

MANGLE Tool Technology for Teaching and Preservation Extreme Environments in

Coastal Areas of Buenaventura - Colombia

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Abstract

The history of education in Colombia is a series of rules on the paper, good intentions just obey the wishes of legislators shift; reform policies and their corresponding counter-annulling, pit, the achievements; vindictory wage protests, impositions; recipes brought by foreign missions, which may well be summarized in several failed attempts, the most, by registering the country into modernity.

The arrival of the new millennium lies in a different world, a world where knowledge occupies a privileged place, which is why our country has embarked on a significant transformation that watches us with first Century The process of transforming education in our country began with the 1991 Constitution and the General Law of Education and becomes a strong government action in 2002 with the name "Educational Revolution" the deepest sense of is it that most Colombians are aware that the output exists and that is through education; This revolution is part of five measures (education lifelong education for innovation, competitiveness and peace, strengthening of the educational institution, ongoing modernization of the sector and participatory management) which establish the chart of education in the country.

The pedagogical exercise is based on a practical development where the student generates its own questions and through practice responds to them coming to promote a research proposal within the basic level of conservation

Goals

Designing a virtual learning system that meets specific contents and pedagogical and technological resources for the dissemination of Mangle as environment preservation.

Development of a platform of virtual education, through the implementation of different computer applications programming and graphic design inexpensive (Java, Dreamweaver, Flash, etc.).

Implementation and monitoring of educational and environmental impact of the educational community platform El Jose Ramon Bejarano, through interaction and two-way feedback with the different levels.

Socialization of the impact that gets the MANGLE as pedagogy system around technology and the environment.



Introduction

The incorporation of Information Technology and Communication (TIC's) in different educational rather than an option or necessity contexts is today a challenge not only by the demands of a globalized society but by the current characteristics of the teaching-learning process due to new and varied forms of access to knowledge. Likewise it is expected that all projects involving TIC's is of great benefit to students and impact their knowledge and their environment (BID, 2010) [1].

Considering the above is "MANGLE technological tool for teaching and preservation of extreme environments in coastal areas of Buenaventura - Colombia" as a proposal that seeks to merge all the resources of technology and communications in a system of collective learning that impacts environmental and educational level specifies a community of coastal areas in Buenaventura - Colombia strengthening the knowledge and preservation of Mangle as extreme environment of great importance in the region. Developing STEM earth sciences become important in the educational curriculum and the cultural social and educational context of the community.

In this research, a virtual learning system that meets specific contents and pedagogical and technological resources for the dissemination of Mangle and its preservation as extreme environment design virtual education platform is developed through the implementation of different computer applications programming and graphic design low-cost, open source.

Implementation and monitoring of educational and environmental impact of the platform in the educational community college Jose Ramon Bejarano, through interaction and feedback with students and teachers of the institution.

This research takes an important role not only in the pedagogical and technological field but also in the dissemination of earth science and astrobiology as keystones in contemporary curricula, involving students in all levels of education and make an impact on a significant positive environmental and cultural heritage of coastal regions of Colombia.

MANGLE, being a technological tool easily disseminated through the internet looking to expand its impact to other coastal areas of the country and Latin America [2], managing to consolidate academic networks around the preservation of this ecosystem[3].



Research

The research "Virtual Education System MANGLE Buenaventura" is funded by the University Foundation San Mateo and Jose Ramon Bejarano School whose goal is to design, implement and evaluate an education system that makes use of various computer and communications technology resources. The education system is in a virtual learning environment that is structured around educational settings, curriculum organization, social arrangements and cognitive levels of learning. In this sense, the structure of the education system is not made only following a basic flow management and traffic information, as frequently occurs in a platform that offers services for virtual courses, but is guided by pedagogical guidelines and cognitive of learning.

The virtual learning environment called MANGLE, and it constitutes a technological tool or educational platform that taking advantage of the properties of computability, connectivity and virtuality, allows editing and development of courses and educational experiences of virtual character. In the editing stage, the platform itself is made for teachers in an educational and cognitive guidance in structuring courses or learning experiences and the development stage, the platform allows implementing courses or educational activities using face different computer tools, connectivity and virtuality. In short, the educational platform is technically configured using basic computer tools, connectivity and virtuality and educationally becomes a virtual learning environment based on pedagogical principles and cognitive learning.

The basic research question that guides conceptually and technically the project is: How to convert an information system (digital and technological organization of information) in a learning system (pedagogical and cognitive organization applied to a specific population of Buenaventura)?

