing with the goals set by the managers and trainers of the training in order to provide a feedback of the positive aspects and helping to correct the negatives ones. For this, were analyzed the speeches of the participating teachers and their students in the training, a representative of managers and trainers

**Keywords:** Digital Communication Technologies, Distance Education, Teacher Training, Virtual Teaching & Learning Environment

## 1 - Introduction

The use of Digital Communication Technologies (DCT) as a pedagogical mediation tool in Higher Education Institutions (HEI) began in 1997, mostly to meet the needs in the development of education in both the distance (DL)<sup>4</sup>, semipresential<sup>5</sup> and presence via the Internet. These practices have received legal support from the Ministry of Education (MEC) which, since 1998, equaled the certification of an undergraduate course in the distance mode with the attendance. In 2004 was published on the Ministerial Ordinance No. 4.059/2004, which enables the HEI apply the distance mode, in the form of semi-distance to the 20% limit of the classes of a subject or recognized course without the need for permission of the MEC. In December 2005, the government, concerned about the training of teachers who would work in distance education, issued a regulation in directing HEI that wanted to introduce the practice of distance education in everyday institution should worry about

"present the teachers with the required qualifications in the existing legislation and, preferably, with training to work with distance education"

Managers from Unifebe aware of the innovations brought by the regulatory frameworks of distance education, the convenience and benefits brought by DCT in everyday teaching supported the first steps in the trial of distance learning in the form of semipresential classes. In 2004, the initiative of a group of teachers began to develop semipresential didactic-pedagogic activities at Unifebe using the Claroline system, which has been available since 2003. In 2005, managers noticed it was necessary to establish a Distance Education Office to plan and implement actions in a distance inside the institutions, mainly in the training of teachers. From 2006 to 2008, was led by a joint management involving diverse sectors as: Dean, Pro-Dean of Undergraduate Education, Pro-Dean of Administration, Pro-Dean of Post and Research and Extension, Course Coordinators, Office of Development, Office of Social Communication, Office of Distance Education and Coordination of Center for Information Technology, aiming to raise awareness and introduce the "Culture of Distance Education" at Unifebe by encounters provided by several continuous training.

Undoubtedly, 2008 was a very important year for Distance Education at Unifebe because managers have approved: the documents that have institutionalized and regulated the practice of distance education inside Unifebe through the PDI, PPI and CONSUNI Resolution Nr. 33/2008; Migration Project of VLE Claroline to VTLE Moodle, and the Project for Permanent Training of Teachers from Unifebe in using VTLE Moodle.

This action made possible the development of two Moodle Trainings for Teacher Author - Basic in the period November 2008 to February 2009, and the from April to June 2009, reaching 50% of teachers performing at Unifebe.

It is on those trainings that we will focus on the topics below.

# 2 - Teacher's Training from Unifebe using VTLE Moodle

# 2.1 - Option for the VTLE concept

Before talking about the training, is worth clarifying why Unifebe choose the Virtual Teaching & Learning Environment term. In 2008, the Office of Distance Education, approved in the University Council of Unifebe (CONSUNI) the migration Project of management platform of Claroline on-line courses, then called Virtual Learning Environment Claroline (Claroline VLE) for the Virtual Teaching & Learning Environment - Moodle (VTLE Moodle).

To this were presented to managers two arguments: the technical aspect - the change would allow an improvement in the quality and quantity of available tools in the management system of online courses to provide more interactivity with the system and would increase the interaction among participants, and in the pedagogical aspect – proposing a paradigm change, in which the pedagogical approach would strengthen the interrelation teacher-student and student-teacher.

Catapan, Mallmann and Rocarelli (2006) propose a theoretical-pedagogical consistency to that concept. The VTLE is seen as a virtual system organized to meet the issues of academic and educational administrations in the direction to teaching and learning. The design, organization and management of a VTLE are concerned not only with learning or with procedures that must be developed by students, but with the whole academic management process, of teaching and the student learning.

Furthermore, this conceptual view is in line with the legal concept of distance education in Brazil exposed in the Federal Decree 5.622/2005, which rescued the teacher's role within the concept of Distance Education (BRAZIL, 2005).

It is clear that the distance education, independent of technological support, should provide an educational process which contemplates the act of the "student learning" "with the act of the "teach the teacher". As the great educator Paulo Freire said "teaching without learning is absent and vice-versa" (1996, p. 23).

