

Social Networks Usage in a Portuguese High School Learning Context

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Abstract – Formative assessment gives information about the current degree of knowledge acquisition within learning activities made by students. Although being an important mechanism for learning adjustments, it isn't very often used in high school classes. In this paper we present a Web 2.0 tool usage in a Portuguese high school context in order to increase the formative assessment levels in those courses. The approach method consists in developing a gadget, to incorporate formative assessment in Hi5, a social network site, which will enable teachers to perform continuous assessment without excessive efforts and costs. The Hi5 platform was chosen because of the student's familiarity and the possibility to use OpenSocial, a common API for social applications across multiple websites. This API is supported by Hi5, which is a member of the Google's platform. Before deciding to use social networks, as a learning space, some questions were raised. What are the advantages in using such platform compared to other learning systems? What are the privacy consequences of moving learning into spaces traditionally used for leisure by our young learners? What are the trends in social network web sites? These issues are later on developed in order to support our approach.

1. Introduction

Information technologies and digital environments enable access to content and connections among citizens in different and dazzling ways. However there are some barriers for the changing attitudes to occur, that effectively push citizens into digital environments. Not surprisingly these barriers are less frequent among teenagers. They produce and intensively consume volumes of textual messages, namely in chat rooms, view thousands of Hi5 profiles and YouTube videos. There is a clear disconnection in comparison to more traditional forms of production and information consumption, (*Veen W. and Vrakking, B., 2006, Siemens G., 2006*). Therefore new forms of digital learning should enhance the learning styles and attitudes of those who grew up connected. But one must not forget that there are still a few students who are disconnected and with a lack of technological skills. In this latter case the teacher, with those learners, must provide alternative methods or promote connections into digital spaces.

The item informal assessment usually is performed by teachers in the beginning of a course to identify the knowledge background of the students. Sometimes it is also used in the end of the course to measure the overall level of essential competences achieved. In this latter case usually it is performed not by the teacher but by the Education Ministry. In these cases the goal is to evaluate the overall system education and the students don't have feedback about their particular performance.

On the other hand summative assessment usually is done at the end of a set of learning activities and the grade results achieved by the learner are registered by the teacher. However if the score is not very good the student will have a bad grade. Wouldn't it be better if before doing the exams all students had some feedback about the skills they have achieved? That's why we consider informal assessment an important learning active mechanism. Unfortunately this is time consuming during the class. Therefore we have chosen to do it outside the classroom. The best place for formative assessment to happen should be in a space where the students spend a lot of

time: their social web site. Informal assessment performance is an added feature because it gives information about the current degree of learner's knowledge acquisition within the learning activities and the activity is done in their social space. In other words, by giving continuous feedback to students, they more easily identify their shortcomings and teachers can adapt their teaching and learning activities more effectively.

Learning is an active and social process, without a right formula. Both actors must change; adapt their attitudes, levels of involvement and global scope in order to fulfill the initial goal: acquire new skills and competences by the learners.

This study contributes to narrow our research in the technology Web 2.0 usage in learning environments and will be applied in a real case: one particular high school of Portugal , with pupils aged between fifteen and seventeen years old.

This paper is organized in the following sections: section 1, this section introduced and presented the difficulties in using technology enhanced learning and the importance of formative assessment; section 2 will describe the social network usage and the knowledge representation importance to identify the competences achieved; section 3 will show how teachers can use social networks as a learning space to improve he or she teaching practices and how social networks is seen by learners; finally in section 4 there will be some final considerations and some pointers for future work.

2. Social Networks

Social networks have been emerging, along with social bookmarking and other Web 2.0 interactive tools, and some web sites are massively being used by teenagers. There are a large number of social web sites, namely Plaxo, Hi5, Ning, Friendster, Bebo, LinkedIn, Myspace and Facebook. They all provide a service for connecting youngsters and in many ways the visible technology, user interface used are very similar. But the situational relevance is very important for the social networking site choice.

