REFLECTIONS ON DISTANCE EDUCATION MANAGEMENT IN BRAZIL: CASE STUDIES ON THE DEVELOPMENT OF DIDACTIC MATERIAL IN DISTANCE EDUCATION IN CORPORATE UNIVERSITIES

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Abstract

The development of didactic material in Distance Education has been discussed in an incipient way in academic circles, through research focused on design models, and ways of using new technologies - videos, blogs, and social networks among others - with greater emphasis on public universities, thus neglecting the corporate universities. This paper presents the research conducted to identify the Management Model for the Development of Didactic Material in Distance Education adopted in Corporate Universities in state-owned companies in Brazil.The research carried out is based on a qualitative approach, focused on the analysis of multiple case studies. The data collection used the literature review and the online questionnaire for the coordinators/managers of the selected corporate universities. The data analysis leads to the conclusion that the 3 universities under study use the open and contextualised instructional design models, but do not use the ADDIE model in the development of the courseware. As for the model of management of the development of the teaching material, it was concluded that it is closed and defined by the company. This research has triggered new questions that need to be answered: i) what difficulties prevent the application of the ADDIE model in the development of instructional design in Corporate Universities?, ii) what future for corporate universities in Brazil's education system?

Keywords: Distance Education, Corporate University, Instructional Design, Management Models, Didactic Material, Brazil.

1   INTRODUCTION

The use of digital media has significantly altered organizational educational processes and models of development and management of didactic materials [1].

The functioning of this new model of information use by the organisations will be based on the knowledge management allied to the business strategy with the introduction of new models of education and learning in order to make the educational process more attractive and motivating for the employees, being these organisations identified as "learning organisations".

It is based on the new concepts of knowledge management and learning in organisations that, in the 1990s of the last century, the corporate education model emerged, defined as "a set of continuous educational practices with a strategic business vision, capable of enabling a greater understanding of an organization's intellectual capital" [2, p.3], which reifies in the figure of Corporate Universities.

The creation of a differentiated educational system based on the Corporate University is still maturing and there is a need to expand its theoretical and conceptual backgrounds [3] in terms of the management and development model of didactic materials. The analysis of the trend of corporate education in Brazil reveals an increase in the use of distance education [4] demanding the Corporate University manager to know the most effective pedagogical and development models of didactic material for distance education [5].

Given the requirements of information and communication technologies, and the new material model of society that they potentiate in cyberspace [6; 7], organizations resort to Corporate Universities in a

process of centralizing the educational process and rational use of the resources made available through distance education [8].

The Corporate University has a more strategic and centralizing vision in the coordination of the learning process, using the technological support to disseminate knowledge throughout the organization, focusing on the development of didactic material for distance education as a way to meet demands and support the organizational strategy, considering two aspects: i) to be a corporate university in an organizational structure that must perform the classic functions of the administration and, ii) the understanding, by the corporate university managers, of the teaching-learning process, the pedagogical models and the educational assessment, that most effectively and efficiently support the use of resources [9; 5; 10].

The creation of corporate universities, in the view of [11], occurred from the need and the broad understanding that the integration between work and learning should occur systematically and consistently in a vision of continuous learning. To this end, it should be understood that distance education allows, based on flexibility of space and time, the adaptation, the enhancement of continuous learning within organizations and the growth of corporate universities with distance learning offer in Brazil [8; 12; 4].

Furthermore, the use of distance education in the Corporate Universities requires Digital Educational Materials, i.e., "all didactic material prepared with objectives related to learning and that incorporate digital resources" [13, p.33] whose development requires a model of Pedagogical Design appropriate to both the traditional and virtual contexts that:

> "unites different areas of study, integrating important factors regarding pedagogical practices, ergonomics, computer programming and graphic composition. The objective is, through it, the construction of digital educational materials that allow an instigating environment in which the student finds space to carry out interactions and interactivities (…) putting into practice a critical, investigative and autonomous posture." [13, p.35]

The development of didactic material for distance education should be done in a planned way, according to the pedagogical model chosen - traditional or constructivist approach - and that meets, in the development of the material, the three most common: graphic, technical and pedagogical, with the understanding that the teaching/learning process will become virtual too, besides the traditional classroom process [14; 15].

Based on the pedagogical model, the design to be implemented in the development of the didactic material is defined, having been adopted as a reference the Contextualised Instructional Design (CID) which is based on the ISD (Instructional Systems Design) and ADDIE (Analysis, Design, Development, Implementation and Evaluation) models; which, for the purposes of this study, will be considered as a single process, following the vision of [16]. Thus, it can be seen that most Corporate Universities have the ISD and the ADDIE models as a reference.

