

# THE USE OF INTERNET SOCIAL NETWORKS IN A PEDAGOGICAL CONTEXT: A CASE STUDY IN A BASIC PORTUGUESE SCHOOL

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## Contextualization

This study takes place in a Portuguese school, situated in the outskirts of one major city Lisbon (capital), and two other mediumsize cities Sesimbra and Setúbal, in a village called Quinta do Conde. The place has been having a demographic boom due to the delocalization of home purchasing. (<http://www.chez.com/quintadoconde>). This situation leads to an overcrowded facility, of more than 900 youngsters. Escola Básica da Quinta do Conde is a school for children from kindergarten to the end of basic school (0 to 9<sup>th</sup> grade), which means that its school age population varies from 3 to 15 years old. Nevertheless, it also offers night and professional courses to students that want to continue or improve their academic skills or to those that do not want to continue their studies beyond the 9<sup>th</sup> grade.

The village in which the school lies lacks most basic infrastructures students need. For example, the Quinta do Conde's public library is very poor and the only decent one, which would be closer, is situated in Sesimbra, 20 km away. In addition, public transportation is also very scarce, preventing students from using it in a daily basis. It is not foreseeable, that the current situation is going to change dramatically, at least in the near future, due to government's policy and budget restrictions.

Despite this lack of cultural infrastructures and resources situation, many students have access to internet and computer technologies due to Portuguese govern technological program eescolas. (<http://www.eescola.net/e-iniciativas.aspx?i=2>). This program allows children and teachers to buy computers and internet connections at a special low price comparing to the average cost. Because of eescolas program, nowadays, many students now have the tools and means to access internet. Moreover, the Portuguese basic academic curricula include both activities and a specific subject concerning information technologies. (<http://www.minedu.pt/np3/816.html>; Despacho n.º 16 149/2007; <http://www.minedu.pt/np3/73.html>). This means that the majority of Portuguese students, including the Escola Básica Integrada da Quinta do Conde ones, are capable of mastering, not only internet use, but also many computer programs and social networks.

In recent years, a new and important tool as emerged on the internet, the so called social networks. The general purpose of social networks is to "establish or maintain connections with others. These sites can be oriented towards workrelated contexts (e.g., LinkedIn.com), romantic relationship initiation (the original goal of Friendster.com), connecting those with shared interests such as music or politics (e.g. MySpace.com), or the college student population (the original incarnation of Facebook.com)." (Ellison at al, 2007)

Since their introduction, there was immediate success; the cybernauts started to dedicate a great deal of their time to these networks. Consistent with a study of worldwide usage of social networking sites, done by comScore, Inc. (NASDAQ: SCOR), a leader in measuring the digital world, "during the past year, the total North American audience of social networkers has grown 9 percent compared to a much larger 25 percent growth for the world at large. The Middle EastAfrica region (up 66 percent), Europe (up 35 percent), and Latin America (up 33 percent) have each grown at wellabove average rates."(Lipsman, 2008)

One of the most famous social networks is Facebook (more than 225.000 people in Portugal net according to

Facebook online site, 5th August, 14:52). According to Hewitt et al (2006) "Facebook is an online social networking community that has become popular at academic institutions. Members can create profiles about themselves, create and join groups with other members, make "friends," and share pictures and messages, "It is similar in concept to a print yearbook, where users can place a photo of themselves on their page and include personal bits of information about their interests and hobbies. Facebook, however, is far more sophisticated than a print yearbook. It allows users to create online networks of friends and join and create groups of likeminded individuals." (Mack et al, 2007). Another common social network, very similar to Facebook, is Hi5. It is also very popular in Portugal. The company was founded in 2003 by Ramu Yalamanchi, who claims that Hi5 has over 60 million active members all around the world (Swartz, 2008)

As one can read from this chart (Lipsman, 2008), it is undeniable the growing importance of these internet tools in today's social life, even though these results do not concern all adolescents.

