

This paper is taken from

Lifelong Learning and Active Citizenship Proceedings of the twelfth Conference of the Children's Identity and Citizenship in Europe Academic Network

London: CiCe 2010

# edited by Peter Cunningham and Nathan Fretwell, published in London by CiCe, ISBN 978-1-907675-01-0

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Nogueira, F. & Moreira, A. (2010) The integration of ICT as a teaching and learning strategy for Civic Education, in P. Cunningham & N. Fretwell (eds.) Lifelong Learning and Active Citizenship. London: CiCe, pp. 455 - 464

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This paper does not necessarily represent the views of the CiCe Network.



This project has been funded with support from the European Commission. This publication reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

# **Acknowledgements:**

This is taken from the book that is a collection of papers given at the annual CiCe Conference indicated. The CiCe Steering Group and the editor would like to thank

- All those who contributed to the Conference
- The CiCe administrative team at London Metropolitan University
- London Metropolitan University, for financial and other support for the programme, conference and publication
- The Lifelong Learning Programme and the personnel of the Education and Culture DG of the European Commission for their support and encouragement.

# The Integration of ICT as a Teaching and Learning Strategy for Civic Education

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#### Abstract

The growth of the students' current generation in a context of expansion and development of technology led to new learning styles that must be taken into account in order to make learning more meaningful and appropriate to the challenges of real life. Individuals are no longer just information consumers to become more and more content producers with multiple possibilities of sharing and collaboration.

In this paper we put forward an attempt at going deep into reflecting upon the potential of ICT for the promotion of citizenship skills, based on some preliminary data that resulted from a teacher-training program developed by the researcher in order to promote the acquisition of technical skills and facilitate the use and appropriation of ICT in Civic Education classes.

**Key words:** Civic Education; ICT; Teaching and learning strategy; Blogs;

#### 1. Introduction

Knowledge-based societies are characterised by a high level of creation, distribution and manipulation of information, which has led to profound changes in the teaching and learning processes. Indeed, knowledge mutability in this highly interconnected world, gives no alternative to the modern citizen, who is forced to develop all the technical, procedural and ethical skills in order to be an updated individual, in a globalized world. Lifelong commitment to learning appears in this context as the most advantageous stance of the individual towards moderns societies, since lowest levels of skills and the weakest capacity for constant updating could lead individuals to social exclusion and low-paid jobs, at the same time that alienate them from personal fulfillment and active citizenship. One of the Key Competences of Lifelong Learning (European Commission, 2007), lay emphasis on Digital Competences, regarding the importance of acquiring basic skills in ICT, in order to use their potential in a critical and creative manner, both in professional, social and personal life.

In this article we intend to address the potential of ICT for the promotion of citizenship education. First, we explore some of the twenty-first century challenges such as the characteristics and learning styles of many young citizens that grown up in an unprecedentedly networked and interactive media world. Then we explore the renewed interest in citizenship education and the opportunities of web-based education in this field, by outlining four major clusters: i) information, ii) communication, iii) simulation and, iv) creation. Finally we present an example of technology use (Blogging) as a supportive teaching and learning strategy to advocate in the Civic Education classes (K12).

### 2. New Millennium Learners and Digital Competences

Nowadays, learning is no longer a matter of place and time to acquire knowledge (school) and an opportunity to apply it on a workplace (Fischer, 2000). Learning in the twenty-first century is a continuum that takes place at anytime and anywhere. Technology and especially Internet features provides a set of resources, broadening the individuals context for learning and extending the topics of interest that are no longer limited to the formal curriculum. Social media is largely responsible for this phenomenon, by given the opportunity to create, communicate, collaborate and share, individuals become content producers rather than just simple consumers.

Living and growing in a world full of web-based technologies has therefore influenced individuals daily life, interests and learning styles. Oblinger and Oblinger (2005) describes the Net Generation as multitasked, connected, visually literate, experiential, social engaged, thrived for immediate responses and gratification. Instructional strategies based exclusive on knowledge transmission mismatched with such traits, therefore the educational systems have the responsibility to provide learning opportunities more suitable with the challenging world that is outside the school walls.

Modern pedagogical ideas linked with constructivist theories advocate that knowledge should be actively constructed, experiential learning must be encouraged and students ought be made responsible for their own learning (student centred learning). If we connect these assumptions with the opportunities that technologies provide nowadays we might understand why ICT is proclaimed as an important tool to support pedagogical changes.

