CONTRIBUTIONS AND CHALLENGES OF DISTANCE EDUCATION FOR CORPORATE UNIVERSITIES

May 2008

Vanessa Itacaramby Pardim – UNINOVE – v_itacaramby@yahoo.com.br

Eduardo Sérgio Ulrich Pace – UNINOVE – pace2@terra.com.br

Category (C – Methods and Technologies)

Educational Sector (4 – Corporate Education)

Nature (A – Research Report)

Class (1 – Scientific Investigation)

ABSTRACT

The competitive advantage of an organisation is intimately linked to the intellectual capital it has at its disposal. In this sense, the organisations already noticed that, to invest in their employees, be it due to administrative questions or to pressures deriving from the environment, brings about positive results. It is in this context that arose the question which quided this paper: how can Distance Education create a propitious environment for the generation, development, dissemination and management of knowledge in the organisations that opted for the creation of Corporate Universities? To answer this question, we conducted a theoretical survey about this topic and after that, we analysed the data of the research carried out by the Anuário Brasileiro de Educação Aberta e a Distância [Brazilian Annual of Open and Distance Education] in 2005 and 2006. We came to the conclusion that, by means of Virtual Learning Environments, Distance Education constitutes itself into a powerful tool to be used by the organisation for the creation, development, dissemination and management of knowledge, but there are some reserves to be considered: not to create Corporate Education programmes. via Virtual Learning Environments aiming at the reduction of expenses; all the members of the organisation's governing body must be involved in order to guarantee the necessary investments and the continuity of the project; the objective of the courses must be well defined in order to guarantee first-rate interlocutions, in a continuous process of construction, deconstruction and reconstruction of knowledge; a careful and efficient pedagogical mediation.

Keywords: Corporate University, Distance Education, Corporate Education and Knowledge Management.

1. What in fact is Corporate University?

A term in vogue, the expression Corporate University has often been used as a synonym of the traditional Training and Development Departments and frequently the analogy is quite correct, but, in the original meaning of the term, Corporate Universities are created in order to develop and retain talents in the organisations, extending their services to providers, customers, outsourced, partners, shareholders and interest communities searching for lucrative solutions for all those that are involved in this chain of values.

There are various definitions of the term Corporate University. According to MEISTER (1999, p. 29), a Corporate University can be defined as "a strategic comprehensive means thought to develop and educate employees, customers, providers and communities, in order to fulfil the organization's enterprise strategies".

As for EBOLI (2004, p. 48) a Corporate University can be defined as "a system of people 's development regulated by the management of persons according to their competences". It is worth emphasizing that the term competence is not synonym of knowledge, since competent is the one that adds value to the results of an organization thanks to his knowledge and skill.

Despite the promise of good results, it is necessary to be quite cautious in creating a Corporate University, since one must be sure that there will be commitment on the part of the organization's governing body, a guarantee of financial resources for the establishment, maintenance and development; an efficient and continuous system of communication and monitoring and the persons' involvement. All these precautions are necessary in order to try to avoid the shipwreck of the initiative in the middle of the path.

The most important factor in Corporate Universities consists in the link between the educational services and the organization, since it is thanks to the interlacement of knowledges deriving from these two systems that the employee, besides acquiring knowledge, becomes aware of the role his function plays in the organizational process as a whole and of the importance this has with regards to the market. A Corporate University cannot only be a University or only a Corporation, a well articulated combination of the scientific rigor of the academy and the practical focus of the organizations being necessary.

After the creation of a Corporate University, tutoring and evaluation are other important aspects, since they will verify the impact of this initiative on the result of the businesses and consequently the level of maturity of the proposal. To evaluate is not and never will be a very easy task, nonetheless it is of extreme importance for the feedback and for the correction of the course it is taking. Thus it will be necessary to analyse the relation cost-benefit and to choose an evaluation methodology moulded according to the organisational profile.

