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A Conceptual Model of Social Networking in Higher Education

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Introduction

Social networking sites have been subject to much recent debate within the educational community. While rapidly growing number of innovative educators praise the potential of social networking to engage learners with their studies, others fear that such applications compromise and disrupt young people's engagement with "traditional" education concept [1]. But most agree that social networking is a galaxy of new worlds for learning professionals. Thus, some authors define social networking sites as "an online site where a user can create a profile and build a personal network that connects him or her to other users for a variety of professional or personal reasons." [2].

There is a multitude of systems available to manage online learning. Even though these have proved becoming popular, they are often "single-user learning environments which provide little in the way of interaction or stimulation for the student." [3]. Cyber teaching researchers Barbour and Plough (2009) found, that typical online learning raises a feeling of social isolation, especially for young persons [4]. The research has proved that it is important to enrich learning platforms with communicational tools and promote communication between learners. Social isolation was the main reason for social networking, as a powerful formal educational tool, coming to the scene.

The explosion of connective WEB 2.0 online technologies such as blogs, wikis, and the social networking sites so many students love to use (and, in some cases, abuse) have given many educators pause as we try to understand and navigate a fast-changing, much more public, collaborative landscape on the Web [5]. It is important to understand these trends as they relate to incoming university students, and the exposure they have had with social networking as a communication mechanism. Younger students are learning through technology itself that they have a role to play in the development of knowledge even in the higher education [2].

This paper is suggesting a broad view of possibilities for using social networks in higher education. A wide range of open source already-built social network sites has to offer many communication tools and design options.

The research of the most popular social networking sites have led to the question what are the most important criteria of its employment in higher education. In order to systemize the findings, a conceptual model has been composed.

Literature on Social Networking in Higher Education

WEB 2.0 technologies usage in Higher Education is innovative in Lithuania. This may be the reason of a lack of scholar papers or discussions on the subject. Meanwhile scholars all over the world have been discussing positive and negative aspects since 2007. Traditional academic institutions have generally resisted the influence and increasingly pervasive presence of social networking activities in the life of their students, but recently the same institutions have had to look with new eyes at all of the aspects and consequences of these new modes of technological socialization sweeping the younger generations [6].

Universities use the social networking tool and theses tendencies are developing at tremendous speed. At the moment, over 470 universities all over the world may be found in the biggest social network 'Facebook'. In a period of three months, this number has increased to over 530. And it can be assumed that many more will join them in the near future. The fact is that social networks are already ready space for public relation actions, reaching few main target groups – students and school graduates – in an attractive way. Early studies of social networking in higher education presented networking as a convenient tool for academic services [7].

There has been reported a divided opinion about the use of the social networking service 'Twitter' in higher education. Many academics see 'Twitter' influencing less intellectually demanding society. However, attractive and effective promotional and networking services have already won the image of irreplaceable communication tool in academia [8]. It explains how campus professionals, especially those in student and academic services, learn to use these technologies to think differently about communicating with students and about facilitating learning. It then discusses the aspects of social networks

that might translate into ways for creating better and more effective student and academic services and possible areas in which the features of social networking technologies could play a key role, such as class lists and class schedules to placement services, judicial affairs and electronic learning [7].

Selwyn (2009), Madge et al. (2009) provide social networks as a student support feature. It concerns sharing learning experiences and events, the exchange of logistical or factual information about teaching and assessment requirements, moral support with regards to assessment or learning. "Social networking appears to provide a ready space where the 'role conflict' that students often experience in their relationships with university work, teaching staff, academic conventions and expectations can be worked through in a relatively closed 'backstage' area." [9] Social network can be presented as part of the 'social glue' that helped first-year students settle into university life [10].

Social networks may be used most importantly for social reasons, although they were sometimes used informally for learning purposes. The communication patterns enabled by social networking technologies mirror the exact process many educators seek to support in self-directed learning based on Social Cognitive, Constructivism and Cooperate Learning theories [12]. Social learning theorists hold that social interaction is at the center of effective learning [13]. According to Bersin, "It (social network) offers an opportunity to "improve organizational learning and deliver high impact learning solutions in today's challenging budget environments." [3, p. 14]. While Richardson claims, "All the while making complex decisions about whom to connect to, how much information to share, and how best to achieve both collective and individual goals. <…> In short, they must be self-directed, self-motivated, lifelong learners who are network-literate in their creation and participation in these spaces." [5].

One more distinguishing feature of social networks is that they provide an opportunity for supporting the social construction of knowledge within and between individuals. [11]. Dawley (2009) stressed out social network as an environment that supports the literal physical representations of their knowledge construction. Like the creation of a paper or portfolio of artefacts that a student might complete during a traditional course of study. "In the virtual world students have opportunities to represent their knowledge using a variety of formats. That knowledge construction and representation can then be utilized by others at future dates to extend learning." [11].

So, concluding the findings above, four main functions (or possibilities) of social network usage in higher education may be distinguished:
1. Academic service support;
2. Student support;
3. Social and cooperate learning;
4. Achievement representation.