Despite much enthusiastic discussion, "current research on the impact of communication technology on learners and the learning process is still underdeveloped" (Siemens and Tittenberger, 2009, p. 6). Therefore, technology cannot be considered a panacea for Education, the same way that it cannot be dismissed as it constitute an fundamental component of the world for which we are training our students. Matching the use of technology with the content, instructor personal style and students learning style seems to be the most prominent way to answering this dilemma (Frand, 2000). Even thought the digital gap between children and adults has the propensity for decrease over the years, we are still faced with different attitudes towards technology. Children are often ahead of adults in embracing new technologies, however they need teachers guidance to critically find, filter, manage and produce knowledge (Jenkins, 2006) as well as to ensure responsibility and safety in use.

# 3. Citizenship Education and Web-based Education

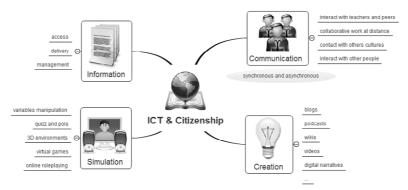
In the past decades alongside with the worldwide dissemination of information, economical/financial growth and mass movements of people, several social and political problems have arise in the modern societies, such as social exclusion, ethnics conflicts, gender and sexual discrimination, environmental disasters, civil wars, terrorism, globally organized crime (...) (Santos, 2006). In addition, a renewed interests in Citizenship Education, at both national and international levels occurred, which led to multiple

studies and large-scale research projects (ICSS, 2007; Menezes, 2003; Menezes, Afonso, and Gião, 2005; Torney-Purta, Lehmann, Oswald, and Schulz, 2001), following the introduction of Citizenship Education (with different terminology) as a statutory-subject in several countries (Eurydice, 2005). Regarding this curricular innovation in Portugal (Decreto-Lei nº 6/2001), several research studies were developed and their findings showed that the implementation of the non-disciplinary curricular area of Civic Education in Portuguese basic schools is far from achieving their original aims (Almeida, 2006; Araújo, 2008; Bettencourt and Pinto, 2007; Fonseca, 2009; Henriques, 2008; Santos, 2005).

Furthermore, in the last couple of year, the rapid development of technology and especially Web 2.0, made the scope of the Citizenship Education issues increase and extend to other levels, namely in online environments (Bennett, Wells, and Rank, 2009). People no longer meet other people exclusively on physical contexts, they are getting online and forming groups based on shared interests and ideas. Networks, by enabling the connection of objects and people and by promoting participation and interaction of individuals within a community, provides collaborative, distributed and shared construction of knowledge, opportunities for individuals' empowerment and civic engagement in social and political life (McDonald, 2008). With pressure created by the vast amount of information available nowadays and the rapid pace of change, citizens' have to construct their identity and their own meaning to the outer world and, in that process; they use the cultural assumptions and commodities around them and in the media (Veugelers and Zijlstra, 2004).

# 3.1 ICT use to support Citizenship Education and Civic Education classes

Digital technology has become ubiquitous in our daily life and the impact it has on how people interact with each other and with the surrounding world, lead us to acknowledge the important role that technology play both in the construction of citizenship identity as a tool to support and change the way that Citizenship is taught, bringing new contexts, realities and dimensions for Civic Education classes. Selwyn (2002) highlight the multifaceted nature of the subject and variety of potential methods of delivery, stressing the need to enable an "education for citizenship" approach. The instructional goal is therefore to assist learners developing general skills for learning and problem-solving. Regarding ICT and Citizenship Education connection, we can list four major clusters, as we can see (Figure 1):



- a) Information ICT as a source of Information is the most commonly advantages of Web-technologies for education. Through democratization of information access, teachers and pupils can easily cross-referencing sources and stay up-to-date with the latest events, increasing knowledge and becoming informed citizens (Gardner and Walsh, 2000; Mossberger, Tolbert, and McNeal, 2008; Selwyn, 2007).
- b) Communication Digital media technologies besides allow the individual to access a vast amount of information concerning social and political issues, it also allow them to get actively involved in real time discussions, deepening their knowledge trough online communities, testing and discussing ideas outside their immediate circle (Bennett, et al., 2009). In more formal contexts, communication tools and platform (e.g. e-twinning) allow teachers and students to interact with other cultures, persons and realities extending their world knowledge, disseminating their cultural heritage, and training their communication skills and social competences (Coutinho and Rocha, 2007).
- c) Simulation Through a range of technological tools likewise interactive materials, virtual instructional games, multiplayer online role playing games or 3D environments (e.g. Second Life) it is possible to provide reality simulation, giving students opportunity for explorations and rehearsals of scenarios hard to bring into the schools, hazardous or unavailable to children in real life (Bender, 2005). Quizzes and polls connected with the contents of their interests are as well a click away, therefore by allowing students to interact with the multimedia features, the teacher is encouraging them to ask 'what if...?' questions and examine consequences.
- d) Creation Finally ICT gives opportunities for students to create digital resources directly linked to issues of citizenship (videos, blogging, podcasting, wikis, etc.). Through the development of digital resources children engage in citizenship topics. Adopting this kind of use of based web technology, besides being an important step toward critical "media education", provides opportunities for student-centred learning, active learning and collaborative construction of knowledge (Selwyn, 2002, 2007).