2. And how does Knowledge Management fit in our scheme?

Knowledge management is an essential part of this action, since we are living in a time in which people transformed themselves into the great differential of the organizations and in this context, knowledge management is being transformed into a valuable strategic resource for the lives of the people and of the organisations. Nevertheless it is still very easy to find organisations which function like real prisons of knowledge. On the other extreme, it becomes necessary to understand that if the

organisations want to gain competitive advantages, it is not enough, for example, to count on a Corporate University to provide a space for knowledge management, since to know much about something does not maximize the power of competition. This is only possible when it is combined with a system of management of the knowledge that is produced, able to create and establish processes which administrate, stock, manage and disseminate knowledge and make its application viable, thus representing a new challenge to be faced by the organisations.

NONAKA and TAKEUSHI (1997a, p. 63) classified human knowledge into two types: tacit knowledge and explicit knowledge. Explicit knowledge is that which can be articulated in formal language, in grammatical affirmations, mathematical expressions, specifications, handbooks, and so on, it is easily transmitted, systematized and communicated from one individual to another. Tacit knowledge is that personal knowledge incorporated in individual experience involving intangible factors, such as, for instance, personal creeds, values, insights, emotions, skills and it is considered an important source of competitiveness between the organisations. They complete each other and interaction between them is the principal dynamics of the creation of knowledge, that is to say, it is a spiral with a continuous process of externalization, socialization, combination and internalization of knowledge.

Knowledge is the organisations´ very heart, since it allows them to adapt themselves to the rapid changes in their environment, promoting the continuous improving of the processes that aims at competitive advantage and it is fundamental since it is "capable to identify opportunities which the others have not seen yet and to exploit them to the utmost degree" (BROWN, apud REGO JR., 2001, p. 222). Another aspect to be taken into consideration is the rapid obsoleteness of this knowledge "and the necessity to generate those knowledges which are related to that which criticizes the success of business" (EBOLI, 1999, p. 1), this is why an effective process of knowledge management is necessary. BUKOWITZ and WILLIAMS (2002, p. 17) define knowledge management as "a process through which the organization generates richness out of knowledge or intellectual capital".

The Corporate University is strongly linked to the definition of organisations that administrate knowledge, but to align the model of knowledge management with the strategies of the organisation is not an easy task, since it must give priority to the potentialization of the medium or long-term goals and gauge direct and indirect, tangible and intangible results. All the fields can and must be taken into consideration by a model of knowledge management, nevertheless the fields which exert a greater influence on the result, according to the relation cost-benefit, and on the future strategies must be privileged. The organisation and the systematization of knowledge, on the operational, tactical and strategic levels, constitute a process that is in constant construction, and there is no precise term to reach its end, due to the necessity of the organisation to remain on the market.

Distance Education and Virtual Learning Environments as strategies for Corporate Universities and Knowledge Management

Since a short time ago, Corporate Universities needed a campus, that is to say, a physical space in order to exist. Nowadays it is a process and Distance Education, especially via internet, has become an excellent option for the organisations to institute

a culture of continuous learning, thus breaking the paradigm of education restricted to physical structures and offering the student a world of information.

Distance Education is a teaching modality which makes information available, using a set of tools in order to produce and distribute contents. This modality allows self-learning according to the students' rhythm and time; it is based on contents which are previously elaborated by the organisation itself. Through Distance Education it is possible to eliminate the barriers of time and distance and to amplify the possibilities of the invested resources, the employees' access and the diffusion of the organisation's values and culture. This is why Distance Education via internet is being more and more adopted by organisations as a tool for knowledge management. Distance Education has helped Corporate Universities to adjust themselves to the reality of the professional environment by offering rapidity, agility, appropriate contents, availability of information at the right moment and reduction of expenses. It must be pointed out that by means of Distance Education it is possible to create a learning process which involves not only the intern public, that is to say, the employees, but the other participants of the productive chain as well: providers, customers, outsourced, partners, shareholders and interest communities.