# 2.2 - The training of teachers on VTLE Moodle

From November 2008 to June 2009, Unifebe developed two Moodle Trainings for Teacher Author - Basic, in which participated four groups of teachers. The first training took place from November 2008 to February 2009<sup>7</sup>, and the second one from April to June of 2009<sup>8</sup>. The main objectives were: to present the VTLE Moodle to teachers, and teach the procedures for creation and configuration of the Insertion tools of media content and mediate the distance interaction through practice in virtual rooms for each participant (UNIFEBE: 2008).

To support pedagogical-educational, the activities that would be developed during the training were created three virtual rooms in the VTLE Moodle from Unifebe. The two first activities are virtual rooms and were set up to manage the training and in where participants received login and "student" password, that is, interacted in these Moodle rooms as a student in the on-line course. The third one was created for a discipline that the teacher-participant ministered in one of 16 undergraduate courses. In this virtual classroom, the teacher received a login and "administrator" password of the room, that is, he could interact with the features offered by Moodle and be the author of the virtual teaching environment.

This strategy aimed to avoid, as pointed out by Moore and Kearsley (2007), the teacher who will work the virtual distance teaching learn only "performing the functions with little or none guidance", or just learn through "people who know little more than her". It also allowed the teacher participant in the experiential training- lived the on-line student status, defined by Lins (2001), as the one responsible for his learning, and because it is inside him that are all essential elements to occur the learning: motivation, interest, necessity and empirical experience.

The Samples Virtual Room for Teacher Author (Showroom) was built to enable the teacher had an idea of the resources offered by VTLE Moodle to mediate the development of educational and pedagogical activities in a distance mode.

The content in this virtual room was divided into an introduction and five themes related to the sets of tools: 1<sup>st</sup> - set of editing tools and insertion of on-

line media content: ten examples, 2<sup>nd</sup> - Collection of tools to mediate the interaction distance: with eight examples; 3<sup>rd</sup>- Set of tools to mediate the assessment of distance learning: with seven examples; 4<sup>th</sup>- Set of administration tools of virtual room: with two examples, and 5<sup>th</sup> - Set of research tools of Performance evaluation: with three examples.

The Virtual Room of Moodle Training for Teacher Author – Basic-was didactically organized to help guiding the teacher participant in his distance training. The media content was divided into: Introduction, Introduction to the theme; First unit: Editing and Inserting Content Mediatics in Moodle, Second Unit - Interactions Mediated by Moodle; Assessment of Training, Certification of participation. The teaching material available was published in different media (text, videos and pictures) to assist the participant in the process of distance self learning.

#### 2.3 - Results obtained from the research

Teachers who participated in the training Moodle presented the following profile: most with academic Master's degree level, public employees and with a good time worked at Unifebe, they just knew the VTLE Moodle in 2008; they were already of Claroline VLE users in the institution, but with little experience in teaching distance or semi-distance.

Regarding the students profile who participated in the research field, it can be said that they are natives of the TCD, because everyone has a computer at home, 95.5% have Internet access from home, from workplace or school, Most is user of various services offered over the Internet such as email, site search, chat, the VTLE and relationship site.

Students knew the VTLE Moodle at Unifebe, in 2009, through their teachers and have never had formal training on the use of Moodle. This confirms what Palloff and Pratt (2004, p. 152) said that there were several "tips for teachers and administrators, but they rarely address the needs of virtual students". Students made it clear that the institution must provide training for them.

With regard to programmatic content which was taught during the training was set to present three tools9 of Activities (Forum, Chat and

Glossary), and four tools of Resources (Link to files and sites, create a simple text page, create a web page and Viewing a directory). Yet, the teachers mentioned the use of ten Activities and five Resources tools.

The set blocks tools were not part of the developed content in the teachers training however, it was mentioned the use of four ones. This demonstrates that teachers, on their own initiative, explored, and discovered more resources on VTLE Moodle and used them on their virtual rooms, showing, then, interest, autonomy in learning and technologies offered by Moodle.

Another indicator that helped to understand the teachers safety in exploring new features in VTLE Moodle is that 80% reported having used the VLE Claroline, which was the old management platform for on-line courses at Unifebe, 10% knew TelEduc and 5% EVA UnisulVirtual. That is, 95% had some familiarity with the use of VEEL.

