SAAW: A STORY OF EXPERIENCE WITH LEARNING OBJECTS

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Abstract
The incorporation of the technologies of based information and communication in the Internet in the area of the Education has allowed that the long-distance modality, either more spread in the world and if it expands in high speed. The use of the digital media made possible new positions and attitudes of teachers and students in the teach-learning process and the virtual environments come gaining space in the educational scene, consisting in locus of learning and potentize the process of interaction between students and teachers by means of its diverse tools and possibilities of communication. In this work we will approach the experience of the PUCPR in the learning object development that inside assists the student and teacher of the Virtual Learning Environment EUREKA.
Words Keys: Long-distance, Virtual Learning Environment and Object of Learning.

Introduction

The Distance Learning (EAD) exists has much time and it does not constitute an innovation properly, however, never had in history, a moment where this modality of education could reach so huge objectives, as the ones that can be seen in the current days.

The Distance Learning has a long history of successes and failures and innumerable experimentations. In accordance with Palloff and Pratt [1] "the sprouting of the computer for the intention to educate created a redefinition of that if it wants to say when it is said in Distance Learning". We add that the EAD with the advent of the computer and the development of the Internet, created a new paradigm in the process teach-learning, resells, basically, the papers of the student and mainly, of the teacher in the process of education and learning.

In this proposal, more is not conceived the idea of linearity of the thought, as a long time, therefore the knowledge is constructed in a constant relation and connection of information. It fits to detach that it was the factor interactive that made possible a more concrete relation between teacher and student, resell the distance that, many times, condemned to failure the other forms of EAD.

Its fast expansion in the last years in Brazil is undeniable and mainly with the legalization of it offers of long-distance courses, passing to be consecrated, specifically, with the new Law of Lines of direction and Bases of the Education and the Decrees that regulate it, what it made possible a growth in the search and the development of projects for Virtual Learning Environment.

The production of the knowledge can be privileged in this modality of education; therefore the interactive model almost always promotes greater involvement and commitment with knowing. From there the necessity emerges to create learning environments that opportunity one practical pedagogical significant, compatible one with the requirements of the society, valuing the reflection, the investigation spirit, the curiosity, the critic, the creativity and the capacity to decide problems.

The Virtual Learning Environment provide to chances of interchange of information and ideas, where the students can also participate actively of the process of education and learning, learning with the others and with the teacher. In this proposal, more is not conceived the idea of linearity of the thought, as a long time, therefore the knowledge is constructed by the exchange between pairs of information, that allows to establish new relations and connections with the knowledge.

A common universe of knowledge passes to be shared. But this only happens, when it has a change in the position of the teacher and not only a virtualization of the actual lessons, where it has only one transference of that it happens in the classroom for the virtual environment.

Although the potential of interactions and active participation is unquestionable, the technology does not guarantee that this happens effectively. Courses where the activities are centered in the teacher instead of being centered in the process of learning of the students present little interaction.

In function of the great advance of the technology and especially after the dissemination of the Internet, the EAD have created chances in Virtual Learning Environment students to make courses independent of its geographic localization in the time and schedule that has to dedicate themselves to its

studies. We come across in these virtual environments, with some tools that contribute for interactive in this virtual space, as forum, chat, e-mail, discussion list and others. All this technology of net environments facilitates the social interaction, makes possible the individual learning by the interactions with the group, becoming an element to make possible the collective creation of a shared knowledge.

Virtual environment Learning

Front to the advance of the technologies of the information and communication, the virtual net allows configuring new spaces of interaction and learning. The Virtual Learning Environment are characterized by nets of communication mediated by computer (CMC) having as objective to provide an interactive space where students and teachers can share information, to construct meanings, ideas and the knowledge by means of individual or collective works. For Harasim [2], such environments can assume the classroom, providing "to structuralize and to chain the learning process" promoting the education.

It can say that the Virtual Learning Environment is a space that assists in the communication, making possible the interactive between the participants and the development of abilities for the construction of the knowledge. The use of these environments provides a connection of learning, propitious to promote the collaborative learning and a procedural and continuous evaluation. Santos [3] affirms that "a virtual environment is a space of signification where human beings and objects technician interact thus potentize, the construction of knowledge, then the learning".