In this modality investments grow in the same measure as entrepreneurs are aware of the benefits of Distance Education. One example concerns the reduction of travel expenses, since courses can be given in the very organisation by means of an already existing infrastructure. Another example refers to the possibility to create personalized courses, planned according to the organisation's field of action, in order to develop a competitive advantage over the other competitors. Since the focus of this field is on knowledge, Distance Education offers, as a principal resource, the possibility to generate continuous knowledge through learning communities and, beyond this, it is an environment which favours the delivery of courses and conferences, the organization of meetings, and so on, thus it constitutes itself into a very important resource for permanent education.

There are various tools for the generation, development and administration of knowledge available in the Virtual Learning Environments, virtual learning rooms, virtual rooms for interactive meetings, on-line conferences, modules destined to the administration of contents, and so on. The tools used for the sharing of knowledge's and the acquisitions of skills that are necessary to achieve the organisations' goals, constitute the main point of the architecture of these environments.

There are many options of Virtual Learning Environments available on the market, for instance Saba and Docent in the corporate field and Blackboard and TelEduc in the academic field. Although they can differ in details such as the users' interface, interactivity and bandwidth, and so on, the model infrastructure of delivery is internet. These environments offer an integrated and complete solution to the development and the management of content. And it propitiates as well an agile process of the creation and delivery of contents and sophisticated resources for the evaluation of performance, a solid repository of contents and an integrated monitoring system.

As far as the construction of a Virtual Learning Environment is concerned, some questions must be enhanced, according to SANTOS (2003):

- a) To create hypertextual sites which add intertextuality, connexions to the other sites or documents; multivocality, that is to add a multiplicity of points of view; navigability, a simple and easily accessible environment and transparency of the information; mixing, integration of various languages: sounds, text, dynamic and static pictures, graphics and maps; multimedia, integration of various mediatic supports;
- b) To potentialize *interactive synchronic communication* real time and asynchronic communication at any time sender and receptor need not be in communication at the same time.
- c) To create *research activities*, which stimulate knowledge construction based on problem-situations, where the subject can contextualize local and global questions of its cultural universe.
- d) To create environments for formative evaluation, where knowledges are being constructed in a communicative negotiation process where making decisions is a constant practice for the processual (re)signification of authorships or co-authorships.

To make available and to stimulate playful and artistic connexions and flowing navigations (Santos, 2003, 227)

The Virtual Learning Environments must be flexible and permit the interaction and the collaborative work between the involved people. Thus the best and most modern technology will not guarantee that the activities carried out by Corporate Universities will be successful if the focus of this process is not on the people who are involved in it.

4. Methodology

This paper is based on a survey of a theoretical referential mainly about three central topics: Corporate University, Knowledge Management and Distance Education.

The following step was a data collection at the Instituto Monitor which published an *Anuário Brasileiro Estatístico de Educação Aberta e a Distância* [Statistic Brazilian Annual of Open Education and Distance Education] in 2005 and 2006, respectively in 2006 and 2007, aiming at presenting a panorama of Distance Education in Brazil in Formal Education and in Corporate Education. This research was supported by the Associação Brasileira de Educação a Distância - ABDE [Brazilian Association of Distance Education] and of the Secretaria de Educação a Distância – Ministério da Educação [Secretariat of Distance Education – Ministry of Education].

5. Data presentation and analysis

Questionnaires were sent to different organisations; very often they do not bear the name of a Corporate University, but the activities they fulfil characterize them as such. From all the organisations to which the questionnaires were sent, only 21 answered the questions in 2005 and 27, in 2006, these organisations compose the sample. A question that must be enhanced is that there is no homogeneity when we speak of Corporate Universities, since each organisation adopts its structure according to its specific needs.

