CY-ICER2012

Looking For Leaders: Reaching the Future Leaders in Education through Online Social Networks

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Abstract

In this paper we introduce online social networks as part of secondary schools system, to allow the development of values, attitudes, socio-emotional skills and ethical standards among students. Students will learn to be citizens, how to vote, and be responsible for the improvements and changes of their own educative system under the supervision of the management team of the center and the school board. This methodology is intended for all students to have responsibilities through their participation in their own school system.

Keywords: Educational Systems, Social Networks, Elections, Voting, Human-computer Interaction;

1. Introduction

Students often demonstrate their desire and ambition to succeed in their studies in order to be rated by their teachers, parents or managers (Moridis, 2009). The idea of this paper is to present a new methodology in secondary schools to introduce online social networks as a part of their system and to offer services to the educational community (students, parents and teachers) for the construction of a training school experience that allows the development of values, attitudes, socio-emotional skills, and ethical standards. As a result, this will create a social life where all participate, share and develop completely. Students will learn to be citizens, learn how to vote, and be responsible for the improvements and changes of their own educative system under the supervision of the management team of the center and the school board. This methodology is intended for all students to have responsibilities through their participation (voting, debate, leadership, etc.) in their own school system.

In addition, what we want from this methodology is to create an inclusive education to promote equity among students through building a solid foundation for positive social interaction in which everyone can feel part of it and offer cooperation to others. Thus, an education developed in the framework (on the basis) of democratic experience, must support the achievement of equality among its students, as well as being relevant and pertinent to the development of citizenship skills.

This article consists of 8 sections: starting with the introduction, followed by the second section were we talk about the social networks and their use in schools by students. Third, we discuss the ways of teaching / learning

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applied in secondary schools and the role of students as part of this educational process. The fourth section discusses the problems of voting abstention in Spain and how to make students aware of the importance of voting by insuring that their opinions and votes count. Fifth, we talk about the functionality of this methodology and its implementation in the secondary schools. Sixth, we discuss the rules when using the social networks and students' responsibilities by taking the franchise of the people who commit misdemeanors. Seventh, we present a case study of this application and its results in a regional secondary school. Finally, we end the article with the conclusions and future work.

2. Social networks

According to Danah Boyd (Danah, et. al, 2007), social networks are Websites that give users a range of services based on Web technologies that allow individuals to: build a public or semi-public profile with relationships system, to have a list of other users with whom they share a connection, and finally, view and navigate through the list of users' connections with those who share a connection in the system. The shape and nomenclature of the connections listed above vary from one social network to another.

2.1. Social networks in secondary schools

In education, the ability to keep in touch a large group of people is the first characteristic that high schools should take advantage of. When teachers make use of Internet technologies in his teaching process, especially when having a large number of students, this variety in the sources of information for teachers and students can raise the effectiveness of the educational task, since both groups are forced to visit a large number of resources (blogs, wikis, etc..) that contain all needed information and at the same time cross students data. This is the perfect medium, for teaching / learning environment, which push these blogs to be widely used in education, and because of the multiplicity of subjects, teachers and students who live together in one or several schools (Danah, 2007).

The social networking phenomenon is growing especially in recent years in parallel with the development of services and tools called Web 2.0. What sets this system mainly from its predecessor, Web 1.0, is a communicative paradigm shift, where the user of the network goes from being a consumer of content to participate in building and developing them.

For these reasons, in our case for students in education systems, we see that the use of social networks for the development of our proposal is fundamental, and presents a very promising solution for the future pillars of the system to learn the meaning and importance of their vote, how it affects in the system development, and finally students will learn the way they can make use of it.

3. The ways of teaching / learning and communication with students

The current ways of teaching / learning are varied; new technologies open new doors for improvement every day. However, the students' participation in the education system itself is still low in some areas. There are many possibilities of enhancing the learning process with new technologies. Some of the main areas where students can participate in secondary schools are (Center for Excellence in Teaching, 1999):
- Extra-curricular activities, such as traveling to other places with cultural or professional interests. Normally these activities are carried out outside of the teaching period.
- In teaching periods, the main activities developed are classes and recesses.
    - Lessons specific to their course subjects.
    - Lectures on crosscutting issues in tutorials schedules.
    - In some centers recreational activities (sports, culture …) are also organized during breaks.
- Satisfaction surveys and quality controls in secondary schools that have implemented quality procedures, carrying out surveys throughout the year to monitor the quality of teaching. Two surveys are normally carried out annually.

-   Election of students' class representatives.

