Blended Learning and New Literacies

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COMMON
GROUND

Blended Learning and New Literacies

An Experience at the University of Barcelona (Spain), 2003-2005

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Abstract: The general use of ICT in higher education is currently facing a new challenge. Blended learning is not only about the promotion of on-line activities or computer enhanced learning: the challenge is to guarantee that these and other educational actions promote, through the use of digital technology, critical thinking skills in the learner. On one hand, learners, future citizens in a permanently changing society, are facing the need for new literacies, digital and media literacy. These concepts are both different and complementary: whereas digital literacy deals with mastering new tools, media literacy emphasises the sensible and responsible use of these tools, as they become increasingly available throughout society and in all walks of life. Media literacy is a higher order concept as it addresses various issues raised by the pervading influence of images and information, to which new technologies have given an unprecedented power of influence. On the other hand, the university and higher education in general has encountered a paradigm shift, in which the focus of attention has moved from the teaching process to the learning process, and where the student has become central. Therefore, digital technology must be accompanied by strategies that promote, among other aspects, self-regulated learning. Self-regulated learning involves the emotional, motivational and meta-cognitive aspects of learning, and allows learners to design their own learning process. This article analyses an experience at the University of Barcelona, Spain, in the field of Audiovisual Communication, where in a project involving 80 students audiovisual messages were analysed and produced around the topic of racism in the media. Digital technologies were used in the project and were central to it. It exemplifies the challenge to educate with digital technology in a blended model, to promote certain aspects of self-regulated learning, and to enhance critical thinking in relation to media.

Introduction

THE GENERAL USE of ICT in higher education is currently facing a new challenge. *Blended learning* is not only about the promotion of on-line activities or computer enhanced learning: the challenge is to guarantee that these and other educational actions promote, through the use of digital technology, critical thinking skills in the learner.

On one hand, learners, future citizens in a permanently changing society, are facing the need for *new literacies: digital and media literacy.* As we will see, these concepts are both different and complementary.

On the other hand, the university and higher education in general have undergone a paradigm shift, in which the focus of attention has moved from the *teaching* process to the *learning* process, and where the student has become central. Therefore, digital technology must be accompanied by strategies that promote, among other aspects, *self-regulated learning*. Self-regulated learning involves the emotional, motivational and meta-cognitive aspects of learning, and allows learners to design their own learning process.

This article describes an experience at the University of Barcelona, Spain, in the field of Audiovisual Communication, where students critically analysed and produced audiovisual messages around the topic of racism in the media. Digital technologies were used in the project and were central to it. It exemplifies the challenge to educate with digital technology in a blended model, to promote certain aspects of self-regulated learning, and to enhance critical thinking in relation to media.

The main question we asked throughout the project was if all these elements could contribute to higher education students being critical, participating citizens, and if their critical thinking towards the media (Media Literacy) was promoted through the acquisition of self-regulated learning skills.

Higher Education: New Realities and Paradigm Shifts

New Realities

Innovation in the educational and professional development in higher education, especially at the university, started to have an important role from the second half of the 90s, when it was consolidated as a strategic academic field during the first years of the 21st Century. This development coincided with the uprising of information and communication technology and the increasing use of the internet as a new medium.

These two factors, new technology and the new medium, has led to a double paradigm shift during the last years. On the one hand, a fundamental change is taking place in the educational process, where the focus on the *teaching process* is increasingly replaced by the focus on the *learning process* (Harvey & Knight 1996), which on the other hand has entailed in a shift from the focus on *specific competences* toward a need for *overarching (critical) competences*.

The shift toward student-centred learning; that is, an approach to education in which the teacher's role is less that of an "expert," and more that of a skilled learning "facilitator", has had profound, ongoing consequences for curriculum change in primary, secondary and higher education. At the same time, it has raised the need for the promotion of overarching competences and skills among university students, citizens of the information, communication and knowledge society.

These overarching competences could be approached from two different perspectives: *self-regulation* and *new literacies*.