According to the data presented in the *Anuário Brasileiro Estatístico de Educação Aberta e a Distância – 2006 and 2007*, the audience of the programmes of the Corporate Universities, in 2005 and 2006, as Tables 1 and 2 show, concentrate themselves on direct employees and service providers, 68, 9% in 2005 and 78,1% in

2006. The other members of the productive chain, such as, for instance, providers, customers, shareholders and interest communities are not quoted by their names, but they can be found in the other occurrences. This shows that the main focus of the Corporate University in the organisations, that had been interviewed, is still on the employees and not on the whole chain of value, which is a characteristic of the training and development departments and not of the Corporate University. This is what MEISTER's (1999) affirmation proves when she states that the organisations more and more chose to call their educational actions Corporate Universities, since an important name is a very powerful lure to help these initiatives to be successful.

	Frequency	%
Direct employees	10	34,5
Direct employees and service providers	9	31,0
Others	9	31,0
Service providers	1	3,4
Total number of occurrences	29	100,0

Table 1: Audience of the courses – 2005

Source: ABRAEAD, 2006, p. 99

	Frequency	%
Direct employees	16	50,0
Direct employees and service providers	9	28,1
Others	7	21,9
Total number of occurrences	32	100,0
T. I. C. A. I. C. I		

Table 2: Audience of the courses - 2006

Source: ABRAEAD, 2007, p. 114

Among the chosen audience, as tables 3 and 4 show, there is a concentration on the operational and tactical levels, 68,9% in 2005 and 78,1% in 2006, which shows that the Corporate Universities, that were interviewed, may not correspond to all the specifications contained in the authors' definitions about what a Corporate University actually is, but they care for the development of the competences which criticise business, whatever the activity fulfilled by the employees in the organisation may be. This becomes clear when NONAKA and TAKEUCHI (1997b, p. 15) state that "the responsibility for the generation of knowledge is not exclusively that of a group of specialists or of a department, that is to say, each of the chief executives, managers and directors has to fulfil his part in this process in an interactive dynamics between all the people who are involved in it".

	Frequency.	%		Frequency	%
Operational	20	28,2	Operational	23	27,4
Supervision	19	26,8	Supervision	21	25,0
Management	17	23,9	Management	21	25,0
Executive Board	8	11,3	Executive Board	11	13,0
Board of Presidents	4	5,6	Board of Presidents	4	4,8
Other	3	4,2	Other	4	4,8
Total number of occurrences	71	100,0	Total number of occurrences	84	100,0

Table 3: Hierarchic levels considered - 2005

Source: ABRAEAD, 2006, p. 99

Table 4: Hierarchic levels considered - 2006

Source: ABRAEAD, 2007, p. 115

The development of a course, even for those which take place in the presence of the students and the teachers, is not an easy task, since it exerts an influence upon activities which include the various stages of the elaboration of pedagogic strategies and of the adjustment of contents, production and publication of the course and chiefly, tutoring strategies. The educational strategy is based on planning, the definition of the

methodology, evaluation tools and criteria and on the learning and application of knowledge. To take these points into consideration does not guarantee the success of the course, since it depends on other factors as well, but it minimizes the risks of ostensive evasions. In the tables 5 and 6 are presented the indices of evasion in the courses of the organisations that were interviewed. The evasion percentage is high in the courses if we take into consideration that 300 of 1000 employees who participate in the courses give up in the middle of the course and this happened not only in one but in six of the organisations we interviewed in 2005 and 2006, that is to say, 28, 6% and 22, 2% respectively. The other ranks as well present evasion indices which deserve our attention.

Percentile ranks	Frequency	%
Up to 10	7	33,3
From 11 to 20	3	14,3
From 21 to 30	5	23,8
More than 30	6	28,6
Total number of occurrences	21	100

Percentile ranks Frequency Up to 10 15 55,6 From 11 to 20 3,7 1 From 21 to 30 5 18,5 More than 30 6 22,2 **Total number of occurrences** 27 100,0

Table 5: Evasion indices of the courses – 2005

Table 6: Evasion indices of the courses – 2006 **Fonte:** ABRAEAD, 2007, p. 117

Source: ABRAEAD, 2006, p. 100

Considering evasion a frequent factor in remote courses, as shown by the specific literature, the success of the course is directly influenced by factors, such as: clear definition of the programme, correct utilisation of the didactic material, correct use of the appropriate means which facilitate the interlocution between teachers and students, and so on. Beyond these points, evasion can also be influenced by individual and regional needs and by the evaluation of the course.

