

VEDUCA: a proposal for learning object on Videos in EDUcation

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Conteúdo e Habilidades

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Descrição de Projeto em Andamento

Investigação Científica

ABSTRACT: This article was developed in order to present the learning object VEDUCA (Video in Education), which aims to assist in training teachers in using and building videos. The video can bring many benefits to education, providing a playful, joyful and dynamic learning (Moran, 2008). Thus, the LO (learning object) VEDUCA aims to provide basic subsidies for analysis, design and construction of videos in order to encourage teachers to implement such a feature in education through interdisciplinary projects. It is intended to enhance it with other materials and activities important to the theme, such as copyright in the use of images, videos and texts from the Internet and how to use in distance education.

Keywords: videos, learning object, education.

INTRODUCTION

With the help of information and communication technology education is incorporating multiple features in its everyday life. A communication media that is enabling this disclosure is the internet. As places Caetano and Falkembach (2007), the democratization of the videos is a reality. *Sites like YouTube, TeacherTube, Yahoo! Video*, among others, allow this democratization. Another important factor is the increasing amount of mobile phones and digital cameras, allowing each individual who possesses these tools to become a "director" of their daily lives stories.

The video, if used in context with the content being used, can bring many benefits, making learning entertaining and dynamic, since the language used in the video, audiovisual, can develop multiple attitudes, using for that the imagination and affectivity (MORAN, 2008).

According to Moran (2008) the video moves with all the human senses, as a resource that explores the visual hearing, vision and all the senses. The video combines different forms of communication and information, using text, images and sounds. "Through the video we feel, we sensory experience the other, the world, ourselves" (2008, p.2).

According to the research conducted by Cruz and Carvalho (2007) the student who builds a video becomes the protagonist and producer of his own material. It was also evident in the research the construction of video enabled the development of various skills such as researching, analyzing, synthesizing and reading (CRUZ and CARVALHO, 2007).

The video is "[...] a facilitator of learning, providing action situations, interaction and research aimed at an integral development of the subject"(DELLACOSTA, 2004).

Despite being a resource with great potential, teachers are not prepared to use them or build them yet. There is still a lack of critical qualification on the subject. As Caetano and Falkembach corroborate (2007, p.3), "[...] the speed with

which technology evolves does not match the degree of training of teachers.” Supplementing with Freire (1996) teaching requires commitment, understanding that education is a form of intervention in the world and we are in a constant movement of search, of curiosity.

In this sense, this article aims to present the learning object (LO) entitled "VEDUCA" (Video in EDUcation), which aims to train teachers in using video in the classroom, both in person and virtually.

According to Hack and Negri (2008), teachers should use communication and information technologies in a critically, reflective, creative and contextualized way, playing the role of mediator. However, this requires that these teachers are trained to be able to identify how, where and when to use the various media.

To have a significant training of teachers in using CITs, it is required to think the courses / workshops planning, taking into account strategies that contextualize the human particularities, cultures and social (for whom? where? how?). As Hack and Negri (2008, p8), should be offered "[...] a space for, with quality: a) reflect critically on the use of media in school; b) develop instrumental skills to the potential use of CIT".

Thus, the OL VEDUCA aims to provide basic subsidies for analysis, design and construction of videos in order to encourage teachers to implement such feature in education through interdisciplinary projects.

OBJECT OF LEARNING: A CONCEPT IN CONSTRUCTION

Before starting the description of VEDUCA, will address the concept of learning object. As Wiley defines (2000, p.4-5), learning object is "any entity, digital or not digital, which can be used, reused or referenced during learning supported on technology."

Learning Objects (LOs) are digital materials that can be created from any media or format (flash animations, text, sound, video, image, *web* pages). They are used in certain content possessing educational goals, ranging from a simple *slide show* to even more sophisticated objects such as simulations.

There is not a defined size for learning objects, however, it must have an educational purpose with basement teaching (Wiley, 2000, Macedo *et al*, 2007; BEHAR *et al*, 2008; VAZ, 2009).

There are some factors that facilitate the use of LO in education, including flexibility (easy reuse and maintenance), interoperability (the ability to use on any platform in the world) and update (easy to update and adapt).

Learning objects were developed to assist in interactive and cooperative processes, creativity and autonomy. Should also be constructed, enabling to use, reuse and combination with other LO in different contexts (SILVER *et al*, 2007).

METHODOLOGY FOR BUILDING THE OBJECT OF LEARNING VEDUCA

The object of learning VEDUCA was developed from a need in the classroom to address the use of audiovisual media as a pedagogical resource. According Dellacosta *et al* (2004) the use of video facilitates the attractive integration of school reality with the interests of students, making learning more meaningful.