In this paper, we have focused our attention on the point of electing representatives, on the role of students in their educational system. The current system of representation of students in Spain in secondary schools is as follows:

-   Each course consists of 25 students, approximately. In the beginning of each academic year, they choose one main student representative and a secondary one. These students' represent the class and are responsible for certain tasks.
-   Representatives of the students in the school board are elected every few years; in case any of them leaves the center due to studies completion, or personal reasons, leaving a vacant position representation, an electing event is celebrated again.
-   Students Association, they are not part of the school system.

The present system gives a limited participation for students once they have elected their representatives. The system shows a certain rigidity regarding the students' organizations, as they can only elect two representatives per class and school board representatives. *Once these elections are finished, students are being told that within the education system they cannot be organized differently.*

This section generalizes the possibilities for participation in the learning process and the system by students. In some centers, these possibilities are greater, but these possibilities may not be generalized to be taken into account. We have to clarify that, this paper is based on the Spanish educational system and it may differ from other countries systems.

4. Last European voting data

On November 20th 2011, general elections were held in Spain. Online social networking experienced a great movement of information, promoting the vote for certain purposes, and that influence could be easily noticed in the elections. Analyzing the results, we can observe that in 2011 the party who achieved the majority in terms of representatives in the Congress of Deputies received 10,830,693 votes, while in 2008 the winner party did not achieve an absolute majority, even with a higher number of votes than the current winner of 2011 (they actually achieved a total of 11,289,335 votes but not an absolute majority). If we look at historical participation data in general elections, according to (Wikipedia, 2011) the average percentage of Spanish participation in elections is 73%, far from countries such as Italy, Austria and Malta that are above the 90%. And the total average of participation in voting in the European community is below the 50%.

The system we propose in this article would be applicable in areas (as Spain) where participation rates are low, trying to teach the importance of voting and electing representatives since the adolescence. A clear example of the importance of voting participation can be observed in the election for the dean position, at the University of Castilla-La Mancha (UCLM), held in November 2011. In the second voting round, the chosen candidate was elected by a minor difference, less than 1%, namely the winner got 50.4% of the votes while the other got the 49.6%. That was thanks for the students votes, and because they understand its importance to have a better future.

Since the electoral issue is not the main line of this article, with this data we just want to show the need and importance of participation in voting in the election of leaders of different social systems around us, as well as learning the responsibility of the personal vote and the impact it has on the environment of students. For this we present this new education issue in secondary schools.

5. Searching for leaders, functionality

This section describes the system, its main features, its principles actors, and its implementation. *Looking for Leaders* is a tool for participation, awareness and leadership within the educational systems of secondary education. The platform users can perform organizational activities, create and participate in the educational community events. It is based on the performance of social networks, adding a number of extra features to support active participation by students in their educational system. It has been taken into account that users of this platform are minors, and

therefore decided that in principle it is an independent platform (per school) for the better management and control of the school. One of the main functions of the tool is to enhance participation in the daily activities that take place in school. For instance: reading workshops, sports clubs and so on.

Next, the whole parts of the system are shown in detail. The platform considers the student as the principal user, but there are more roles within it. The system participants are:

- Students are the main users of the system. They create most of the flow of information and activities within the platform.
- Teachers and directors of the center. They will be responsible for managing the platform, controlling the social interactions among students, and ensuring its proper use. One or more of these people will be the administrator/s of the platform.
- Other school staff. If the aim is to encourage participation and leadership in the educational system, every player who is inside should be involved. This role has fewer responsibilities and therefore less functionality than teachers and directors.

In principle, for a first version of the platform, we have not taken into account the participation of parents in the system.

In terms of system functionality, two groups are presented.

5.1. Functionalities of social networks:

- Communication of the most important parts of the platform. They will have: private messages, board staff, general board of the whole school, and messages to administrators to report misuse.
- Pictures use. In Internet everything is so visual, and we thing that it would be a mistake to leave out the images use, between users, on the platform. It will not have more importance than it has in other social networks.
- There is no figure of friend list on this platform; it is the great difference in its functionality in contrast to other online social networks. The idea is not to promote the popularity contest with the platform, but we wish to increase the participation and leadership regardless of whether students have more or fewer friends within the school system.
- Events. Creating events in social networks are a key element of participation in actions and other situations, thus also they will be a key in the platform.

5.2. Looking for Leaders Platform functionalities:

- Supervision. The group of teachers will be responsible for overseeing all activities of students taking the administrators role.
- Voting. Any activity, event information, situation may be voted. In principle, all participants who have not been disciplined for misuse may propose votes on the basis of the activities. Within the feedback we have two key buttons, "Agree" and "Not Agree" (Figure 1).
  - o The student votes "Agree" to give support to the presented proposal,
  - o On the other hand, if the student votes "Not Agree", he or she will give reasons of why, so the dissatisfaction of the user can be meaningful and constructive for the educational system.
- Values. Teachers can enhance the acquisition of certain values that are transverse to their own subjects by creating activities and / or events in the platform.
- Groups, organization of areas or group working will be key features in this platform; students can create their own interest groups, for a given activity/s along the way. Groups can be public or private. For the private ones, students must be invited to register in it, while in the public all the world can unite it. Teachers may enter as participants or observers to both groups.