In spite of the high evasion indices, Distance Education via internet, more than ever, represents a possibility of continuous education for the individual person and for the organisation as a whole. This becomes clear when we look at Tables 7 and 8 which show the media that were more used in Distance Education courses in 2005 and 2006. Among the quoted media, the highest percentage, 40% in 2005 and 36, 6% in 2006, is that of Distance Education via internet or E-Learning.

	Frequency	%
E-learning	18	40,0
Printed material	7	15,5
Television	5	11,1
CD-ROM	5	11,1
Video	4	8,9
Videoconference	4	8,9
DVD	2	4,5
Total number of		
occurrences	45	100,0

Table 7: Most used media in DE courses in 2005 **Source:** ABRAEAD, 2006, p. 102

	Frequency	%
E-learning	26	36,6
Printed material	11	15,5
Vídeo	7	9,9
DVD	7	9,9
Videoconference	7	9,9
CD-ROM	6	8,5
Television	5	7,0
Others	2	2,7
Total number of		
occurrences	71	100,0
T.I. 0.14 / DE		

Table 8: Most used media in DE courses in 2006

Source: ABRAEAD, 2007, p.117

A point, which must be observed, is that there was a small drop in the growth of Distance Education via internet, from one year to the other, if we compare it to other

media, nonetheless it did not stop growing. Another outstanding media is printed material, since it was maintained as the second most used media. This data attracts attention so far as to it is a unidirectional media different from Distance Education via internet, which by means of the Virtual Learning Environments enables a bidirectional communication, that is to say, it allows a greater interaction between the persons who are involved in it.

The most used media can be divided into two groups: a) *media for communication*: e-learning (possesses other tools, such as, for instance: e-mail, discussion list, chat and videoconference; b) *media of message reproduction*: printed material, video, DVD, CD-ROM, television, radio.

The first group congregates the media which allow communication between the involved persons in a synchronic way. The second group deals with the transmission of messages in an asynchronic way, carried out by the subjects who are acting in the process of teaching-learning. It is worth emphasizing that E-learning, or Distance Education via internet, as we chose to call it in this paper, is composed of various media which enable interaction in synchronic and asynchronic ways.

Returning to the data of 2005 and 2006, we notice that in the list of the media, which are most used in the Corporate Education programmes, only 2 from the 8 quoted media allow the interlocution between the persons who are involved in the process of teaching-learning in a synchronic way. When we look at the percentages of tool utilization, we notice that the sum of the 2 most used media results in 48, 9% and 46, 5% in 2005 and 2006 respectively, that is, it almost amounts to 50%. From this fact we can infer that the reduction of 24% from one year to the other is due to the attention remote courses require. The point is not to create material and distribute it to a large audience, but to create a course and go on adapting it in the course of the activities. This requires time and resources and very often the organisations are not willing to assume the expenses involved in creating a first-rate Virtual Learning Environment.

Virtual Learning Environments aggregate interfaces which enable contents production, various communication channels, database management and the total control of the information circulating in and through that environment. These characteristics have permitted that a large number of subjects geographically scattered all over the world interact in various times and spaces. That is why all the advantages quoted by the organisations are centred on two keywords: time and space, as one can see in the Tables 9 and 10.