Interestingly users tend to distinguish their relationships into different social networks. We can identify a primary social network, which is comprised of their close friends and family, and several other secondary social networks, which may be comprised of co-workers, classmates, neighbours, teammates and so on. As their social networks are webs, the primary and the secondary nets all intertwine; regardless, they maintain separate identities for each.

If we now consider teenagers, we state that their primary social network grows very close to the secondary social network of classmates. They dynamically shift their primary and secondary social network constantly and the incentives for expansion are, for example, partnering, or friend aggregation (*Boyd, D. 2008*). Exploring websites, which provide information about new people and updating each other's information, becomes a priority or even a need. Globally MySpace, Orkut and Facebook are currently used by millions of users (figure1). In Portugal, interesting though, teenagers prefer to use Hi5 for finding new friends and growing their network of friends. For them Hi5 serves the core information needs to increase their network of friends.

This social platform, Hi5, was selected as a learning platform besides the fact of being popular in Portugal. It was theorized that many students would be familiar with Hi5 interface and norms of interaction and this should be an advantage choice (*Stutzman & Kramer-Duffield, 2008*).

As students spend large amounts of time on Hi5, the inclusion of learning activities in, may be beneficial. Hi5 offers interesting learning opportunities, but they must be weighed against potential costs and liabilities.

The major psychological drawback of using Hi5 in education is teacher encroachment into social spaces. Social networks allow a student to express a part of his or her personality, and it may not be the teacher's right to encroach into these spaces. Therefore, extension of the school setting into online social spaces should be handled with care, responding the boundaries students have asserted around their online social digital identities (*Palen & Dourish, 2003*).

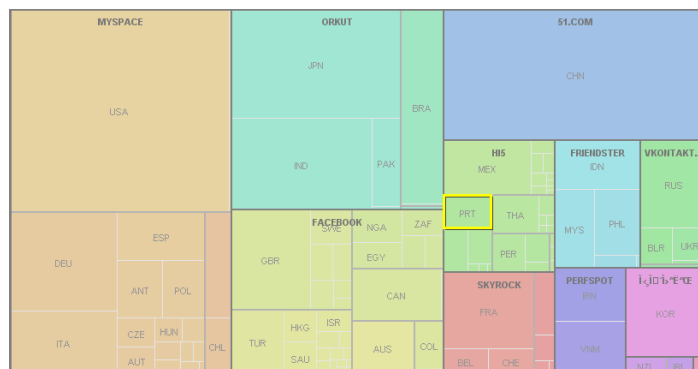


Figure 1: Social Networks Treemap (*Many Eyes 2008*)

Many teenagers view online spaces as semi-private, with context limited to social interaction (*Stutzman & Kramer-Duffield, 2008, Boyd D., 2008*). Teachers should also use caution when establishing Hi5 relations with students. In social networks, the teacher does not attempt to “friend” students, and shouldn’t accept friend requests. This personal policy is designed to keep the teacher out of student social spaces, keeping interaction only for class. Just as the teacher’s perception of the student may be affected by observing his or her online social activities, students may view teachers in differing lights after viewing their Hi5 profile (*Mazer et al., 2007*).

In comparison with Learning Management Systems namely (LMS): Moodle, Sakai or even Blackboard, Hi5 advantage is to meet the students “on their territory”. The teacher doesn’t have to use Hi5 or stop using a LMS. The idea is to provide a web place where the teacher can upload the activities. Each activity (quizzes, inquiries, fill in the blanks, etc.) should be possible to automatically grade it. Moreover each uploaded activity should be classified accordingly to a previously established skills and competences list. By classifying each activity, later on the learner will know what skill he or she successfully accomplished. Additionally, in our project, it is expected to enable learning activities portability from Moodle into Hi5 spaces, to unease the teacher’s effort. Therefore the teacher could automatically upload the activity to the Hi5 gadget, inside the Moodle platform. Other products such as Blackboard Sync12 are moving education into online social spaces, but it doesn’t seem beneficial yet. There are still some problems related with data portability, privacy and personal identity.