Next we are going to present how blogs can be use to support Civic Education Classes and so promoting pedagogical changes.

# 4. Blogs as an supportive tool for teaching and learning

Social media have revolutionized the web and the way people interact in the past years. Blogs are "online public writing environments, which enable a single author or a group of authors to write and publicly display articles, called posts, which are listed in reversed chronological order" (Redecker, 2009, p. 33). These web 2.0 tools are giving voice and power to the individual, by allowing citizens to produce, write and share their ideas in a few minutes and broadcast it worldwide. Indeed, this facility can entail also negative impacts such as overload information, lack of scientific rigor and ethical concerns. This is where education comes as a key element to prepare citizens to analyze and properly interpret the surrounding online and offline world.

Wordpress, Blogger and Livejournal are three of the vast Blog providers available on the web. Edublogs is also an important service since offer free domains aimed specifically for pupils and teachers.

Oravec (2002) advocates that blogs can be considered sources of information on relevant topics or as modes of online classroom interaction. If we assume blogs to be a pedagogical resource (Gomes 2005), students may adopt a passive position accessing their class-teacher' blog, a subject-matter expert blog or an institutional one, primarily to collect or assimilate information. However, when blogs are used as a teaching and learning strategy (ibidem), students get more involved, producing and interacting with each other and with a global network. Therefore, blogs can be use as e-portfolios to collect and present students work or learning logs; to promote critical reflection; to developed habits of reading and writing; for enhancing dynamic learning environments through communication, collaboration, digital simulation, debate or topic-related discussions (Akbulut and Kiyici, 2007; Bartolomé, 2008; Downes, 2004; Redecker, 2009).

# 4.1 Blogging in Civic Education Classes: two examples.

During the current school year, after an exploratory study about the non-disciplinary curricular area of civic education functioning (Nogueira, Moreira, and Pedro, 2009), a teacher-training program is being developed aiming to promote discussion about teaching strategies and methodological principles under the concern of Civic Education; to encourage teachers to promote joint and individual reflection about their practices and, to foster the acquisition of technical skills in order to facilitate the use and appropriation of ICT in Civic Education approaches.

A learning environment to support the training program was developed in a Social networking (NING) and during the training sessions other web 2.0 tools were use and/or manipulated by the teachers (Wordpress, YouTube, Delicious, Prezi). One of the main activity of the training-program consisted in developing a structured action plan for their Civic Education classes, after teachers find with their students an issue or problem related to citizenship.

In this article we put forward the work developed so far by two of the participants in this teacher training-program. These two teachers decided to create a blog with their students (12-14 years old) to support the activities designed in their action plans. They clearly intend to use the blog as a mode of online classroom interaction (Oravec, 2002) and not only as a source of information, nevertheless the aims behind its use, and the strategy adopted, showed to be very different.

Teacher A created a blog, on their one, with the purpose of establishing a Class Diary online. The Blog was restricted to these class students and their teacher (Class-Director). According with this teacher plan, the Blog represents an online space for their students to present and reflected about school daily occurrences, aiming to diminishing the time of Civic Education Classes spent with certain behavioural and administrative problems. Students were encouraged for the teacher to write *posts* about what they *Like*, *Dislike* and *Propose*, along the school year. Through this scheme it was expected that children

speak about their problems, discuss different point of views and also try to find answers or creative solutions for emergent class or local problems.

A different approach was developed by Teacher B. According with recent Portuguese legislation (Lei n.º 60/2009) Education for Sexuality became a topic to explore in basic schools trough a trans-disciplinary point of view and also in Civic Education classes (16 hours of the total in the annual curriculum for children between 12 and 14 years old). Multidisciplinary teams were established in many school in order to develop guidelines and promote synergies between different teachers and curriculum departments, taking into account that this is a topic that Teachers lack training, confidence and experience (Nogueira, et al., 2009). In Teacher' B school, the Class Directors were defined as the major responsible for conducting and exploring this theme in Civic Education classes. Regarding the lack of time to go deep in this issue in the 45 minutes a week of Civic Education Classes, and looking this topic as a difficult theme to explore face-to-face, Teacher B decide to use a Blog as a tool for stimulate discussion, sharing of feelings, doubts and problems outside the classroom. The Class Blog became also a digital portfolio where students answered to the challenges posed by the teacher and as an instrument of formative evaluation allowing the teacher get to know the impact of her action: contents presented and discussed in and out the classroom.