Advantages	Frequency	%
Time flexibility for the student	19	17,2
Agility	18	16,2
Reduction of expenses	17	15,3
Comprehensiveness and reach	17	15,3
Access facilitated to the student	16	14,4
Space flexibility for the student	12	10,8
Minor interference with the student's routine	12	10,8
Total number of occurrences	111	100,0

Table 9: Advantages of DE for the organisations - 2005

Source: ABRAEAD, 2006, p. 102

Advantages	Frequency	%
Comprehensiveness and reach	24	17,9
Reduction of expenses	23	17,0
Time flexibility for the student	23	17,0
Agility	19	14,1
Access facilitated to the student	18	13,3
Space flexibility for the student	15	11,1
Minor interference with the	13	9,6
student's routine		,
Total number of occurrences	135	100,0

Table 10: Advantages of DE for the organisations - 2006

Source: ABRAEAD, 2007, p. 118

The advantages mentioned in Tables 9 and 10 can be prejudiced when, for instance, the design is not attractive. The simplicity of the layout of the environment enables the participants to learn how to use the technology while participating in the course. The more facility the participants will have with technical aspects, the more time they will devote to the content and to the active participation in the environment. Nevertheless some Virtual Learning Environments adopt rigid aesthetics of difficult navigability which very often simulate the classical presencial practices.

In the operational perspective, the Virtual Learning Environments must foresee pedagogical strategies which promote the development of learning and demystify the barriers of space and time between students and teachers. It is necessary to evaluate the conceptions of curriculum, of communication and of learning used by the authors and managers. It is possible to find courses which use the same Virtual Learning Environment, but with an incredible variety of practises and pedagogical and communicational postures. Such practises can be instructionist as well as interactive and cooperative.

The process of Distance Education via internet must consider the student an active subject able to determine his self-learning, which requires the offering of support services, interactive strategies and the integration of different media. The creators of Virtual Learning Environments must be challenged to develop and to administrate new forms and contents so that those new forms constitute themselves into more than mere deposits of contents. Pedagogical practises must be created, which are not only focused on the distribution of contents, with compulsory request of tasks and without pedagogical mediation, in which the tutors´ role constitutes itself into a bureaucratic and bank-like management of the process of teaching-learning. In the interactive and cooperate practises, the content (design and communication) of the course is constructed by the subjects, in a process of authorial and co-authorial creation of meanings, in which interactivity is the basic characteristic of the process.

In order to have the Virtual Learning Environment constitute itself into a living organism involved in constant change, interaction between the participants is indispensable, since the participants' creation, development and dissemination of knowledge are based on it. And according to the relations between the components (technical aspects, quantity, quality of the messages, and so on), the environment can expand or reduce itself.

Other obstacles, such as for instance, available time, each person's rhythm, difficulties, technical doubts, problems of interpretation, contents which are not clear, and so on, can also provoke absences and not the interaction between the people who are involved in the process.

By neglecting one of the points we mentioned above, many problems may occur, which convert themselves into disadvantages and may prevent the organisations from going on delivering remote courses. In Tables 11 and 12 are presented some of the main disadvantages the organisations that chose to use Distance Education via internet, can have to cope with.

Disadvantages	Frequency	%
Absence of intimacy with the		
method	11	25,0
Evasion	9	20,5
Impersonality	8	18,2
Establishment expenses	7	15,9
Monitoring of the participants	6	13,6
There are no disadvantages	2	4,5
Others	1	2,3
Total number of		
occurrences	44	100,0

 Table 11: DE disadvantages for the organisations

- 2005

Source: ABRAEAD, 2006, p. 103

Disadvantages	Frequency	%
Evasion	15	27,8
Absence of intimacy with the		
method	12	22,2
Establishment expenses	10	18,5
Impersonality	6	11,1
Monitoring of the participants	5	9,3
Others	4	7,4
There are no disadvantages	2	3,7
Total number of		
occurrences	54	100,0

Table 12: DE disadvantages for the organisations - 2006

Source: ABRAEAD, 2007, p. 118

When we observe Tables 11 and 12, we notice that, in those two years, the most quoted disadvantage is evasion. It is due to different factors, such as, for instance, the case in which the Virtual Learning Environment does not work during one week, this discourages the participants, since there is a discontinuity of the process and to restart is not a very easy task. Thus it is necessary to exploit the new possibilities carried along by Distance Education and to keep alert so that the planning of the various aspects, we mentioned in this paper, contribute to a significant learning.