Soon Web 2.0 tools will offer many benefits. The identity-driven nature of interaction creates opportunities for class cohesion. Students learn about one another through digital profiles. Nowadays students have a high degree of familiarity with digital video and social networks; it is understandable that students are able to adopt them quickly.

This quality of interaction and user experience is important in the learning experience.

The successful integration of such web 2.0 tools will require understanding of the social and educational contexts by the teacher. Through continued research in this area, we will be able to better understand our students and their expectations, creating exciting new opportunities for learning.

3. Teacher's point of view

Social networks are being massively used by students, where they like to meet new people and establish a lot of social connections. This social interaction is starting to be seen as a window opportunity by the teachers and instructors to motivate students and engage them with different learning experiences. It is a fact that newly empowered learners will give more focus to learning systems based on conversation, interaction, on sharing, creation and participation (*Downes 2006*).

Some teachers are already performing experiments using games, videos, music or TV realizing technology is influencing the skills and attitudes of learners in a changing learning paradigm (*Win Veen 2006*). The e-learning 2.0 systems go in this direction because comprises resources and services organized in order to offer learning opportunities in a network environment (*Downes 2006*). Moreover McKenzie claimed that a web system must provide a structure, supporting the student's investigation and keeping them on the path while seeking "the truth" about whatever issue (McKenzie 1999).

In a high school context all members must have an active role in achieving good educational results. So we are expecting to use a social network space to reinforce the student levels of motivation and interest for learning: Moreover it is expected to provide a Treemap (*Treemaps 2008*) visualization feature to easily identify the skill level achieved. The students will have a clear picture of their on-going knowledge acquisition. Moreover the informal assessment activities will have a purpose and the students will be more motivated to do it.

Recently an experiment was performed, by one of the authors, comparing Moodle with a social network Ning's based. The Moodle was used during one term and during the other two terms Ning was used. The learning context was a discipline in a twenty seven student's class, aged between fifteen and seventeen years old, in a first year of a professional informatics course.

An analysis of a evaluation (26 students) showed that 88,4% (23 students) registered in the Ning platform and 76,9% (20 students) improved their results. About 86,9% (20 out of 23) developed their profile and made a network of friends. In fact they invited other friends and in the end of the experiment the social networking site had 152 members. Only 4,3% (1 out of 23) did not use it for establishing new connections. On the teachers side 20 invitations was sent but only 20% (4 teachers) accepted the invitation and only 25% (1 in 4) really used the platform. Surprisingly a Spanish girl and a company education editor joined the network. Also 8,7% (2 out of 23) didn't

used their own name and didn't post a image for identification. But 30,4% (7 out of 23) posted a image which was not their photo. Despite the teacher have told in class for using their own name and post the photo to better identify. As overall analysis, the students did not like very much to change from Hi5 to Ning and maintain both profiles. However they liked the experiment and their friends posted messages like "If I only had a teacher like you ", or "That's what you do in class, nice!". In comparison with Moodle 80,7% (21 students) registered in the Moodle platform. Also 38,1% (8 out of 21) didn't post an image and 4,7% (1 out of 21) used an image which was not his photo.

By observation the students showed more interest in using Ning rather Moodle. However some difficulties happened during Ning's usage, namely the students copied each others work during group activities, and dispersed during the class for seeing each others profiles or for sending messages. Therefore it is the author's claim that a social space Ning's based is not adequate to use during the class face-to-face period. This supports the choice of using Hi5 only as a class space complement.

By providing a bidirectional communication media system outside the classroom, between students and teachers they both will interact more and reach higher levels of understanding, mutual cooperation and strengthening metacognitive skills.

4. Final considerations and Future Work

Web 2.0 applications, which enables user's interaction in a social network is dazzling. The power of a digital personality is just starting and soon new systems will appear to show the great opportunities they can do. Our research effort will continue in making bridges between these social platforms and learning environments, as a class complement.

Therefore we are now analyzing the impact of these social networks in a real context: one particular Portuguese high school, which will later on validate our claim that social networks can be useful for learning activities.

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