Self-Regulated Learning and the Blended Model

Self-regulated learning (SRL) is understood as a set of overarching competences that allow the student to control the variables that have an impact on their learning process. These variables can be cognitive, motivational-emotional or social (Zimmerman, 1990). SRL is situated in the context of *life long learning*, where students not only monitor their cognitive progress (acquisition of knowledge), but also take strategic decisions and manage emotional factors like stress and anxiety in their learning process (Schunk & Zimmerman 1998).

The process of SRL can be divided into three phases: *planning, monitoring* and *evaluation* [1]:

- The *planning phase* implies that students design their learning scenario(s): define and clarify learning objectives, analyse the tasks, plan strategies to achieve the objectives (including the alternative strategies).
- During the *monitoring phase*, the students check if their learning process is making progress toward the set aims, if they are using the appropriate strategy or they have fallen back into old learning habits, if this strategy works or a different one has to be used.
- During the evaluation phase, the students analyse to see if the chosen strategy has worked, what they think about it and how they feel, if it is appropriate for that kind of learning task, etc...

These three phases, if applied correctly, form a 'virtuous circle' of continuous progress:
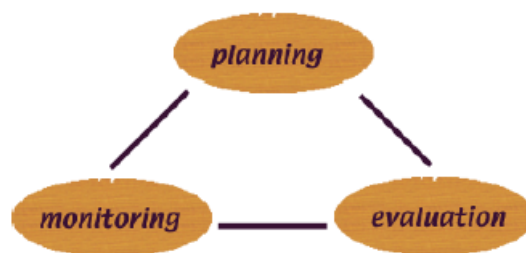

Fig. 1: 'Virtuous Circle' of Self-Regulated Learning (SRL)

The three phases of SRL must have a dimension of reflection, which connects the cognitive and the meta-cognitive aspects of the tasks being carried out in the learning process.

Technology enhanced environments will have to consider these aspects in their pedagogical designs.

In our view, this is the most important link of SRL and the use of ICT in education: increasing the number of tools and methodologies, so that students have the choice about what to use in order to achieve their learning goals. This leads to a new conception of *blended learning*, where the blend is not only

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[1] The development of the three phases of SRL can be consulted at http://vcs.ccc.cccd.edu/crs/star/educ120/intro2SRL.htm (project EDUC 120, Orientation to Expert Learning).

about using technology, but also about using different strategies to achieve the same goals.

Blended learning (BL), then, is understood as the process of offering resources - *off-* and *on-line* - for both face-to-face and distance learning, combining both methodologies and the use of digital technology for the development of critical and communication competences, fostering self-regulation (Aiello & Willem 2004).

Moreover, the increasing use of computers and tecnology in university class rooms, inevitably leads to the idea that its daily use should be accompanied by certain quality standards (Bartolomé & Grané 2004).

In other words, BL is not only about the promotion of on-line activities or computer-enhanced learning: the challenge is to guarantee that these and other educational actions promote, through the use of digital technology, critical thinking skills in the learner.

New Literacies

It has been assumed that we live in an audiovisual society (Castells 1996). This means that, after centuries of hegemony of the word, audiovisual messages are starting to have a similar status in society and also in education. In these fields, the printed word was the dominant medium for a very long time, and it still is. But although knowing how to read and write is still essential, it is no longer *sufficient* in a world where the image and audiovisual media – be it television, cinema, information technologies or the Internet – is increasingly becoming the dominant medium (Goodman 2003).

Moreover, the intensive use of digital media and the massification of the Internet as the information and communication net is being increasingly stimulated. In this context, it becomes clear that on all levels new literacies must entail: digital literacy and media literacy.

Whereas the concept of *digital literacy* implies the mastering of new tools, *media literacy* puts the emphasis on the sensible and responsible use of these tools, as they become more and more available.

Digital literacy refers to the acquisition of skills and competences related to new digital technologies, which play a fundamental role in education, work, leisure, and ultimately in active citizenship. In the context of digital literacy, new technology is considered to be an instrument to achieve more efficacy in the access, use, distribution and processing of information.