Both teachers and students were questioned about the use of these tools in undergraduate classes. According to the teachers, the more used tools in VTLE Moodle to deliver media content were: Compose a text page, 33.4%; Compose a web page, 23%; Link to a file or web site, 23%; a Display a Directory 18%. Students in their turn confirmed the teacher's speech, since according to 81% of them the teachers from Unifebe used the VTLE Moodle I order to deliver content. These, 56% said that the teachers access texts, videos and link to sites and 20% that teachers made only text and link sites. That is, the teachers were providing media content through Moodle.

Regarding the use of communication tools (synchronous and asynchronous) of VTLE Moodle to mediate the distance interaction, the outcome show discrepancy, because 50% of teachers said they used Moodle to mediate the interaction, while 70.4% denied the use of students.

For both teachers and for 29.6% of the students who answered affirmatively, were asked that cited Moodle tools used to mediate the discussions.

For teachers, the most used tools were: 45% messages 35%, forum and 5% chat. And for students, the most used tools to mediate the discussions were 43.8% Forum and 31.2% the Message.

When asked the teacher if they used Moodle as a means to assess student learning, 46.4% confirmed. And for students, when asked whether they had already participated of some learning assessment via Moodle, confirmed 44.8%. There was a minimal difference of 1.6% between the responses.

It was also asked to teachers and students that mentioned what were the tools of VTLE Moodle used for assessing learning. The result show: Evaluative forum was cited by 21.1% of teachers and 15.8% of the students; Individual Task was cited by 15.7% of teachers and 15.8% of the students; On-Line Questionnaire was cited by 10.5% of teachers and 21% of students; and Evaluative Glossary was cited by 10.5% of teachers and 15.8% of the students.

For those who have used or participated in an evaluation activities mediated by VTLE Moodle, were asked how often they used or participated. The result was similar, 32% of students said they participated once or twice, and 35.8% of teachers responded practically the same amount. There was a difference of 3.8%.

To end the issue of learning assessment, the students were asked if they approved the use of VTLE Moodle to mediate Assessment of Learning: 69.2% responded affirmatively; only 7.7% said no, while 23.1% said that they did not make any opinion.

#### 3 - Some Conclusions and Recommendations

The first observation made in this research was that a HEI which wants to introduce the "Culture of Distance Learning" in the semipresential lessons mode in undergraduate programs should consider strategies to sensitize teachers and students at the institution. For this, it is crucial that managers see the DL as educational modality combined with classroom teaching, which brought more flexibility and dynamism to the educational and pedagogical actions of teachers to students. And that the DL is not a competitor but a complement. Managers should mobilize all sectors to contribute to the process of awareness and create several moments of reflection and debates with teachers and students. In this sense, the continuous training that takes place twice a year in a HEI is the key to have those moments. Another important factor was the choice of teaching methodology used in the training process of

teachers. The participant was led to experience two different roles at a distance: the on-line student into the virtual classroom for Moodle Training, and teacher author (administrator) in the virtual room in his discipline. According to the report made by one of the teachers who participated in the Training Moodle 2008.2, and that coordinated, Continuing Education at 2009.1, the work of a group of participants who socialized the experience for other teachers of the institution, the virtual rooms of training were highly praised by its didactic presentation by the clarity and objectivity of the wealth of tutorials and examples.

Teachers also gave suggestions to improve or expand the training, and educational aspects of the business relationship with HEI classes in the semipresential (UNIFEBE, 2009a, p. 23-24).

Such considerations are important both for teachers and for trainers, managers and researchers of the theme. To teachers, because present new teaching and technological challenges, and requires a professional attitude of non-accommodation of the changes brought by TCD.

To trainers because they must organize and develop training on distance educations that meets the teachers participants needs about several resources available in VTLE on questions regarding to pedagogical action mediate by TCD. For managers of HEI, because these must create the institutional, materials, educational teaching conditions in the Continuing Education so that teachers and students know more and more distance education.

And, finally, for researchers from diverse technology and education areas, because they should study, reflect and publish papers on the phenomenon of distance education in Brazilian Higher Education and the use of VTLE to support teaching mediation and the virtual teaching practice supported in VTLE; is in classroom learning, semi-distance and distance; with educational quality of excellence for students.

#### Notes:

<sup>1 -</sup> Disponível em <a href="http://www.unifebe.edu.br/07\_noticias/ver\_noticia.php?not=1697">http://www.unifebe.edu.br/07\_noticias/ver\_noticia.php?not=1697</a>>. Acesso em 17 abril 2010.