With regard to the construction of a pedagogical model in distance education, it is based on a Pedagogical Architecture (PA), which is founded on 4 aspects: i) organization processes, ii) content development, iii) methodology, and iv) technologies for its development [13].

With this theoretical backgroung, and inspired by one of the authors' experience as an organizational manager, this study, in the scope of the Master's Degree in eLearning Pedagogy (Universidade Aberta, Portugal) aims to identify the management model for the development of didactic material for distance education adopted by Corporate Universities in state-owned companies in Brazil based on the pedagogical model of [13] and the instructional design model of [16].

In the following sections we will briefly present the results and elaborate some concluding remarks.

2   METHODOLOGY

The methodological approach is qualitative, centred on the analysis of multiple case studies and the data collected through document analysis and an online questionnaire given to the managers of the selected Corporate Universities.

The study took place from 08/01/2021 to 10/15/2021, with the electronic survey (Google forms) link being sent to the managers of 11 UCs of state-owned companies in Brazil with only 3 viable answers obtained. The consolidation of the answers was made by the Google Forms itself.

The survey had two parts, the first of a general nature and the second consisting of 4 blocks (1- questions about the chosen pedagogical model, 2- questions about the defined organizational structure, 3- questions about the functioning and, 4- questions about the process evaluation of material and training based on the ADDIE model).

3   RESULTS

The analysis of the collected data results in:

- Questions Block 1 - aims to identify the management/pedagogical factors and models that influence decisions concerning the planning of didactic material development: each responding corporate university adopted a different model, with no standard management or pedagogical model for didactic material development.

- Questions Block 2 - aims to know how the corporate university was organized and structured to develop didactic material for distance education: there is no standard model of organization and structure (two organizations adopt the functional structure and have a matrix corporate university, while the other is autonomous); the professionals who develop the didactic material and instructional design model are also different between the organizations.

- Questions Block 3 - aims to know the process of coordination and use of structures for the development of the didactic material: the evaluation and approval of the didactic material takes place through meetings, pilot tests and content specialists, while the control of student participation is done by the access to course content, tests, and activities. Only two corporate universities haver courses open to participation from outside the organization.

- Questions Block 4 - aims to know the process of evaluating the development of didactic material in distance education based on the ADDIE model: only two corporate universities comply with the provisions of the ADDIE; all the organizations have different strategies for evaluating the objectives achieved.

The results indicate that the management model for the development of didactic material for distance education used by the corporate universities of the Brazilian state-owned companies under study is closed, the organizational structure adopted is functional, there is no defined model for the support processes in the development of teaching material and the most used instructional design model is the Contextualized Instructional Design model.

4   CONCLUSIONS

The research carried out tried to understand and find alternatives to improve a specific situation, the development of didactic material for distance education in Corporate Universities of state-owned Brazilian companies, towards organizational growth and the improvement of the corporate teaching-learning process.

Taking into account the main question underlying this study – *Which management model for the development of didactic material for distance education is used by Corporate Universities in state-owned companies in Brazil?* – the main conclusion is that the management model in use for the development of the didactic material is a closed one (i.e. defined by the company without the possibility of students' participation in the definition process), the organizational structure adopted is the functional one (i.e. with centralized decision making and less speed in the responses to external changes), without the possibility of structure change by the Corporate University.

Concerning the way the support processes are adjusted to the development of didactic material, the study revealed that there is no defined model, instead, the organizations use meetings, analysis of indicators and students' grades.

Regarding the way in which the course material and the support processes of the Corporate University are evaluated and reviewed based on the assessment made by students and strategic areas of the company, we found there is no defined model for this process. Also, concerning the identification of

the main instructional design model, it was found that the most used model is the Contextualized Instructional Design Model.

The increased use of distance education in Corporate Universities demands rethinking the development practices and models of didactic material.

In this context, we believe that this study contributes to broadening the debate that is imposed in decision-making on the management model of didactic material development for distance education in Brazilian Corporate Universities, taking into account the issues involving the courses' quality, specified objectives and the promotion of personal and professional development.

As future work, follow up research will seek to answer the questions triggered by this study, namely: i) what difficulties prevent the application of the ADDIE model in the development of instructional design in corporate universities?, ii) what holds the future for corporate universities in Brazil's education system?

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