Media literacy, on the other hand, refers to a higher concept level: it is oriented toward the different aspects that emerge from the impregnant influence of images and information, enhanced by new

technologies, that have granted the media - traditional and new media - with an impressive power to fascinate. In the context of media literacy, information is analysed and evaluated en terms of *varicity* and *deceit*, of confusion between facts and fiction, and from a precise point of view, as opposed to bias and prejudice. It is, therefore, an overarching concept necessary for active citizenship.

In this sense, we could define media literacy as the 'development of competences that allow people to be critical thinkers and creative producers of messages that are increasingly diverse, using image, word and sound'. The Center for Media Literacy[2] proposes a wider definition of this concept, responding to the new situation of media culture of the 21st Century. The definition suggests the importance of education in this process, as it not only refers to the fact of being literate, but also to the set of actions that leads towards literacy:

> *"Media Literacy is a 21st Century approach to education. It provides a framework to access, analyze, evaluate and create messages in a variety of forms (...). Media Literacy builds an understanding of the role of media in society as well as essential skills of inquiry and self-expression necessary for citizens of a democracy" (CML, p.8).*

In any case, the concept of media literacy is characterized by several phases related to audiovisual messages:

- *access*: the access to and distribution of media – old and new media - both from the audience and the production point of view.
- *awareness and analysis*: the ability to analyze messages with analyzing tools (both form and content)
- *evaluation*: detect contradictions, discover intentions, disguise ideology behind the message.
- *creation/production*: the ability to produce and emit (distribute) audiovisual messages, being aware of all aspects that are related to them.

Critical Thinking

In educational terms, the process of analysing and producing audiovisual messages from the perspective of media literacy implies a new way of learning. Here, a reflexive process takes place, similar to self-regulated learning, where the key point is to have *high level critical thinking skills*. These skills or competences are the true basis of intellectual freedom and complete citizenship for all members of a diverse and democratic society.

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[2] Center for Media Literacy: www.medialit.org

So how exactly do we define these high level critical thinking skills? During the last years, several kinds of cognitive competences or skills have been proposed that are related to critical thinking. We could summarize them in three categories (Piette 2003):

- The ability to *analyse* information: formulate questions, define concepts, distinguish the elements of an argument, identify problems and clarify alternative solutions.
- The ability to *judge thereliability* of the information: judge the credibility of a source, identify implicit bias, judge the logical validity of an argument.
- The ability to *evaluate* information: draw appropriate conclusions, make generalisations, infer meaning, formulate hypotheses, and reformulate an argument, a problem or a situation.

Conclusion

As a conclusion we can say that the relationship between Blended Learning and New Literacies is precisely these *critical thinking competences*, necessary for a self-regulated, significant learning process. In other words, in order for learners to become active and literate citizens, they should be able to look for the appropriate information for their learning, and to select it in a critical way. And in this information-overloaded society, this is the challenge.

The Challenge: Adapting Practices To The Paradigm Shift

How can we promote critical thinking skills in Higher Education students? This section describes an experience at the University of Barcelona, Spain, in the field of Audiovisual Communication, where in a project involving 80 students from 4 different universities, audiovisual messages were analysed and produced around the topic of racism and xenophobia in the media. Digital technologies were used in the project and were central to it. This experience exemplifies the challenge to educate with digital technology in a blended model, to promote certain aspects of self-regulated learning, and to enhance critical thinking in relation to media.

The research question is, therefore, if SRL and critical thinking towards the media (Media Literacy) was promoted through the use of digital technology.