<sup>2 -</sup> Disponível em < http://www.unifebe.edu.br/07\_noticias/ver\_noticia.php?not=2021>. Acesso em: 17 abril 2010. E disponível em <a href="http://www.unifebe.edu.br/galerias/galeria.php?pg=1&id=493&npg=20>">http://www.unifebe.edu.br/galerias/galeria.php?pg=1&id=493&npg=20>">http://www.unifebe.edu.br/galerias/galeria.php?pg=1&id=493&npg=20>">http://www.unifebe.edu.br/galerias/galeria.php?pg=1&id=493&npg=20>">http://www.unifebe.edu.br/galerias/galeria.php?pg=1&id=493&npg=20>">http://www.unifebe.edu.br/galerias/galeria.php?pg=1&id=493&npg=20>">http://www.unifebe.edu.br/galerias/galeria.php?pg=1&id=493&npg=20>">http://www.unifebe.edu.br/galerias/galeria.php?pg=1&id=493&npg=20>">http://www.unifebe.edu.br/galerias/galeria.php?pg=1&id=493&npg=20>">http://www.unifebe.edu.br/galerias/galeria.php?pg=1&id=493&npg=20>">http://www.unifebe.edu.br/galerias/galeria.php?pg=1&id=493&npg=20>">http://www.unifebe.edu.br/galerias/galeria.php?pg=1&id=493&npg=20>">http://www.unifebe.edu.br/galerias/galeria.php?pg=1&id=493&npg=20>">http://www.unifebe.edu.br/galerias/galeria.php?pg=1&id=493&npg=20>">http://www.unifebe.edu.br/galerias/galeria.php?pg=1&id=493&npg=20>">http://www.unifebe.edu.br/galerias/galeria.php?pg=1&id=493&npg=20>">http://www.unifebe.edu.br/galerias/galeria.php?pg=1&id=493&npg=20>">http://www.unifebe.edu.br/galerias/galeria.php?pg=1&id=493&npg=20>">http://www.unifebe.edu.br/galerias/galerias/galerias/galerias/galerias/galerias/galerias/galerias/galerias/galerias/galerias/galerias/galerias/galerias/galerias/galerias/galerias/galerias/galerias/galerias/galerias/galerias/galerias/galerias/galerias/galerias/galerias/galerias/galerias/galerias/galerias/galerias/galerias/galerias/galerias/galerias/galerias/galerias/galerias/galerias/galerias/galerias/galerias/galerias/galerias/galerias/galerias/galerias/galerias/galerias/galerias/galerias/galerias/galerias/galerias/galerias/galerias/galerias/galerias/galerias/galerias/galerias/galerias/galerias/galerias/galerias/galerias/galerias/galerias/galerias/galerias/galerias/galerias/gal

- 3 Disponível em <a href="http://www.unifebe.edu.br/04\_proeng/formacao\_continuada/moodle/">http://www.unifebe.edu.br/04\_proeng/formacao\_continuada/moodle/</a>. Acesso em: 17 abril 2010
- 4 A Lei nº 9394/96, LDB, no seu Artigo 80, incentivou a prática do "ensino a distância, em todos os níveis e modalidades de ensino, e de educação continuada". Poder Público regulamentou prática da EaD no Brasil por meio dos Decretos Presidenciais nº. 2.494/1998; nº. 2.561/1998, nº. 5.622/2005 e nº 6.303/2007.
- 5 Portaria nº. 4.059/2004, que no seu Artigo 1º, conceitua aulas semipresenciais como "quaisquer atividades didáticas, módulos ou unidades de ensino-aprendizagem centrados na auto-aprendizagem e com a mediação de recursos didáticos organizados em diferentes suportes de informação que utilizem tecnologias de comunicação remota".
- 6 Conforme o Inciso VII, do Artigo 12, do Decreto Presidencial nº 5.622, de 19 de dezembro de 2005.
- 7 Disponível em: <a href="http://www.unifebe.edu.br/07\_noticias/ver\_noticia.php?not=1697">http://www.unifebe.edu.br/07\_noticias/ver\_noticia.php?not=1697</a>>. Acesso em: 10 junho 2009.
- 8 Disponível em <a href="http://www.unifebe.edu.br/07\_noticias/ver\_noticia.php?not=2302">http://www.unifebe.edu.br/07\_noticias/ver\_noticia.php?not=2302</a>>. Acesso em: 10 junho 2009.
- 9 O AVEA Moodle apresenta três conjuntos de ferramentas: Conjunto de Ferramentas de Atividade (13 ferramentas). Conjunto de Ferramentas de Recurso (6 ferramentas). Conjunto de ferramentas de Blocos (16 ferramentas).

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