

Educative proposal of web 2.0 for the encouragement of social and citizenship competence

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Abstract: Nowadays the web development is increasingly oriented towards social and participative uses. This tendency is generating the sense that we are going into a “second step” a new and “improved” version: Web 2.0. In this report we present a proposal for the use of this web in order to develop the “Social and citizenship competence” introduced by the Spanish educational legislation (LOE, 2006) that regulates the content of the school curriculum. In this proposal we have taken into account both the potential of the 2.0 applications to encourage cooperation and social relations and the activities or instructional strategies required to encourage the contents implied in the social and citizenship competence.

Introduction

Nowadays the web development is increasingly oriented towards social and participative uses. This tendency is generating the sense that we are going into a “second step” a new and “improved” version: Web 2.0. Nevertheless, there is not a consensus about whether there is or not a basis to talk about a 2nd version of Web, or if it is the same Web with other uses (Anderson, 2007). In Wikipedia we can read the following definition of Web 2.0: “Web 2.0 concepts have led to the development and evolution of a second generation of web culture communities and hosted services, such as social-networking sites, wikis, blogs, and folksonomies whose purpose is to make easier the creativity, the collaboration and give you the opportunity to share the contents and other resources among the users”. It is becoming commonly accepted that Web 2.0 makes reference to the group of technologies (blogs, wikis, podcast, Really Simple Syndication systems–RSS-, etc) that provided a social Web more connected in which any user can add or edit the information contained in it.

Challenges suggested by Web 2.0 to increase the social competence

It is unquestionable the revolution in society, the media, the economy and the education that these new uses of the web are producing in the social and civic participation and collaboration. As in every innovation you can also find lights and shades, new possibilities to improve the people and their relations or new ways to impede those existing: Web 2.0 is not an exception to this premise.

A paradigmatic case of the potential of the web to increase the turnout and the mobilization is the one that took place through Facebook (application that allows creating social relations) Colombia, on 4 February 2008, and commented in an article of Eduteka (2008). According to the information provided by the organizers, thirteen million people from 183 cities of different countries demonstrated against the Farc, in response to the call of the Facebook group "A million voices against Farc" that had been doing for a month after the 4th of January. The organization itself cannot still believe the answer to the call (Terra, 2008). On the other hand, there are also other examples of the bad use of a lot of Web 2.0 applications, very extended among the youngsters, which have deepened the digital gap between generations, between parents and children and between teachers and students. It is normal for the parents to unknow what their children "do" on the Internet, with whom they have contacts and what information they share, in the same way the teachers are not aware of the potential that the Internet offers to teach their students, besides the dangers that can lie in. There are countless of cases of abuse and bullying among teenagers through the different services of the Internet.

Social and citizenship competency and the Spanish Organic Law of Education (LOE, 2006)

If we pay attention to the children and teenagers in our closest setting, at school, we should highlight that the Spanish Law of Education (LOE, 2006) includes a novelty regarding the previous regulation, it includes as a vital part in the curriculum a new element: the basic competences¹.

“According to this Regulation, we understand by curriculum the set of targets, basic competences, pedagogical methods and criteria of assessment of each of the learning models regulated by this Law.” (LOE, art 6.1).

The basic competences become the reference in all the levels of the realization of the Spanish curriculum: 1) It is included in the minimum teaching of compulsory education (LOE, art. 6.1); 2) they are a reference in the passing to the second stage of primary school and the obtaining of the diploma in compulsory secondary education (art. 20.2 and 31, LOE); and 3) they are a reference in assessments diagnosis (Preamble, art 21, 29, 144, LOE).

The basic competences that have been established in the Spanish legislation are an accurate reflection of some Recommendations of the European Parliament (2006), as well as an international tendency to question the competences that all citizens should acquire to manage freely in the 21st century. In this article we want to focus the attention in the Social and citizenship competence established by the Spanish regulations, that although it pretends to be taught with the controverted subject "Education for citizenship", the same LOE (2006) considers that it is a competence that should be developed in a crossed way all over the subjects.

Inside the frame of this competence, participation is the core of the democratic citizenship. This refers directly to the active participation in the system of rights and responsibilities that citizens have in democratic societies. So that, the education oriented to that will be aimed to raise the necessary training for the development of those rights and responsibilities. This implies, both the learning of the political judgement, and the civic conscience, in order to stimulate the turnout of citizens in the civil society.

This learning can be reached, in a way, in the social coexistence, but it will be mainly updated through the education carried out to that purpose, whether in the family, the school or in other contexts. Here, we are making reference to the school context, although it would be very interesting to see that importance in other contexts such as the family or the most vague but not less influential of the society. At the present situation it is specially important the continuous education of all the citizens (Naval and Altarejos, 2000; Naval, 2003).