To considering a collaborative learning in a Virtual Learning Environment, interpersonal communication must be generated potentize the interaction of the student.

> The basic characteristic of the learning in net is the premise of cooperative methods of learning. The net are surrounding of communication in groups that extend the social connectivity. The learning in net makes possible forms of contribution without precedents, based on the sharing of interests, and not in the geographic localization. HARASIM [4]

The Virtual Learning Environment is composed for a system that also manages and stores the contents and a graphical interface.

The graphical interface is the way for which the user interacts with the Virtual Learning Environment, in this space it is contained the graphical elements and the information - organized and structuralized in accordance with the necessities of each group of individuals. The visual composition of the environment directly is related the studies and research of the users. The storage of information of these environments is essential for the management of the content, therefore, they facilitate the access to the information that are separate for specific groups.

Taking in account the necessities generated in the use of the new technologies, these environments have the necessity to be flexible, taking care of different groups of studies that if interact in diverse applications, thus providing, the interaction between man and machine.

Objects of Learning

Inside of the diverse possibilities that the technology provided it is important to detach Objects of Learning. According to Bettio, [5] "Objects of Learning is digital entities that they look to promote the perfect spreading and organization of the information in the Internet". We can say that the Objects of Learning are small parts of all, are tools that assist the learning of the subjects of study from hypertexts, images, videos, animations, drawings, projects, graphs, animated or not that they are used in the digital way. It has as function to organize the agreement and to provide a bigger cognition of the subject to be studied, inside of virtual environments; they make possible the transmission of the message for a bigger number of people and allow that each one studies in accordance with the knowledge and speed of learning.

The Objects of Learning directly are related with the technologies of the information and the communication (TICs) and is developing with the growth of the modality of Distance Learning. They provide an infinity of resources, illustrating and making possible the experimentation and the comment of phenomena that nor always are possible in the classroom, enriching the interaction between teacher and student. The Objects of Learning also can be used in the actual education as in the pedagogical boarding.

Another characteristic of Objects of Learning is that they interact with student providing one feed-back so that the student can verify its performance and, if necessary, to come back to use the object how many times they want.

The main advantages of the use of Objects of Learning in Distance Learning are:

- To assist in the agreement and learning of the boarded subject;
- To allow updates of constant form;
- To organize subjects that the student can review and consult of independent and not linear form;
- It makes possible the creation of virtual libraries that allow being available different subjects to be boarded in different programs of learning;
- They also allow the possibility of the use of diverse pedagogical boarding's as: auto-learning, solution of problems and in the study of contents and projects.

Virtual Learning Environment EUREKA

In 1995 the PUC-PR - Pontifícia Universidade Católica do Paraná initiated the development of the Eureka - Virtual Learning Environment - in partnership with Siemens.

In 1999, the EUREKA is consolidated definitively as a tool of support for the teachers of the PUCPR, with approximately, 1,000 users. In the end of 2000, already they were 10,000 credential users in the system, passing in the end of 2006 for 30,963 registered in cadastre people, 7,523 academic rooms opened and 1,492 rooms MATICE students to attend an incomplete subject on-line.

The Eureka is an environment based on the Web, and contributes for collaborative learning, allowing the development of formation courses, qualification and training in distance. It was developed in modules, with well-defined functions, objectifying to maximize communication techniques enters the participants of the system, providing the accomplishment of collaborative

education, as it affirms Eleutério [6]: "One used processes of specification and implementation of software that confer quality and scalability to the solution, allowing personalized configurations and continuous development and adaptation of new easiness's and functions."

With the experience acquired in the implementation of the Eureka, the necessity of development an Object of Learning was being more evident that assisted in the process of education and the learning. Detaching that it would not be enough to place only the content of the discipline in the virtual environment, was decided to develop an adequate material, using the interactive resources, that makes possible in the Internet. Another aspect important to stand out is that these materials are available to the teachers for its use in the programs of learning.