In constructing the LO VEDUCA were used four steps for Amante e Morgado (2001): a) Project design (what, to whom and how we intend to develop the object - initial ideas); b) planning (putting into practice the first phase of which was designed, the *storyboard*-model of what will be created, through selection of materials and content, define the quantity and relevance of information, building layouts and prototypes, interface *design*); c) Implementation (all planned points during the development of the project and planning will be put into practice at this stage, product building); d) Evaluation (set of evaluation procedures and validation the product.) Then, the developed and detailed steps:

a) Project Design: thus, LO VEDUCA was developed to be applied with prospective teachers who have an interest in learning how to analyze, build and publish videos on education. To do so, shall be required basic computer knowledge.

This LO was designed and built in a constructivist approach, in which the student will go through the discovery, interaction, cooperation and research

building his/her knowledge. As Jonassen (1996, p.70) "Constructivist principles provide a set of guidelines to assist designers and teachers in creating collaborative environments targeted to education, to support authentic experiences, engaging and reflexive." Therefore, with this learning object is intended to create problem situations in the form of challenges, in which the user can build their conceptions through cooperation and collaboration. LO VEDUCA can be used both within the distance as in person, as needed.

LO VEDUCA was built according to a compound navigation, where navigation is free, but may be suggested a route if necessary (AMANTE and MORGADO, 2001). Because the available pedagogical resources in learning object VEDUCA be constructed independently, the user may use them in accordance with the objectives and necessary combinations.

b) Planning: in its development were used multimedia resources such as text, video, sound and images. To this end, we decided to use the *Flash CS3* program in its construction, to include the project design and its planning.

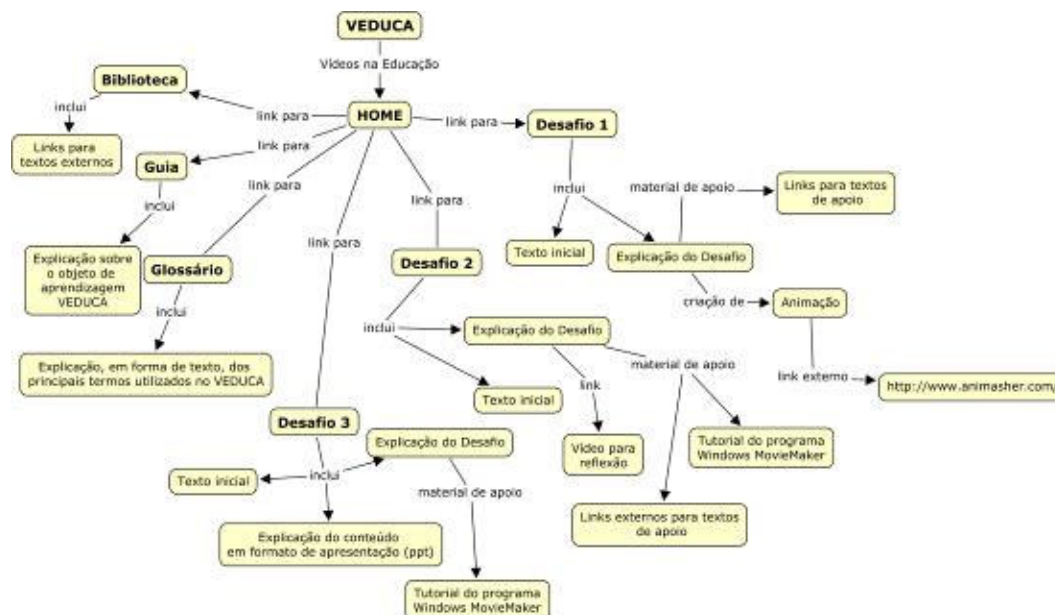


Figure 1: Storyboard LO VEDUCA

Upon entering the learning object VEDUCA, the user will find on the home screen a metaphor for the film cinema (Figure 2). At the top and bottom are the

buttons with the options available in the LO, which are: "Home," "Guide", "Challenge 1", "Challenge 2", "Challenge 3", "Library" and "Glossary".

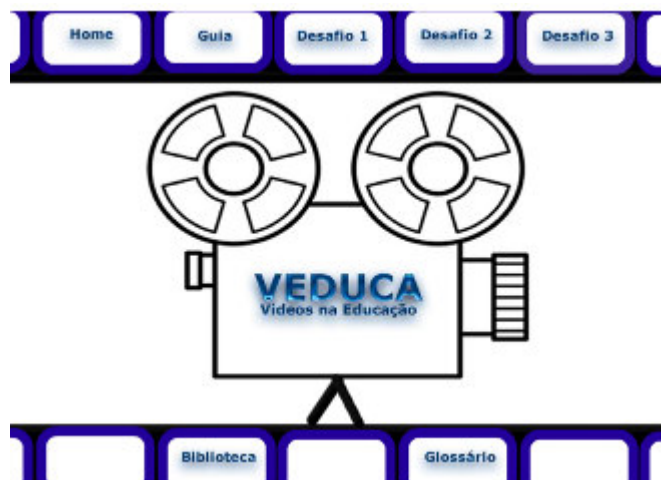


Figure 2: home screen LO VEDUCA

c) Implementation: In the "Challenge 1" (Figure 3) was asked to read scientific articles for creating an animation through an online tool available on the internet, with main topics covered in the suggested text for reading. After its construction, the student must publish in the environment he/she is using, his/her material produced in gif format and through a collaboration tool, will discuss how video can help teachers in education