The Case: eCLIPse Project at UB

The eCLIPse project[3] focuses on media, race and the question of representation: students analysed the portrayal of ethnic minorities and immigrants in the media during several months. This project aimed for Media Literacy, through the promotion of several aspects of SRL and the use of new technologies. The following strategies of SRL and Media Literacy education were used with the students at University of Barcelona:

Blended Model

- *Face-to-face sessions vs Virtual Campus:* the technical classes, for the acquisition of digital video skills, and the workshops for the analysis of media messages, were face-to-face sessions. At the same time, discussions about the selected clips and the topic in general, continued in the Virtual Campus: forum, chat and e-mail. These tools were also used for a continuous evaluation, monitoring and assessment of the students. Both on- and off-line tools were used in a complementary manner.
- *Analogue vs digital media*: both kinds of technologies were used in this project. On one hand, students had to record news items from their television, using analogue VHS technology. Later on, the selected fragments were digitalized and presented on DVD. On the other hand, other digital technologies were used, like editing and compression software, communication technology and digital video.
- *Teacher-regulated learning vs Self-regulated Learning*: the teacher-regulated learning took place in the form of classes, specific assignments and monitoring, but students had also the course website for further practice, with guidelines and summaries, resources and suggestions.

Meta-Cognition

In the eCLIPse model, the meta-cognitive aspects lie in the fact that students not only analysed and evaluated media, but also had to *think* about their analysis, write down their reflections, and share their experiences and insights with students from the other universities at the Media Forum. This allowed them to compare their work with the other students and think about the differences and similarities between them. Thus, during the forum, two essential aspects of media literacy came together: the *cognitive processes* (learning about media) and *meta-cognitive processes* (learning about learning).

So it became clear to us that each of the steps in the process of learning about media had to be controlled or 'validated' by meta-cognitive mechanisms that allowed for reflection:

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[3] http://www.lmi.ub.es/eclipse/

- *Analysis of the new acquired knowledge*
- *Reflection on the learning process*
- *Application of the new knowledge*
- *(Reflection)*

Digital Literacy

As we have seen before, digital literacy is here understood as the acquisition of skills and competences related to new digital technologies. In the eCLIPse project, students were familiarised with digital video and its related technology: non-linear editing software, media compression software and web application software. These skills were necessary if they wanted to participate in this project, as all videos had to be available on-line (website) and off-line (DVD) after the project.

Obviously, students had to use regular e-mail, the communication tools of the Virtual Campus, and internet search engines for their information.

Media Literacy

Participants in the eCLIPse project analysed the way media, and especially news features, *(re)present ethnic minorities and immigrants*. Why this topic? We wanted to make our local 'Spanish' students aware of a process that has been going on in most European countries for decades, but that for a number of reasons has only begun to show in Spain the last 5 years. Significantly, according to some authors, the representation of minority groups constructed by the media plays a very important role, not only in the perception the public has of these people, but also in the very perception they have about themselves, their self-esteem and their aspirations (Shepherd 2003). Most importantly, the imagery of television news may contribute to racism and discrimination through promotion of various stereotypes (Campbell 1995). Both positive and negative representations in media may reflect ideology and attempts to encode meanings for audience members (McQuail 2000). Thus, the question is: what are these meanings and who are the audiences?

It would be silly in media education to pretend that ideologies did not exist or that they did not influence the media. It would, perhaps, be criminal. Ignoring ideology is no better than pushing a single ideology. The only tenable stance towards ideology is one that helps students *identify ideological influences in their media*, clarify their own ideological beliefs, and come to terms with the way that ideologies operate within the media (Worsnop 2003).

So the general questions that we kept on asking throughout the project were:

1. How do we judge the relationship between the representation that the media offer of people, places and events, and their existence in the 'real world'?
2. Who is included in the representations of the media?
3. Who is not included?
4. Why? What/who is behind the message?

The eCLIPse project turned out to be a good tool for the promotion of the awareness about media, the analysis, evaluation and creation of audiovisual messages. The new opportunities that digital video technology offers us, allow for web-access to audiovisual products. This makes it easier to develop socio-communicative aspects of SRL: now students can share their audiovisual messages (both analysis and production) with their tutor, their peers and even with other – unknown- audiences, through web applications.

Evaluating the Learning Process

After the Media Forum, students were asked to reflect on their own learning process during the project. Especially interesting was the question of how new technologies enhanced self-regulated learning and new literacies. Two strategies were used to collect the information:

- *Individual reports about the Media Forum (open questions)*
- *Interviews about their learning process (semi-structured interviews)*

Analysis of Interviews

We analysed 7 interviews, all at the end of the first phase of the project.