There are obviously a lot of challenges that education for citizenship has to face. An aspect that undoubtedly is convenient to deal with is the importance of looking for synergies, a shared work among those different educative fields: family, school, society, media, mainly to answer the request that globalization poses to us. Education cannot ignore the social impact of media and IT have mainly among the youngsters (Lupia and Philpot, 2005). In the civic education the challenge is to make the media and technologies tools to increase the confidence and social participation and that is what we are going to analyse now (Naval and Sádaba, 2007).

¹ There are eight basic competences that want to be encouraged in the LOE: 1. Linguistic communication competence; 2. Mathematical competence; 3. Competence in the knowledge and interaction in the physical world; 4. Information processing and digital competence; 5. Social and citizenship competence; 6. Artistic and cultural competence; 7. Competence to learn to learn; 8. Autonomy and personal initiative.

The cooperative learning as instructional strategy and the use of ICT

In order to reach participation, the cooperative learning is presented as a strategy specially convenient, and the Information and Communication Technologies (ICT) as the adequate means. Regarding this, in a suggestive article "The Three Cs of Safe Schools" Johnson and cols. (1997) present the strategy followed by a nursery school in Minnesota, in which they combine Cooperation, solving of Conflicts and Civic values to encourage a healthy school. The collaborative learning could be defined as a "philosophy" that implies and encourages the working together, the building together, the learning together, the changing together, the improving together. As Wiersema (2000) states, if different people are able to learn together in the same class they will learn to be better world citizens, because that way of learning and working teaches to interact with people that think differently not only in a local area, but also in the global. Included in the philosophy called collaborative learning we can highlight the cooperative learning, it uses didactically small groups in which the students work together to maximize their own learning and the learning of the others. That is, it is a methodology that systematizes through different instructional resources, the need of the members of the group to work together cooperating among them in order to do the work (Johnson, Johnson and Holubec, 1994).

According to the results of the investigation about its efficiency, we can indicate how these strategies increase the benefits in the students, both in affective aspects and cognitive aspects. Johnson, Johnson and Stanne (2000) and Johnson, Johnson and Smith (1998) point out some evidences of the positive effect of the Cooperative Learning. They underline that the efficiency of the cooperative learning is due to three basic reasons:

- This methodology is solidly based on a range of theories: Anthropology (Mead, 1936); Psychology: social interdependence (Deutsch, 1949; Johnson and Johnson, 1989), cognitive development (Johnson and Johnson, 1979; Piaget, 1950; Vygostky, 1979); Behaviourism (Bandura, 1977; Skinner, 1968); and Sociology (Coleman, 1961).
- A great deal of studies shows the validity and the superiority of the collaborative learning in front of models of competitive or individualist teaching in very different circumstances. It has been proved that the efficiency in the academic achievement, high levels of reasoning, time dedicated to the task, transfer of learning, intrinsic motivation, social and cognitive development, personal interactions, friendship, reduction of stereotypes and prejudices, mental health, self-esteem, social competences, internalization of values and quality in the learning environment.
- The cooperative learning has a great variety of methods that can be used by teachers, what makes it available for very different circumstances and conditions (cfr. Johnson, Johnson and Stanne, 2000; Lara, 2001).

The use of computers and the Internet in education has not skipped the potential of the cooperative working to pose the different uses of networking learning. The firsts tools to put up with the cooperative work were set up before the spreading of the web, and others during the boom of the Internet. We can mention as precedings the creations of the systems CSILE/Knowledge Forum and BCSW. We can also indicate the abilities of cooperation that are offered by the e-learning platforms, and finally the current applications of Web 2.0.

Perhaps the preceding with more echo has been the work developed by a group of Canadian researchers lead by Bereiter and Scardamalia (Bereiter and Scardamalia, 2003; Scardamalia, 2004), in the Institute for Knowledge Innovation and Technology (<http://www.ikit.org>) with the development of their theory about the creation of online environment for the knowledge building environment. Before the outcoming of the web in 1983 these professors developed a software to be used to a local level and to create, in that way, an environment of collaboration for the contents management (CSILE), this prototype has been replaced by a version for the web: Knowledge Forum (www.knowledgeforn.com). This software offers technological tools for the cooperative work, the development of a virtual place of discussion and the collaborative elaboration of materials, and they are targeted towards both the school and the university.

In mid nineties it was created in Germany the system BSCW (Basic Support for Cooperative Work). It is a tool for collaborative work with synchronous and asynchronous character web based, that was created with the purpose of changing the Internet from a passive information storage to an active cooperative instrument (<http://www.bscw.de/english/product.html>) (Román, 2002:130).