Worldwide Growth among Selected Social Networking Sites June 2008 vs. June 2007 Total Worldwide Audience, Age 15+ Home and Work Locations Source: comScore World Metrix			
	Total Unique Visitors (000)		
	Jun2007	Jun2008	% Change
Total Internet: Total Audience	778,310	860,514	11%
Social Networking	464,437	580,510	25%
FACEBOOK.COM	52,167	132,105	153%
MYSFACE.COM	114,147	117,582	3%
HI5.COM	28,174	56,367	100%
FRIENDSTER.COM	24,675	37,080	50%
Orkut	24,120	34,028	41%
BEBO.COM	18,200	24,017	32%
Skyrock Network	17,638	21,041	19%

Chart 1 The growth of social networking in the world

All academic members, especially professors and tutors have grown conscious of social network power. That is why many research and application of these tools is being done, at present time, in college and university campus. (Hewitt et al, 2006; Mack et al, 2007; Bugeja, 2006).

The rising question, for many scholars now is the possible application of these internet tools (social networks) in secondary and basic education, since there are already promising results at a university level.

It is known that one of the most fundamental facets of learning is the social interaction in which learning is an outcome of individuals sharing experiences. Learners perform learning tasks in formal contexts, (ex. classes), semiformal contexts (ex. lectures or seminars) and informal contexts or nonacademic settings. Of course, not all students have the same access to these contexts, which could mean a certain discrimination and that would have reflection in their academic success.

School must also prepare the young generations for the new challenges that they will face and of course the

ability to tackle new technologies is indeed very important. "Technology has added a new type of literacy to consider. Sometimes referred to as digital fluency, this type of literacy refers to the ways people become comfortable using technology as they would any other natural language. Some scholars suggest digital fluency will be another prerequisite for sociability, lifelong learning, and employment opportunities. The uses of educational technology have a twofold advantage: they can promote the types of literacy traditionally encouraged in learning, as well as the digital fluency needed to prosper in the digital age". (Huffaker, 2005) In an attempt to diminish this possible gap between students and to improve their social relations in a nonschool context, social networks were used to try to balance this unevenness. These tools were applied to enhance not only pedagogical relations and communication skills, but also to promote the school work done by two classes, during a school year.

Chart 2 and 3, describe the classes and the disciplines where social networks were used.

GRADE	Number of students
7 <sup>th</sup>	27
8 <sup>th</sup>	22

Chart 2 Number of students of each class

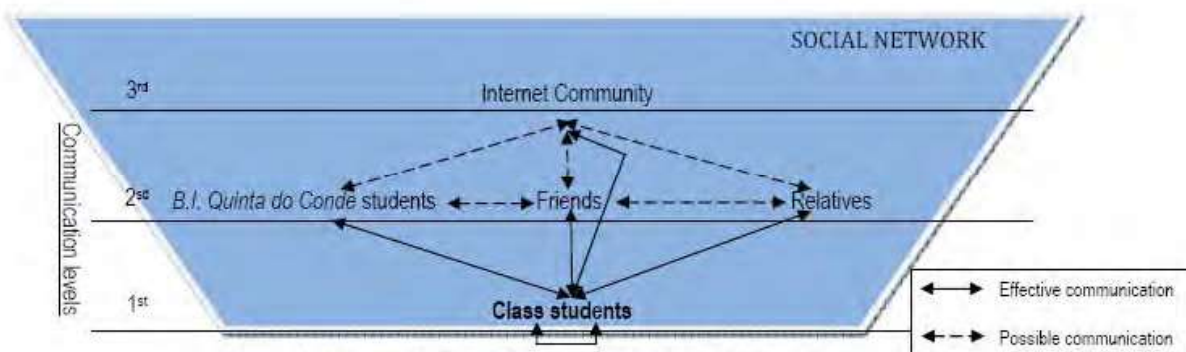
GRADE / DISCIPLINE	Natural Sciences	Project Area
7 <sup>th</sup>	X	X
8 <sup>th</sup>	X	

Chart 3 Classes which were involved in networking project.

This project was born not only from teacher's will, but also from the students willingness to show their accomplishments and to be able to interact with other Quinta do Conde students that were not aware of their work, but still could give interesting contributes. Some youngsters even singled out the importance of broadcasting their work and of receiving possible tips from students from other countries, since it would help them to improve their skills and possibly start a social network, using a nonmaternal language.

This type of communication implicated sharing (ex. scientific) knowledge, skills, aptitudes and values, therefore taking pedagogical ties to a further level: a global one.

This scheme represents the different communication agents that were involved in the development of this project.



Scheme 1- Communication levels and agents implicated in the social network.

## Aims and Questions

The project intended to research and develop the communication potential of social networks in a pedagogical context, in other words, the goal was to use internet tools like Facebook and Hi5 (nonacademic setting), in a class context, with an educational purpose. The aim was to create a channel of communication, with multiple levels and possibilities, in order to enhance the students' scientific, social and communicational skills. In particular, the objective was the creation of social bonds, based in an academic

context, that were not confined to school space.