- Events, performances, proposals, will have studies: Idea (initial state), working and willing (partially or completely). This information will remain in the system, so that teachers can evaluate the activities of the students' participation and their success.
- The Students' representatives feature is discussed more extensively below, in the next section, since it is one of the key points.
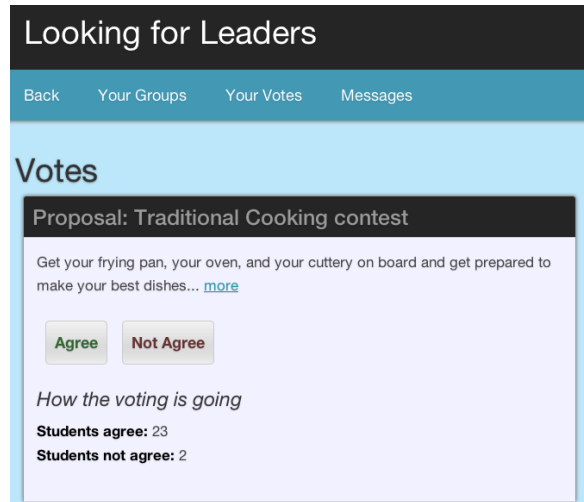

Figure 1. Voting a Proposal

5.3. Students' representatives:

Looking for Leaders platform does not replace the current items used in schools, it just gives them more support. Therefore, representatives established by the education systems, according to its internal rules, will remain. The features related to leadership are as follows:

- Leadership by accumulation. Each student may delegate his or her vote to peers either because they have similar ideas, or because the student likes their way of leading, to be the class representative. Students who delegated their vote shall not vote until they revoke the delegation. For example, if a student is a voting delegate of three other students, his or her vote will count as four.
- Representatives of the group. All groups will include the following figures: the group representative/s and the rest of students. A manager coordinates and represents the group actions, can be a student or, in some occasions, several students from the group. An example is depicted in figure 2.
- Voting proposals. Everyone can open a voting form. If the proposal goes beyond 10% participation in its first four days since creation, it will remain active, otherwise it will be closed.
- Academic timeline. Students can view their actions with respect to the system as a timeline. Viewing the activities in which they participated or the ones that were successful and the ones that were not.
- Proposals of change regarding system aspects. Made by the students themselves, each center may set a percentage of votes for a proposal that the school management may take into account. One possibility would be to evaluate the proposals which reach more than 50% of votes.

These features are designed to teach students the importance of voting their representatives, and to engage their participation in the activities, actions and improvements in their environments. Furthermore, the students, themselves will have the chance to find their position within the group and see if they have the ability to lead; contrary to other social networks based on popularity, *Looking for Leaders* tries to engage students themselves to find the leadership through their own actions, which is the positive reinforcement of the platform. There is a learning

process while the students use the platform. Therefore they learn which actions work and which does not, basing this learning on their own personal attitudes and skills for leading a group of people.
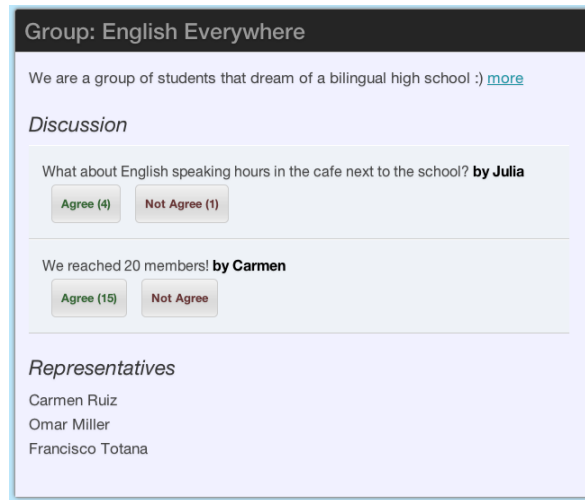

Figure 2: English Everywhere Group

6. Platform implementation

Regarding the communication system implementation, it is the same as any basic social network has, while the new added features are the strong point in achieving the objectives of participation and the pursuit of leadership.

Initially, the platform is based on two main entities or classes: Social User and Event. The Social User represents the default capabilities a user can perform in a social network, such as log in, comments, etc. The Event is to be seen as anything subject to vote. Both classes will be specialized to add specific behavior. Therefore, students, teachers or any other social actor interacting with the system will have its own specialization of Social User that represents the actor capabilities. For example, the Teacher class will add supervision capabilities when extending Social User. In an analogous way, events such as activities or proposals that are created with voting perspectives subclass Event, which includes the general voting data.