The questions we asked were:

- What kind of technologies have you used in your learning process?
- How did these technologies help you to analyse media messages?
- What do you feel you have learned?
- Do you think you will use the acquired knowledge in the future/ in a different context?

Analysis of Students' Reports:

We analyzed 29 reports, 12 after the first phase of the project, and 17 after the second.

The students were asked to freely answer the following questions:

After the first phase the questions were quite general:

- What do you feel you have learned at the workshops and the Media Forum?

- What did the first phase of this project mean for your learning process?

After the second phase the questions were more specific:

- *What have you learnt from the eCLIPse project as to the representation of immigrants and ethnic minorities in the media?*
- *What have you learnt about digital media and the question of representation?*

- *What have you learnt from the eCLIPse project as to your personal experience?*

Results

The results of the analysis can be summarized in the following table. The different categories represent the skills and competences acquired by students as to their self-regulation and critical thinking process:

Table I: Cognitive and Meta-Cognitive Skills Acquired by Students in the Self-Regulated Learning Process During the eCLIPse Project

	Analysis of acquired knowledge	Reflection on acquired knowledge	Application of acquired knowledge
AWARENESS about media	e.g. What have I learned about media that I had not thought of before? e.g. What have I learned about how media represent immigrants?	e.g. What attitude(s) did I have towards media? e.g. Was I aware of the stereotypes transmitted by media messages?	Start to think critically about media.
ANALYSIS of media messages	e.g. Which skills have I acquired to analyse media messages that I did not have before?	e.g. How have I learned to analyse media messages, and what implications does this have?	Use the acquired analysis skills to evaluate media messages.
EVALUATION of media messages	e.g. Which skills have I acquired to think critically about media messages? How can I put media messages into a context?	e.g. How have I learned to think critically about media?	Use these critical thinking skills in other contexts in the future.
PRODUCTION of media messages	e.g. Which skills have I acquired when producing media? Which specific or technical competences? Which overarching competences?	e.g. Have I applied these specific and overarching competences to the creation process?	Create and produce media messages that do not perpetuate stereotypes, but rather contribute to transformation of society. *(Overarching crirical skills)*

Conclusion

As to their Media Literacy level, all students say to have learnt about the question of representation of immigrants and ethnic minorities in the media. A part from what they said in the interviews, we also have their video productions as a result at the end of the project. When analysing their audiovisual messages we could say that they reached at least the second phase of Media Literacy: the awareness/analysis phase, and some of them the evaluation phase (see 'Digital Literacy and Media Literacy').

Although SRL was not explicitly addressed in the project as such, students used some SRL strategies for Media Literacy, in that they monitored and evaluated their learning process in the field of media literacy and compared it with other students' during the Media Forum. However, these strategies do not seem to have had a key influence in acquiring Media Literacy skills as such.

We could say that, rather than self-regulation, what helped students most in becoming more media literate was the 'blended' setting of the project.

For future research, it could be useful to find out in a more systematic way how SRL can be applied to media literacy education, based on the 'ideally' acquired competences as shown in Table I, and based on the actual analysis of the messages (or discourse) students show when producing video.

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As a PhD for University of Barcelona, specialist in Educational Technology, Antonio Bartolomé has worked in Multimedia design and development since 1988, first with Laserdisc-based systems, later CD-ROM and Web, and lately with digital video solutions. His current work in Educational field is centred on Blended Learning solutions and on new and innovative designs for virtual learning environments. He is author of 20 books and more than one hundred articles. He has participated with papers or as keynote speaker at around 200 events since 1983. He has coordinated European projects in funding schemes like Comett, Eurotecnet, Telematics, Socrates and eLearning since 1990, as well as other national and local research work. Antonio Bartolomé is currently full professor in Audiovisual Communication at the University of Barcelona. http://www.lmi.ub.es/personal/bartolome/

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