Through an analysis of the teachers' reflections done on their personal blogs developed in the NING social network (http://ticidadania.ning.com), it has been possible for the researchers to monitor the difficulties, anxieties and positive developments alongside with the implementation of the project. A brief analysis of the *posts* and *comments* made both by students and teachers help us to reach a few and preliminary conclusions of the projects developed by these two teachers in particular.

Teacher A considered that the Blog has been an important tool for discuss several issues of behavioural problems, allowing the students extra time to reflect about their attitudes as a group, taking responsibility for their actions and establishing class rules and agreements. Through the analysis of the comments made by the Teacher A in the Blog it was possible to understand that she used the blog to condemn some episodes of indiscipline but also for enhancing good attitudes (apologizes to peers; to teachers), positive behavioural changes and other class initiatives (study visits; yearbook).

Teacher B also believes that this project has been a very positive experience. The contributions and scientific support of the multidisciplinary team in her school was moreover crucial for her performance. Nevertheless their students have been collaborating in an enthusiastic, responsible and respectful way in almost all activities so far, and according to her technology, specifically the blog, had a crucial role. In this Class Blog, students have share their feelings, gathered videos, images and music, on the web, for help them express their thoughts and ideas and write about issues such as youth transformations (emotional and physical), self concept, sexuality, sexually transmitted disease (STD), etc.

Some of the problems reported so far by the teachers, that end resulting in discussions online between the several teachers participating in this teacher-training program and the investigator were: lack of time to implement the project due to bureaucratic demands and

behavioural problems, in line with other research findings (Bettencourt and Pinto, 2007; Figueiredo, 2002; Nogueira, et al., 2009); periods of lower turnout and participation in the blog linked with evaluation periods, prohibition of parents to access the Internet as punishment for children's bad grades; evasion on the topics and/or in the tasks requested by the teacher and spelling errors.

Both projects are still in developed, moreover they constituted, in our point of view, different forms of using technology to enhancing learning and to promote pedagogical change.

#### 5. Final considerations

Successful citizens in today's society are those who are aware of the impact of digital revolution in course, assimilating and adapting towards the surrounding challenging environments. Therefore, digital divide now concerning both access and use of technology has become an undeniable indicator of democratization and nation's progress (Atkinson and Castro, 2008). Regarding Education, it is important not to neglect schools environment and teacher's role for effective learning, keeping in mind that both formal and informal learning must foster individuals' adaptation towards multiple professional and personal contexts, as well as their engagement as global citizens. New Millennium Learners (OCDE, 2008) are technologically savvy, highly skilled at multitasking, and, living into different worlds: inside and outside the schools. By advocating the use of technology for enhancing learning in Citizenship we are attending to the engagement and the attraction it triggers in the children of this age range, but also concerned with the need of developing the basic and critical skills bearing in mind the influence and role that technology play in our daily life's (Jenkins, 2006).

Our aim, in this paper was to focus on ICT potential to support Citizenship Education and particularly Civic Education classes. It was possible to highlight four possible connections between technology and citizenship: Information, Communication, Simulation and Creation. Different teaching and learning strategies can be put in practice in Civic Education classes through the exploration of these four dimensions and taking the best of the technological tools that embody them, namely those strategies based on student-centered learning, grounded on active methodologies and the collaborative construction of knowledge (as opposed to more indoctrinating and traditional methodologies).

As an example we report an ongoing project that involves two basic schools teachers using Blogs in their Civic Education classes. Major conclusions will be available soon, nevertheless first analysis leads us to evidences of positive contributes of engagement in the Civic Education activities and tasks, examples of group critical reflection about behavioural issues and stimulation of self concept. Teachers also reveal positive feedback of the experience, referring to student's motivation and better management of class time. Concluding, recalling Hooft's (2007) findings, children want more access to diverse digital tools in their school, but more than basic technology skills they are looking for challenging, meaningful, and interactive instructional activities. Teachers

### Acknowledgments

The authors wish to thank the teachers that participated in this empirical study. This work was supported by a grant from the Portuguese Foundation for Science and Technology, under contract no. SFRH/BD/35793/2007 and by the Research Centre for Didactics and Technology in Teacher Education – University of Aveiro.

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