

A B S T R A C T S

Design of digital educational materials: a complex task with social responsibility

IRÁN G. GUERRERO TEJERO

The article invites critical reflection on digital technology and its application in education, based on the idea that any educational material is a form of interaction between people and groups of people in which everyone is an active interlocutor. In this sense, developing educational materials carries a great social responsibility. The process involves resolving the tension between the personal initiative of the designer and the collective experience in the design of materials, as well as reviewing the tension between transmissive and interpretive models based on knowing and reflecting on the use that people will give to the materials. The article proposes moving from the active designer to the reflective designer and from the passive user to the active user, as well as favoring the design of light, portable, cheap, and reusable educational materials.

**Learning with educational materials
Keys for its design and application in youth and adult education**

WILFREDO FIDEL LIMACHI GUTIÉRREZ

In this article, the author shares reflections derived from his long career in the design, development, and application of educational materials in youth and adult education, specifically digital materials, and the experience of the Permanent Development and Learning Foundation (Fundación para el Desarrollo y el Aprendizaje Permanente) in the implementation of distance education before COVID-19 in Ecuador. Among the reflections that should guide the development of digital educational materials are the demand for creative responses to specific situations of the context, as well as the importance of having theoretical approaches and strategies that guide the development of materials. The recovery of previous experiences (of digital or non-digital materials) is important and the participation of educators and specialists, among others, for the review and interpretation of curricular contents.

**From the product to the production of educational materials
Students as multimodal designers**

VÍCTOR JESÚS RENDÓN CAZALES

The article questions the way of understanding digital educational materials as products that address certain content employed by passive users. It presents a way of thinking about the design of this type of materials as a process of constructing meanings and learnings in which students actively participate. The author describes an experience of building infographics with two groups of university students. He shows that the group that used a commercial application developed very similar exercises despite deep thematic differences, whereas the students who used a program offering a blank page and various tools the products were much more creative, since their infographics offered different ways of approaching the content, as well as a diversity of visual elements.

**The Great *Camalú*
Micro digital educational materials based on games in order to develop socio-emotional skills**

GABRIEL ANTONIO VERA ANGARITA

The article presents a digital educational material aimed at offering a learning opportunity to teachers who are interested in improving their communication and interaction skills with their students. Forty adults, teachers, and civil servants, used it, who previously participated in a diagnosis of the emotional skills they most needed in order to improve their work. The material was designed based on the needs expressed by the users and has three virtual learning objects (communication, emotion management and facilitation) that are worked with interactive materials that are easy to understand and consult on any computer. These include capsules, infographics, and playful activities.

***Diavistas*, audiovisual materials for Fundamental Education**

MARGARITA MENDIETA RAMOS

The creation of educational materials has been, during the 72 years of CREFAL's trajectory, one of its main lines of work. During the first decade, from 1951 to 1960, Fundamental Education was developed, a model oriented towards the development of populations considered backward, especially rural populations, which covered all aspects of their lives. The author presents the "*diavistas*", an audiovisual material with drawings or photographs in sequences of 35 to 50 images accompanied by the teacher's explanations. The *diavistas* could narrate stories or have an explicit educational objective when they reflected real life situations and proposed solutions to the problems identified by the teachers. The *diavistas* complemented other series of materials: posters, theater, cinema, and puppet theatre, among others.

The use of YouTube as a digital educational material

BENITO CASTRO PÉREZ

Although the use of video in education is neither a novelty nor a result of the digitization of education due to the pandemic, the increasingly frequent use of YouTube in school assignments is evident. The author describes the results of his master's research on the use of YouTube by 82 secondary school students from Mexico City. Among the results are, for instance, that students frequently turn to this application to do homework; they seek to find exact answers to the questions they must answer; they prefer short videos, less than 5 minutes; and they pay a lot of attention to the aesthetic aspects and the number of "likes", comments and views. The author reflects on the immediacy of students' contact with information; the passivity that implies being only an observer and the logic of entertainment that is essential to YouTube, very distant from the logic of school assignments.

Visual thinking and digital educational materials in the experience of the Inter-Learning (Interaprendizaje) Platform

JHAQUELIN ELVA DÁVALOS ESCOBAR

In this text, the author describes three experiences of making videos for residents of rural Bolivia, which address the problems of the communities in a complex way, from the productive, social, gender, cultural and epistemological dimensions, and in contrast with different realities. She works using the Inter-Learning Platform "Virtual field for land and rural development", of the Institute for Rural Development of South America (IPDRS). One of the experiences refers to the reflections generated in peasants of the Andean zone about everything that the mountain implies in social, productive, ecological, and cultural terms. The second experience consists of three videos on the advances and setbacks in the path of indigenous autonomy. The third experience is a course aimed at beekeepers from the Chasco forest that resulted in a book and several videos.

Teaching and learning to develop digital educational materials in the virtual classrooms of CREFAL

CREFAL

The COVID-19 pandemic led to drastic changes in education. Teachers, particularly those working at primary level, were unprepared for the challenges this implied. This article on the CREFAL explains how the organization reorganized its educational programs to open a series of online courses for the development of basic digital skills and describes the methodology employed and the contents of the Design of Digital Educational Materials with Support in Communities of Practice workshop course. This 8-week course was taught online, free of charge and with no admission process. In order to serve all the applicants, the participants were organized in groups of thirty and a tutor was assigned to each one. Participants developed educational materials that could be applied directly in their classrooms. From April 2020 to date, the course has been offered twelve times with a total participation of 2,751 students from Mexico, Latin America and the Caribbean.

My participation in the certified course "Digital resources for educational practices in EPJA"

JUANA AGUSTINA SÁNCHEZ RAMÍREZ

The author, teacher and translator of the Tsotsil language and adviser to the National Institute for Adult Education (INEA), recounts her experience in a youth and adult education course aimed mainly at participants developing digital skills for virtual teaching. She explains the difficulties she faced in making a stop motion video of a little fish out of whose mouth come the letters of the Tsotsil alphabet while a voiceover pronounces them, and the satisfaction that it has been useful to her students. She also mentions making a podcast in Tsotsil about how traditional costumes are made in the town of San Juan Chamula. One of the learnings that she rescues is to lose her fear of technology and to better use computers and her cell phone to facilitate the learning of her students.

Reflections on my teaching experience with digital educational materials

ALONSO IRÁN SÁNCHEZ HERNÁNDEZ

The author is a teacher of ICT applied to agro-ecology, remote perception and geographic information systems with students ranging from 19 to 57 years old. Starting with the pandemic, the face-to-face class model had to be replaced by one in which educational resources had to be created for students to carry out the activities of the curriculum. This involved an exercise in imagination and creativity, as well as a series of lessons on script writing, image collection, music selection, sequence, speed, volume, and respect for copyright. The author reports that he created a YouTube channel and two repositories of digital teaching resources. He stresses the importance of stimulating critical thinking, as well as reading and writing, especially in this digital age.

Being a tutor in a CREFAL course

LORENA YAZMÍN GARCÍA MENDOZA

The author shares some learning from her experience as a tutor of the certified course in digital resources for educational practice in Youth and Adult Education (EPJA). She highlights, among others, the discovery of unforeseen aspects, mainly in relation to introspection exercises of the participants and reflection on their educational practice, to the dialogue between participants from very different contexts and practices and having faced and solved many different obstacles; all of that related to her commitment and the desire to know. Other lessons related to the production of digital educational materials were the need to go beyond transmitting information by connecting with the recipient; be simple, easy to understand, elaborate and share; experiment and reflect on what works best; and the possibility of one material becoming several more.

Traducción: Ilse Brunner