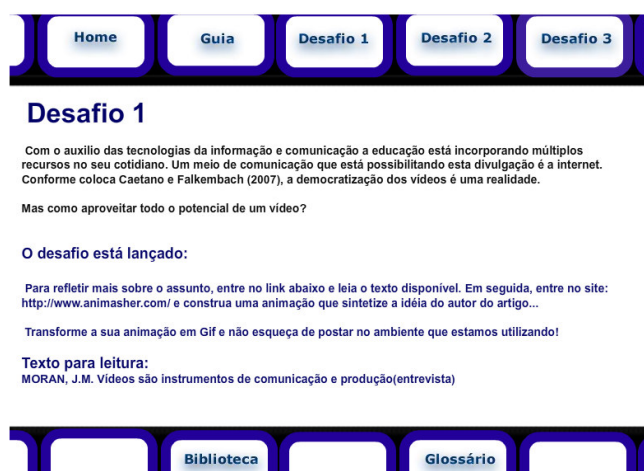


Figure 3: Challenge 1 LO VEDUCA

The "Challenge 2" (Figure 4) has proposed a framework for discussion, taking as its starting point a video, produced by the authors to develop critical and reflective sense of the student in selection and construction of videos for education. For such, the user must publish his/her opinion in a collaborative environment (Wiki, forum) to build the concept through interaction with colleagues about how and what type you can use video in education.

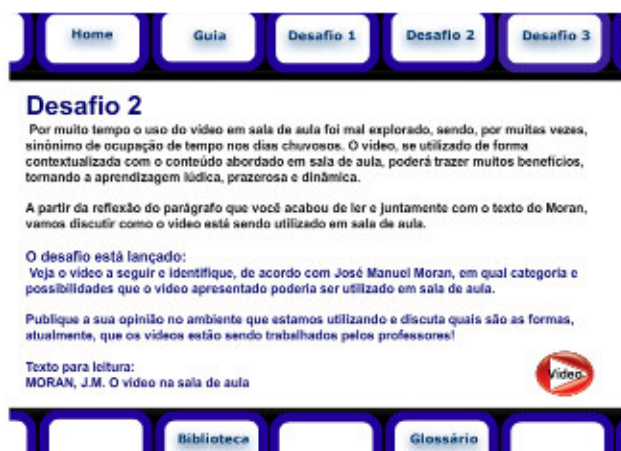


Figure 4: Challenge 2 LO VEDUCA

The "Challenge 3" (Figure 5) presents some steps suggested by Girao (2002) for creating a video as well as explaining the operation of the program that was suggested for the construction of videos in this LO: Windows Movie Maker. Windows MovieMaker, Microsoft, is a program for video editing, which allows the insertion of movies, pictures and texts, as well as animations and sounds / music. As Cruz writes (2007), this program encourages creativity and authorship of an audiovisual production. After the construction of the video, the user will publish it in the virtual environment in order to be viewed by other people for a deconstruction / reconstruction / construction of knowledge. After the construction of the video, the user will publish it in the environment he/she is using.



Figure 5: Challenge 3 LO VEDUCA

In the "Library" was provided external links to articles and texts related to the theme of LO in order to assist in learning and knowledge construction of each challenge made. In the "Glossary", were classified certain terms used throughout the learning object.

The "Guide" serves as the basis for the user to understand what is, for what and how to use the learning object VEDUCA.

d) Evaluation: This step is still in progress. It is intended to be validated with the application in a presence extension course offered to undergraduates in Pedagogy at the Federal University of Rio Grande do Sul (UFRGS), in a computer lab, with duration of 10 hours. Participants must have basic computer knowledge and interest in using video in education as a pedagogical resource. For the evaluation, will be applied a questionnaire about pedagogic and design aspects.

CONCLUSION

In constructing this object aimed to develop reflection in teachers of the importance of when and how to use videos in the classroom. This learning object was also designed in order to empower teachers and future teachers in the use of computer through the potential of the videos. As the authors Caetano and Falkembach put (2007, p4), "The teacher must know how to manipulate the media to their advantage, and for the learning of their students."

In building the learning object VEDUCA we can perceive a lack of materials on the subject related to education, especially with the incorporation of new features in videos, like the links (hipervideos). "Independently of the type of video the important is the educational use that is made of "(DELLACOSTA et al, 2004, p.4).

We are in the process of implementation, evaluation and validation, so we have no detailed results. However, we intend to improve it with other relevant materials to the theme, for example, the issue of copyright, enforcement in the EAD and the establishment of interdisciplinary projects with this feature. We intend to register the LO VEDUCA in the repository of learning objects CESTA* for future research and enhancements.

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*CESTA: <http://www.cinted.ufrgs.br/CESTA/>