The disadvantages quoted by the organisations can be corrected or minimized by a well structured and multidisciplinary team that is able to overcome the deficiencies in Distance Education and to elaborate projects of remote training the goals of which are the students' interactivity, autonomy and flexibility, thus providing higher performance.

6. Final considerations

The utilization of Distance Education in the programmes of Corporate University, by means of the Virtual Learning Environments, constitutes itself as a powerful tool for the creation, dissemination and management of knowledge by the organisation, since it possesses various elements which potentialize actions oriented this way, such as, for instance, the possibility of synchronic and asynchronic learning processes; the sharing of the participants' previous experiences (in a process of the socialization of tacit knowledge), interventions which lead to reflections, reflections which lead to answers that generate new questions and lead to new answers, in a continuous process of socialization, externalization, combination and socialization of knowledge.

Nevertheless some reserves were made, since the organisations generally choose to develop their Distance Education programmes by means of this modality of teaching-learning thinking that they are minimizing expenses. This is partly true, because it eliminates different expenses, which a trip, for instance, would imply; nonetheless very often a first-rate technological infrastructure for a remote course via internet is quite expensive.

Another point which is extremely important is the involvement of all the members of the organisation's executive board that ranges from the choice of the Virtual Learning Environment which will serve as a mediator to the different stages of elaboration, development, application and tutoring of these educational systems, since

these activities are crucial for the performance of the Distance Education programme which will adopt this modality.

Besides the institutional support, other elements may characterize the success or the failure of a proposal of Corporate Education via Distance Education, but when a Corporate Education programme has a well defined objective and when the employees notice that they are integrant parts of the teaching-learning process, they will succeed in developing self-confidence and confidence in the group, which will facilitate the learning process and consequently the management of knowledge. In order to make this possible, a careful and efficient pedagogical mediation is necessary not only in the sense of attempting to amplify the interactions, but also to make interventions in order to guarantee first-rate interlocutions in a continuous process of construction, deconstruction and reconstruction of tacit and explicit knowledge.

There are many advantages of the utilization of Distance Education, such as the ones we listed in this paper, but we also presented disadvantages, which can cancel and even make a proposal of Distance Education in this environment unviable.

7. Reference

BUKOWITZ, W. R.; WILLIAMS, R. L. Manual de Gestão do Conhecimento: Ferramentas e técnicas que criaram valor para a empresa. Porto Alegre: Bookman, 2002

EBOLI, M. Educação Corporativa no Brasil: mitos e verdades. 2 ed. São Paulo: Editora Gente, 2004.

INSTITUTO MONITOR. Anuário brasileiro estatístico de educação aberta e a distância 2005. São Paulo: Editora Monitor, 2006.

INSTITUTO MONITOR. Anuário brasileiro estatístico de educação aberta e a distância 2006. São Paulo: Editora Monitor, 2007.

MEISTER, J. C. Educação corporativa: A gestão do capital intelectual através das universidades corporativas. São Paulo: Makron Books, 1999.

NONAKA, I.; TAKEUSHI, H. Criação de conhecimento na empresa: como as empresas japonesas geram a dinâmica da inovação. Rio de Janeiro: Campus, 1997a.

NONAKA, I. Como as organizações aprendem: relatos do sucesso das grandes empresas. São Paulo: Futura, 1997b.

REGO JR., L. C. M. E-Learning. In Manual de Treinamento e Desenvolvimento: Um guia de operações. São Paulo: Pearson Makron Books, 2001.

SANTOS, E. O. dos. Articulação de saberes na EAD online: Por uma rede interdisciplinar e interativa de conhecimentos em ambientes virtuais de aprendizagem. In SILVA, M. (org.) Educação online. São Paulo: Editora Loyola, 2003.