The SAAW of the PUCPR

Ahead of the necessity of an Object of Learning, appeared the Nucleus of Educational Technologies (NTE) that since 1997, search's technological solutions for the development of digital didactic material. In this nucleus the SAWW was born - System of Support to the student through the WEB - that in accordance with Tarrit et al [7] "was created to take care of to the necessity to be available definitive content of safe and efficient form and that offers a set of functionalities integrated to the EUREKA." Thus, the first objects of learning of the PUCPR are developed. Such objects are available for all the teachers of the PUCPR. As Hilu and Tarrit [8] "All the virtual classrooms of the graduation [of the PUCPR] has automatic access to this functionality from the moment where the responsible one for the room creates one or more scripts of study applied to all or the part of the students of the class."

The system are available beyond subjects of public studies - developed by teachers that was contracted by the PUCPR to elaborate the Objects of Learning - space for the creation of private subjects of restricted use of the teacher and author.
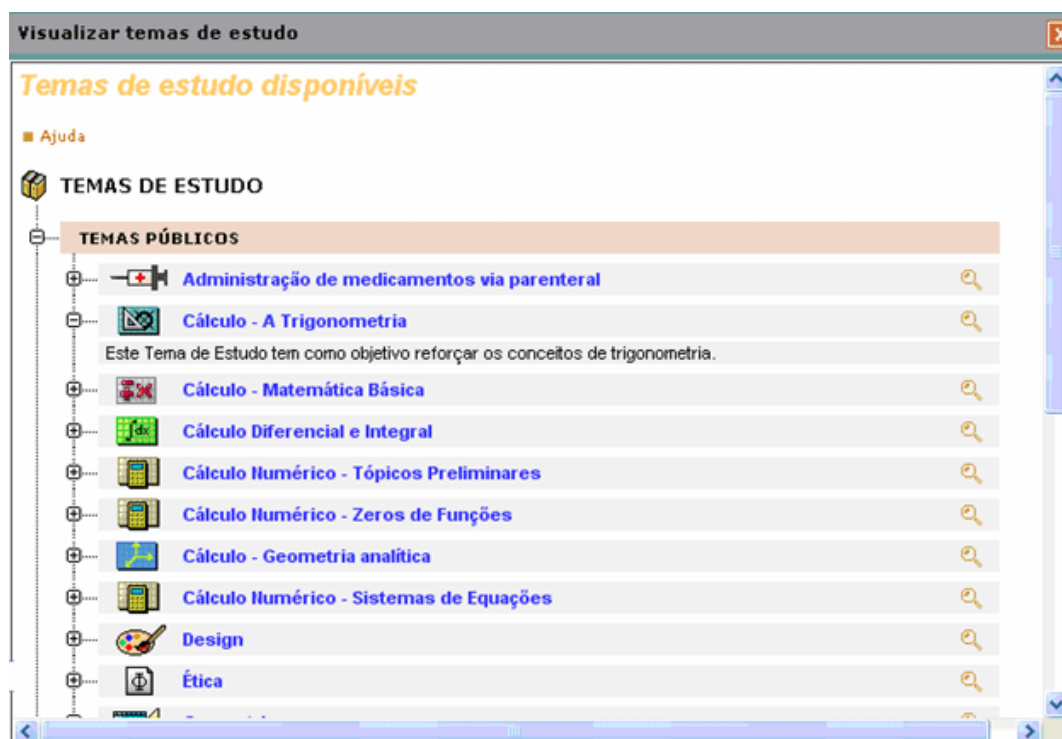
Figure 1. To visualize study subjects

Easily the teacher can create its proper Object of Learning to disposal to the students. With a simple click, it has reach a resource that makes possible diverse creative forms of use, being able to be associated with other tools of the EUREKA, also allowing that the teacher elaborates a learning script that associates diverse subjects.

Figure 2. Screen of opening for Object construction of Learning for the author

Figure 3. Tela of entrance of the SAAW

After almost 10 years of research for the evelopment of the Object of Learning, diverse teachers live deeply the experience of use of this tool - SAAW - for support its lessons, searching always to improve the quality of education. The nucleus of educational technologies, tied with the Directors of EAD, is consolidated today as a nucleus of research and learning object development.

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