Besides, the online learning environments (both commercial tools such as Blackboard, and open source platforms such as Moodle) have tools that enable cooperation through chats and forums. Moreover, nowadays the Moodle platform even allows including modules of wikis and webquest.

The previous applications, novel in their time, have been overcome by the development of the Internet. As we said at the beginning of this report, the social network offers bigger options to establish connections and encourage the communication, the cooperation and the exchange of ideas and information rather than Web 1.0, in which most of the applications previously mentioned were born. Particularly, we would like to highlight these advantages of the current 2.0 tools with reference to those previously suggested:

- the easiness and simplicity in the use of 2.0 applications. You don't need specific technical knowledge;
- the accessibility from any browser (Mozilla, Explorer...). No server is necessary to host applications and store contents;
- and, in most of them, the access is free.

Following the classification of De Haro (2008) of Web 2.0 applications, we indicate some of their possibilities to encourage cooperation:

- (1) Those tools allow to generate and publish contents through blogs and wikis.
- (2) Those tools generate contents such as images, videos, PowerPoint slideshows, sound, etc., like Youtube, Flickr, Google docs.
- (3) Those tools allow data recovery through RSS, tagging, custom start pages and search engines 2.0.
- (4) Those applications that allow to establish personal and community relations.

Proposal for the educative use of web 2.0 in the promotion of social and citizenship competence

Bielaczyc (2001) said that the only fact of using any kind of software to put up with the cooperative learning does not guarantee that it would be promoted, so that he considers that it is necessary to create:

- a culture of cooperation and collaboration among students that should, in a way, to impose to the sometimes predominant competitive and individualistic atmosphere;
- the use of activities that encourage cooperation and collaborative common work;
- and lastly, the implementation of some kind of software that facilitates and manages this type of work and learning.

In Table 1 we highlighted in bold the conceptual, procedural and attitudinal contents of the Civic and social competence, which we consider they can be promoted through the adequate use of the so called social web or Web 2.0. Yet we consider that the potential of Web 2.0 for this purpose has to take into account the Bielaczyc's suggestions. Specifically, we refer to the use of activities or instructional strategies that involve the students in a cooperative work, and the use of software easy to use by students and teachers. As a summary, you can see a proposal in Table 2 that we are going on to explain.

Among the instructional strategies that can be used, it can be interesting the use of: project management that contribute to the collaboration among students; the cooperative case solving that allows developing the capacity of analysis and critic reflection; the elaboration of small researchings through the structure set out by WebQuest that pursue the analysis of questions and values proposed in the civic and social competence.

Other initiatives, that have encouraged and promoted the use of the networks to establish links among people and so that to increase cooperation, have been called global projects. As Hutchings and Strandley (2000) suggest, it consists on using the learning by projects as a basis to build teams formed by people with different backgrounds, languages and cultures that work together to do real projects, solve problems and build relations between global

partners. Currently, there is a great variety of options to establish relations between schools and educative institutions and in that way to increase that kind of projects (we can find some examples in: <http://www.epals.com/>, <http://www.scienceacross.org>, <http://www.iearn.org>, <http://www.kidlink.org/>, <http://www.globalschoolnet.org/>).

Social and citizenship competence	Web 2.0 applications	Instructional strategies
<i>Contents:</i> - Knowledge and comprehension - Critical reflection	Blogs	Project management
<i>Skills:</i> - Communicating - Accepting and practicing social rules	Wikis	Case solving
	RSS	WebQuest
<i>Attitudes:</i> - Considering of a set of values - Respectful behaviour with the environment, the cultural and natural patrimony and the sustainable development	Social bookmarking	Global projects
	Social Networks	Cooperative learning
	Documents sharing	

Table 1: Web 2.0 applications and instructional strategies for the encouragement of the social and citizenship competence

We consider that all these strategies and activities should be imbued with the principles of the cooperative learning: positive interdependency, stimulating interaction among students, individual responsibility, dealing with interpersonal techniques of working group, and assessment on the developing of the group (Johnson, Johnson and Holubec, 1994).

Those activities referred could be supported and benefited by the potentialities of 2.0 applications, because they allow —as we have been commenting along the report – the establishment of relations between students and teachers, the exchange of information and the collaboration in the development of common works.