In this circumstance, three main research questions were asked: (1) Can basic school students create a page on an internet social network and manage it, in a mixed (school and free time) context? (2) How many communication levels were established? (3) Did the students improve their communication skills?

## Methodology

The pedagogical method used for the students' creation of class page in both Hi5 and Facebook was the same. The teacher suggested, during a Science Natural class, the possible creation of a webpage in a social network, in which they could post their ideas about that particular subject, show the work already done or talk among themselves about the several projects they were doing for other subjects. The suggestion was immediately taken and they started organizing themselves in several groups according to different tasks they had to do, in order to create the pages. It were the students that chose the social networks they wanted to use.

The creation of the social network pages started during a regular Science Natural lesson and continued that day, in the Project Area class. The rest of the work was done by students in their free time.

Project Area is a relatively recent subject included in Portuguese curricula, whose goal is allowing students to build a project of their own, in order to develop competences such as integration of knowledge already acquired and the enhancement of cognitive and social skills. ([http://www.dgjidc.min-edu.pt/fichdown/livros\\_IIE/area\\_projecto\\_parte\\_2.doc](http://www.dgjidc.min-edu.pt/fichdown/livros_IIE/area_projecto_parte_2.doc)).

In order to access the pages development, posts and the communication done, the teacher accessed the pages and recorded the changes weekly. It is important to notice that she never changed their content. Occasionally, she gave suggestions about possible contents and photos that could be added, in order to enrich the pages, but in the end, the final decision was done always by the students.

At the end of 3<sup>rd</sup> period, the students made an oral assessment of the project, focusing mainly in four items: general feeling, difficulties felt during its development, positive aspects (both personal and classgroup) and suggestions for its improvement.

Both classes were aware, the project was not going to be taken into consideration (at least formally) in their final marks in any of the subjects involved (Natural Sciences and Project Area). Indeed the teacher made these very clear during her presentation.

## Results and Analysis

The project lasted one school period (about three months) for both classes (two) and was mastered by the same teacher.

The setting up process of these small working groups was the same in each class: one of the class students wrote, on the blackboard, the names of his/her colleagues, according to the task they wanted to do for the project. This process was quicker on the 8<sup>th</sup> grade, perhaps because, not only they were a smaller class, but also they were working together, for two years then.

These groups were flexible since some students were involved in more than one, though not many. In all of them,

someone was in charge of the group and was responsible to upload the information to the website pages. This individual changed, during the project time, probably because some students had other school tasks that were more important for their academic success.

Nevertheless, there were differences concerning the two classes' results: the younger class (7<sup>th</sup> grade) finished first the construction of both pages (Hi5 and Facebook) but both of them made and maintained them, without any time interruption.

It was also the 7<sup>th</sup> graders that had the most complete pages and the best layouts. One of the reasons could have been the greater enthusiasm that they showed during the project (it was mentioned several times in their final reflection) and the fact that some of them did not have one personal page on the social networks and saw this as an opportunity to practice for their own.

The pages (Hi5 and Facebook) contents focused on the following items (chart 4):

Contents	7 <sup>th</sup> Grade		8 <sup>th</sup> Grade	
	Hi5	Facebook	Hi5	Facebook
School description	X	X	X	X
Personal information (general)	X	X	X	
Personal photos	X	X	X	X
General information about Natural Sciences class	X			
Written projects (Natural Sciences and Project Area)	X		X (only of Natural Sciences)	
Photos from projects	X	X	X	X
Links with possible interest	X	X	X	X
Communication posts	X	X	X	X
Chats	X	X	X	

Chart 4 Table of contents developed in social networking pages.

Since the teacher only dedicated two lessons for the implementation of this project, the greatest part of the pages creation was done in their free time, especially at home, but also taking advantage of school computers. In the 7<sup>th</sup> grade, several times, the students asked other teachers permission to continue working on their internet pages. This situation was more common in the subjects of foreign languages (English, Spanish and French) and Study Class (Estudo Acompanhado). However, some Portuguese language classes' contents were also used to make the pages.