A business entity will enable different states of voting and supervision processes depending on the kind of social user and event.

Our *Looking for Leaders* platform features client-server architecture to enable the social capabilities. The main business logic module functions as a web server that includes the implementation for the features that have been explained before.

As we seen in the figure 3 several user interface client specializations are considered. Web and Mobile interface have lately acquired great success and are the easiest to use for students and school staff. However, desktop or even console clients should be also taken into account for other kind of tasks, be it administration, monitoring, or support, among others.
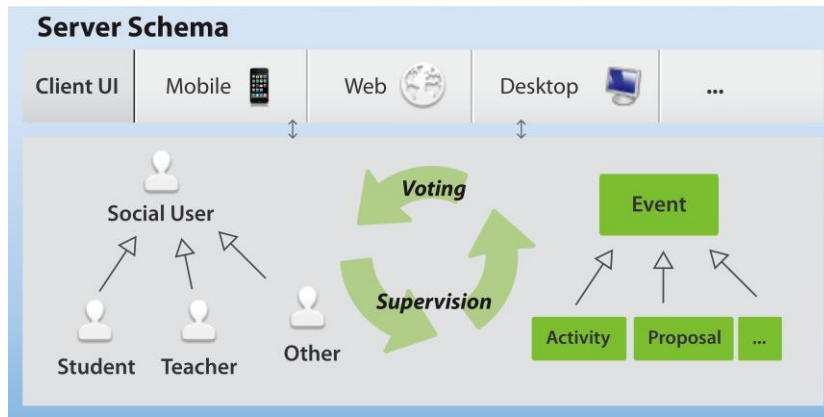
Figure 3. Server Schema

6.1. Rules for using the platform

With a great power comes great responsibility. So for the proper function of the system and to prevent irresponsible or improper use by students a set of rules is defined. There are three possible sanctions, by the team of teachers responsible for the students who make use of the platform in an inappropriate manner:

- When a student loses the representative position, he or she shall not be able to re-present candidacy in the system for a certain period of time.
- Temporary voting ban. The student shall not be able to participate in any of the voting proposals. Advisable to take this measure with students who are using their vote unethically.
- Observer. In this case, the student adopts the observer role, and he shall not use any of the system features. This would be the most restrictive measure.

Such sanctions are documented in the system, to prevent the possible misuse of it. In addition, each school has the opportunity to add its own rules, with respect to the system, in order to adjust it as much as possible to its projects, and promote the values they want in its students.

7. Case Study

We have performed trials in a secondary school in the region of Castile-La Mancha in Spain. The server was located in one the computers of our research group at UCLM.

During two months, three volunteer teachers introduced the application in their teaching methodology. First, they proposed a new activity for the students, a debate. Students then logged into the social network and voted this proposal. This first step encouraged the students to start creating their own events. We can consider the more proactive students as the so-called first leaders. They actively engaged in the network and participated in a constructive way.

Naturally, there were students that were not so good intentioned, or curious, and tried to exploit or use the network unethically. These students were banned from voting during a couple of days and afterwards they would show a more correct behavior, others after being banned shown a passive attitude. It is also important to remark that not all of them learned from this 'punishment' and would continue their bad attitude.

We found that the voting proposals sometimes can end up in really good initiatives. For example, in the secondary school were the trials were carried out, one student proposed to hold a traditional cooking contest. Not only did he managed to got massively voted, he was also elected as the contest organizer, with the help of a teacher, and finally the contest counted with the participation of students, relatives and teachers.

8. Conclusions and future work

After developing this platform we can observe that the integration of such tools as the core of subjects, such as "citizenship", currently taught in secondary education in many countries of the world, would be a great advancement and modernization of the existing education systems. The platform allows the ability to assign the role of organizing activities, by the representatives of the groups, so they can feel the meaning of responsibility.

This platform is a very interesting tool to analyze data, from passive participation (early voting only), and active participation, of students in the secondary school, to assess the level of leaders, the level of discontent and a number of indicators that give the possibility to improve the system. Teacher behavior can also be analyzed, since the platforms gives an idea of which teachers work more towards increasing the participation of students in the system. At the same time, the platform could generate an active curriculum of each student, from the activities in which the student has participated in, the degree of involvement, voting participation rates and so on. This curriculum can serve as a demonstration of commitment for job interviews or for studies admission.

As future work, we are working on acquiring new features to the system, like "points of leadership": a positive score added to the system to students who are representative of groups, make proposals, etc. It would be a way to

motivate students in the pursuit of leadership and the ability to create mechanisms in the platform to share them between several secondary schools.

Acknowledgements

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