References

- Anderson, P. (2007). What is Web 2.0? Ideas, technologies and implications for education. Retrieved from: http://www.jisc.ac.uk/whatwedo/services/services_techwatch/techwatch/techwatch_ic_reports2005_published.aspx
- Bereiter, C. and Scardamalia, M. (2003). Learning to work creatively with knowledge. In E. De Corte, L. Verschaffel, N. Entwistle, and J. van Merriënboer (Eds.), *Unravelling basic components and dimensions of powerful learning environments*. EARLI Advances in Learning and Instruction Series. Retrieved from <http://ikit.org/fulltext/inresslearning.pdf>
- Bielczyc, K. (2001). Designing Social Infrastructure: The Challenge of Building Computer-Supported Learning Communities. Paper presented at European Conference on Computer-Supported Collaborative Learning, Maastrich (Holland), 22 th –24th March.
- Cobo, C. and Pardo, H. (2007). Planeta Web 2.0. Inteligencia colectiva o medios fast food. E-book free. Retrieved from: <http://www.planetaweb2.net/>
- De Haro, J.L (2008). Aplicaciones 2.0. Retrieved from: Blog EDUCATIVA. [<http://jjdeharo.blogspot.com/2008/01/aplicaciones-20.html>]
- Diario Oficial de la Unión Europea (30-12-2006). Recomendación del Parlamento Europeo y del Consejo de 18 de diciembre de 2006 sobre las competencias clave para el aprendizaje permanente (2006/962/CE). Retrieved from: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2006:394:0010:0018:ES:PDF>
- EduTEKA (2008). Seis grandes ideas que subyacen en la web 2.0. EduTEKA. Retrieved from: <http://www.eduteka.org/pdfdir/Web20Ideas.php>

- Johnson, D. W., Johnson, R. T. and Holubec, E. J. (1994). *El aprendizaje cooperativo en el aula*. Buenos Aires: Paidós.
- Johnson, D. W., Johnson, R., Stevahn, L. and Hodne, P. (1997). The Three Cs of Safe Schools. *Educational Leadership*, 52(2), 8–13.
- Lara, S. (2001). Una estrategia eficaz para fomentar la cooperación. *Estudios sobre Educación*, 1 (99–110).
- Lemke, Ch. (2003). Standards for a Modern World: Preparing Students for Their Future Learning & Leading with Technology 1 (31).
- Ley Orgánica 2/2006, de 3 de mayo, de Educación. Retrieved from: <http://www.mepsyd.es/mecd/gabipren/documentos/A17158-17207.pdf>
- Lupia, A. and Philpot, T.S. (2005) Views from the Inside the Net: How Websites affect Young Adults's Political Interest, *The Journal of Politics*, 67 (4), 1122-1142.
- MEC (2006). *Currículo y competencias básicas*. Madrid: Ministerio de Educación y Ciencia.
- Monguilot, I. (2007) Las competencias básicas y el currículo. Paper presented at XXVII Congreso Las competencias básicas y la convivencia en los centros. Asociación Nacional de Inspectores de Educación, Bilbao (Spain), October.
- Naval, C. (2003). Democracia y participación en la escuela. *Anuario Filosófico*, 36(1), 183-204.
- Naval, C. and Altarejos, F. (2000). Educar para la participación. In J. L. García Garrido. (ed.) *La sociedad educadora*. Fundación Independiente (pp. 226-244). Madrid: Caja Madrid.
- Naval, C. and Sádaba, Ch. (2007). How the media can collaborate in the development of youth participation. *Journal of Social Sciences Education*, 6 (1), 80-96. Retrieved from: http://www.jsse.org/2007-1/pdf/naval_sadaba_media.pdf
- O'Reilly, T. (2005). What Is Web 2.0. Design Patterns and Business Models for the Next Generation of Software. Retrieved from: <http://www.oreillynet.com/pub/a/oreilly/tim/news/2005/09/30/what-is-web-20.html?page=1>
- Real Decreto 1631/2006, 29 de diciembre de 2006, por el que se establecen las enseñanzas mínimas correspondientes a la Educación Secundaria Obligatoria. Retrieved from: <http://www.boe.es/boe/dias/2007/01/05/pdfs/A00677-00773.pdf>
- Román, P. (2002). El trabajo colaborativo mediante redes. In J.I. Aguaded and J. Cabero (ed). *Educar en red. Internet como recurso para la educación* (pp. 112-134). Málaga: Ediciones Aljibe.
- Scadamalia, M (2004). CSILE/Knowledge Forum. In *Education and Technology: An encyclopedia* (pp. 183-192). Santa Barbara: ABC-CLIO.
- Standley, M. and Hutchings, K. (2000). *Global Project Based Learning with Technology*. Visions Technology
- Wiersema (2000). How does Collaborative Learning actually work in a classroom and how do students react to it? A Brief Reflection London Guildhall University. Retrieved from: <http://www.lgu.ac.uk/deliberations/collab.learning/wiersema.html>.

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