In terms of communication levels established, there were also differences between the two classes. In both of them, the 1<sup>st</sup> level of communication (between class members) was well established; however there were more posts and chats on the 7<sup>th</sup> grade pages. The 2<sup>nd</sup> level (class students and other school members, family and friends) was achieved. It is important to refer that there was much more communication with friends (not belonging to Quinta do Conde school) and students from Quinta do Conde school, than with family. This situation might be so because family is not very involved with school projects

and does not have much time or are used to chat with their offspring over the internet. The communication level was not established in the 8<sup>th</sup> grade class (any page) but was accomplished in the Facebook page of the 7<sup>th</sup> grade. In this class, some students had relatives and friends living abroad, so probably they used the page to check on their Portuguese friends and family.

The Hi5 pages had more visits, posts and chats than Facebook ones (in both cases) probably because the students had been using this social network before. Many of them, during the reflection about this project, mentioned that, for them, it was easier to use Hi5, as they knew better the protocols and tools of this social network.

In terms of improvement of communication skills, many students referred that they felt more comfortable now using facebook/Hi5 since they started to practice with the class page. Another point mentioned was the possibility of using social networks with "school" contents, as some of them were not very sure that their pages could be successful.

Chats and posts, as time went by, got more interesting in communicational terms, since the number of references to scientific concepts and mentions to their school projects increased although, some talking themes were not directly connected to school life but to more personal matters. In this case, it is possible to see the influence of their past experiences with these networks on their project behavior.

Another interesting result was the increased use of nonmaternal languages in posts and chats, on the web page of 7<sup>th</sup> grade class. A possible explanation for this might be that it was in this particular class, that the 1<sup>st</sup> communication level was established. From the beginning, the 7<sup>th</sup> graders wanted to reach a broader communication audience, so they chose to post information in English and Spanish.

Closer to the end of the academic year, the communication intensity diminished perhaps because the students had exams and other school projects to finish.

## Conclusions and Implications

From the analysis of this experience, one can conclude that, at least some basic school students are able to use social networks, in a nonacademic context. They managed to create and maintain, without any adult supervision or work, two different social network pages, for almost three months.

All students got involved in this process, even if they did not have previous experience, because these ones were actively helped by the ones that already knew how to use them. This proves that peer learning is an active way of getting the necessary knowledge to use these internet tools.

Experience as a factor, seems to be a key issue in social networking use. The use of new social tools appears to be more straightforward for those students that had already made use of other networks. The more experience one has, more innovative can the student be, in terms of contents put on line. The more experienced students were the ones who helped the others, so a solidarity chain was set on motion, guarantying that all were involved.

This process, was usually done during classes given to develop the project and also, in the internet school room. If there was no time or place for this learning, probably not all students would have participated, moreover as some of them did not have the necessary computer.

Concerning communication levels, it can be stated that the interaction, within social network, between class students is almost immediate and effortlessly obtained. The results from 2<sup>nd</sup> level are not homogeneous, since it appears to be easier the communication between students and their friends and school fellows than with their family. Here, the

factors involved go beyond school relations and are more difficult to elucidate. The 3<sup>rd</sup> level seems to be the harder to accomplish, although it is possible especially if the students involved, already have strong connections with people beyond school walls. Those acquaintances should already be internet and social networks users. The last communication level seems to require more time to develop, as it came up last in the chats and posts. Probably, it would have appeared in both classes and developed further, if the project had continued.

According to students own opinion, their communicational abilities improved a lot, especially because they had to intervene in the activities (chats, posts) that were going on, and therefore had to use several capabilities (for example. nonmaternal language, scientific concepts) they were not used to employ in a nonschool context. The investigator confirmed this opinion as there was indeed a better performance in using languages, not only students' native language but also nonmaternal languages taught at school. In terms of scientific knowledge, there was also an increase of using natural science concepts.

The communication quality improved during the project, as the number of chats, photos and posts raised. As time was going by, not only the contents added on the pages, but also the posts and chats, reflected the students easiness in dealing with the tools. With this project, they started using them outside the common use of social networking, that some of them were already doing (personal use) and wanted to continue, next year with the same project.

To conclude, social networks can become another standard pedagogical tool in communication development if teachers and other educators are willing to propose such projects to students.

These preliminary results may assume a relevant role for social networks in school context for all students, since they can intensify and increase communication within school and with the rest of the internet sphere. Because an effective communication implicates the exchange of opinions, values and knowledge, more communication partners mean a greater improvement of these necessary communication abilities that in this case, are oriented for academic success.

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