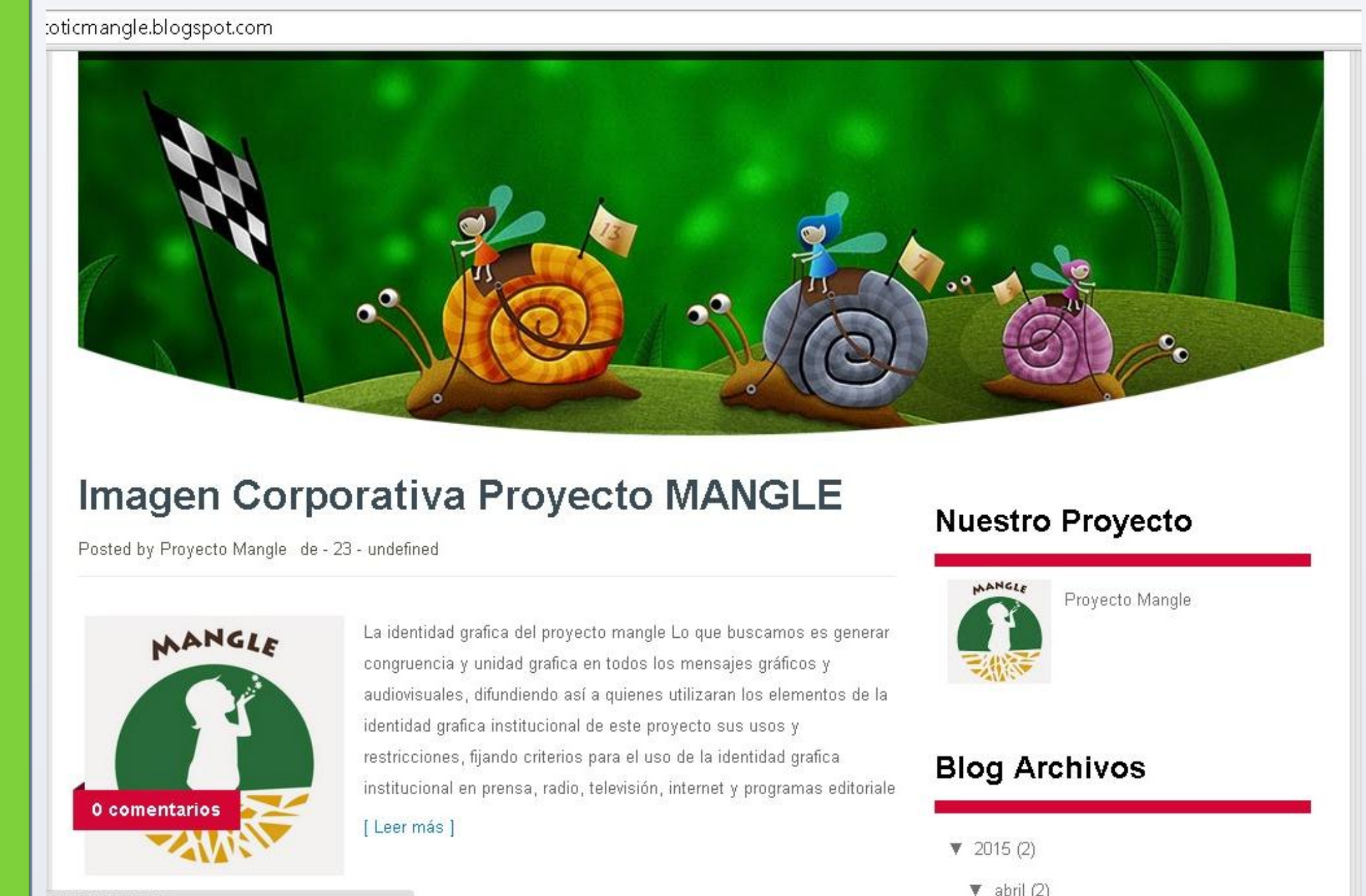
To answer the question we start with a budget of investigative work: You can design a system of virtual education, taking advantage of the properties of computability, connectivity and virtuality of information and communication technologies, to promote in students a conceptual structure of knowledge and processes thought, if it is built on a model of curricular, pedagogical and cognitive learning organization.

The project beyond developing a series of content around the theme "knowledge systems and learning environments" creates a technological object or platform "MANGLE. Virtual Education System Buenaventura" structured in a model curriculum, pedagogical and cognitive learning that allows the design and implementation of online courses organization.



Results

<http://proyectoticmangle.blogspot.com/>



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