Chapter 10 Analyzing the Level of Inclusion of Digital Educational Objects in Eskola 2.0

M^a Luz Guenaga

DeustoTech Learning – Deusto Foundation, Spain & University of Deusto, Spain

Iratxe Mentxaka DeustoTech Learning – Deusto Foundation, Spain & University of Deusto, Spain

Susana Romero DeustoTech Learning – Deusto Foundation, Spain & University of Deusto, Spain

Andoni Eguíluz DeustoTech Learning – Deusto Foundation, Spain & University of Deusto, Spain

ABSTRACT

The Basque Government has published two calls to create digital educational objects for the programme called Eskola 2.0. After having provided schools with technological equipment, these calls aim to increase the use of learning technology in the classroom. More than 300 didactic sequences have been developed, which vary greatly in visual design, content structure, organization, and pedagogical aspects. Even though accessibility is one of the quality criteria, the reality is that they are hardly accessible and inclusive. DeustoTech Learning research group has carried out a survey of the educational objects approved in these calls up to November 2011. The authors evaluated pedagogical and technological aspects to find out how inclusive they are. In this chapter, they provide the results of the survey and propose a set of guidelines for designing more accessible and inclusive objects in the future.

INTRODUCTION

In July 2009, the Council of Ministers of the Spanish Government promoted a programme entitled Escuela 2.0 (Moncloa, 2009) which invested over 100 million Euros in equipping 400,000 students and 20,000 teachers with laptops, digitalizing 14,400 classrooms with Wi-Fi connection, digital whiteboards and other technology aimed at enhancing learning. This programme was established in the 2009-2010 academic year, starting with 5th –year primary school students, and each year it covers one new academic level.

DOI: 10.4018/978-1-4666-2530-3.ch010

In the Basque Country competences on education are transferred from the central Ministry of Education to the Basque Government Department of Education, who endorsed this programme and called it Eskola 2.0

Many changes have taken place in a very short period of time: computers in the classroom, Internet connection, multimedia and audiovisual content at hand, changes in pedagogical models, competence-based learning, training teachers in Information and Communication Technologies (ICTs), etc. The present academic year, 2011-2012, is the third in which the Eskola 2.0 programme is being carried out. There are already three years of students with their own notebook to work with in class, but there are still many challenges for all participants in the educational process (teachers, institutions, schools, parents, students...)

Schools have been provided with technological infrastructure, but a key aspect is having quality educational content to enhance learning with the use of technology. This is the aim of these calls and the result has been more than 300 educational

sequences in core subjects of the Basque curriculum. Content producers received a few guidelines, so each has applied their own pedagogical and technological design criteria and the results have been quite varied.

In this chapter we present an evaluation of Digital Educational Objects uploaded to Agrega (AgregaGV 2012), the website where the Basque government shares all the content under its/a Creative Common license when it approves pedagogical and technical evaluation.

We analyze the accessibility and adaptability of this content for students and we assess the relation between the previously mentioned variables and the level of accessibility. This analysis will conclude with a set of guidelines for the design of inclusive educational content. Furthermore, we will provide content creators with a proposal on how to improve their material without the need of a total redesign. It is not the same to create educational content from scratch, with the proper guidelines to make it inclusive, as improving existing material and making it more adaptable.

Figure 1. Information of the DEO provided by Agrega search engine

rca de Agrega Comur	nidad Accesibilidad Preguntas frecuentes Mapa del p	ortal <u>Contacto</u>	💳 💻 💟 👪 📕 Ж Acceder Avuc
grega [®]		Idioma de Buscar en: (I Contenido 💽 Buscar Avanzado ® Todo Agrega 💿 Euskadi
ecnología intera	activa - Diseña y construye una estruc	tura	Fecha publicación 29/07/2011 09:59:5
Valoración: Sin valorar Cualquier objeto, aparato o máquina, necesita disponer de elementos cuya función básica es soportar fuerzas (exteriores e interiores, cargas adicionales, el propio peso) y mantener la estabilidad. El conjunto de estos elementos, unidos entre sí, constituyen una estructura. Para construir puentes, edificios, torres metálicas o máquinas de grandes dimensiones necesitamos estructuras. Además de soportar pesos y fuerzas, las estructuras también astáficareo ntras funciones: dar rigidez, proteger objetos, salvar distancias (puentes, torres de construcción, etc.) Por tanto, juegan un papel fundamental en el diseño y construcción de cualquier objeto, aparato, edificio, monumento o máquina. Comentarios(0) Comentarios(0) AddThis			
Formato:		Tamaño:	28.69 MB
Idioma:	castellano	Ámbito:	universal
Licencias:	creative commons: reconocimiento - no comercial - compartir igual	Destinatarios:	alumno, docente
Tipo de recursos:	actividad de discusión, animación, autoevaluación de aprendizaje, experimento, gráfico, herramienta aprendizaje/trabajo individual/cooperativo/colabor	, caso contextualizado, ejercicio o probl de apoyo a procesos/procedimientos, h ativo, juego didáctico, mapa conceptua	ema cerrado, escenario real o virtual erramienta de gestión de I, presentación multimedia, proyecto

19 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

www.igi-global.com/chapter/analyzing-level-inclusion-digitaleducational/71875

Related Content

Improvement of Energy-Efficiency in High Performance Computing (HPC): A Case Study of the HPC Facility at the Dar es Salaam Institute of Technology

Damas A. Makwebaand Daudi Samson Simbeye (2021). *International Journal of ICT Research in Africa and the Middle East (pp. 30-51).*

www.irma-international.org/article/improvement-of-energy-efficiency-in-high-performance-computing-hpc/290835

Improvement of Energy-Efficiency in High Performance Computing (HPC): A Case Study of the HPC Facility at the Dar es Salaam Institute of Technology

Damas A. Makwebaand Daudi Samson Simbeye (2021). International Journal of ICT Research in Africa and the Middle East (pp. 30-51).

www.irma-international.org/article/improvement-of-energy-efficiency-in-high-performance-computing-hpc/290835

E-Government's Role in Poverty Alleviation: Case Study of South Africa

Stephen M. Mutula (2012). Cases on Developing Countries and ICT Integration: Rural Community Development (pp. 104-122).

www.irma-international.org/chapter/government-role-poverty-alleviation/57990

Regional-National ICT Strategies

Melih Kirlidogand Stephen E. Little (2010). *E-Strategies for Technological Diffusion and Adoption: National ICT Approaches for Socioeconomic Development (pp. 63-87).* www.irma-international.org/chapter/regional-national-ict-strategies/44301

Academic Libraries in Nigeria and the Challenges of Application of Information and Communication Technologies

Kingsley Nwadiuto Igwe (2013). Challenges of Academic Library Management in Developing Countries (pp. 152-162).

www.irma-international.org/chapter/academic-libraries-nigeria-challenges-application/77979