Yet, all these different social network features were found in case studies, mentioning different tools: Twitter, Facebook, MySpace etc. But can we have them all in one? If yes, what tools are necessary to make social network compatible for higher education?

Choosing the Right Social Networking Site

A possibility to create a professional social network to use in higher education begins with technical decisions – what platform, tools, interface would suit the needs and what opportunities are available. A variety of open source social networking sites makes decisions easier.

Sharing his large practice on social networks creation for enterprises learning purposes, Bersin (2008) provides these guidelines:
• Train people to use the tool;
• Give users room to discuss new ideas and don't over moderate conversations;
• Place thoughtful limits on content authoring, sourcing and rating;
• Do not allow anonymity; The social network system must integrate with other systems;
• Encourage freshness and frequency with regular content updates by community leaders;
• Promote adoption and ongoing use by celebrating the findings, activity and results of your network;
• Document what constitutes misuse and make it visible, so the network becomes self-governing;
• Remember that these tools are user-driven by nature, so the measure of success is participation;
• Choose a platform that is easy to use, proven and intuitive [2].

There are few major networking sites mentioned as a convenient tool for higher education. The most frequently mentioned is 'Facebook' – a social networking site, launched in February 2004. It may well be described as an Internet social networking sensation. Initially restricted to college campuses, it has now grown to more than 62 million users worldwide, comprising one percent of the world's population. "Facebook is a versatile social networking website, allowing users to post messages on their friends' walls, share photos and video files, send email and instant messages." [14]. The second is 'MySpace' social networking website, established in 2003 in the USA. 'MySpace' became the most popular social networking site in the United States in June 2006, yet it was overtaken internationally by its main competitor 'Facebook'. Both 'MySpace' and 'Facebook' are innovative digital communication tools that surpass traditional means of social interaction. [15]. Other big player in the scene is 'Windows Live' service pack. Windows live is the collective brand name for a set of services and software products from Microsoft, accessible from a browser. There are many more social networking sites, providing similar services available in various languages and interfaces. Yet, when trying to plan proper social network performance, it is necessary to pay attention to some software quality issues.

In academic literature there are many models and frameworks to evaluate educational software quality. For example, Plaza et al. (2009) suggest a framework consisting of six quality dimensions: (1) functionality, (2) reliability, (3) usability, (4) efficiency, (5) maintainability, and (6) portability [16]. When thinking about open source social networking popular sites, reliability, usability, maintainability and portability do not apply. Usually these

sites provide high quality reliable services that are user-friendly and compliable with many operational systems and internet browsers. Using social networks, users or administrators do not need to worry about software maintainability or portability, as it can be used anytime, anywhere on any computer with internet connection via any browser. So the main educational software quality dimension that needs a wider discussion is social network site functionality. Plaza et al. (2008) distinguished five subcharacteristics defining functionality: (1) Suitability; (2) Accuracy; (3) Interoperability; (4) Security; and (5) Functional Compliance.

Authors define suitability as "The capacity of the software product to provide an appropriate set of functions for specified tasks and user objectives" [16]. When thinking about a perfect 'all in one' academic social network, at least four main objectives must be fulfilled: (1) To provide academic service support and academic information dissemination; (2) To enable student support and communication; (3) To exalt social and cooperate learning; (4) To provide achievement representation ability. It is important, that all these functions would comply in one secure and interoperable social networking site. Meanwhile accuracy depends on administrators and users, as social network content is user generated by nature.

Concluding all the findings above, a conceptual model of a perfect social networking site for higher education was generated referring to functions, tools and main software functional compliance criteria.

Model of Social Networking in Higher Education

Kennelly (2009) reports, that decision using online social networking should be based on two criteria. First, many traditional students should be likely comfortable with an interface and its associated learning style. Second, social networking sites have functionality, such as the ability for users to link and group themselves, which is not available in other common web-facilitated learning environments such as course management systems [17]. According to Reynard (2008), social networking essentially requires a less controlled, user-generated environment, which challenges conventional views of the effective 'management' of teaching and learning [13].

So, when trying to perform a successful academic service support, it is necessary to make sure, that social networking site would provide tools for grouping or networking, enabling users to connect themselves in learning networks and communicate. Communication tools are the most important tools for academic information dissemination. It is significant sharing event information or providing student academic support, encouraging student and teacher collaboration. Such specific social networking tools as walls, events, discussions help to communicate a message promptly and effectively. These tools may be used by academic administration or by students themselves to encourage informal communication and lead to 'social glue'.

Meanwhile Monahan et al. (2008) refer to a social network, as "collaborative learning environment in virtual reality that uses multimedia and provides communication

tools to support collaboration among students" [18, p. 1341]. So, social network learning environment has to be enriched with asynchronous and synchronous communication tools and multimedia environments, to provide best performance in personal learning style and encourage cooperate learning. To ease interactive information sharing such tools as online data processing tools, blogs, wikis are preferable. These tools provide a possibility to form knowledge together. It is extremely effective in group working and problem based learning [19].

A different knowledge construct can be expressed by personal profile or communication tools such as wikis or blogs. These features enable users to present their knowledge construct and express themselves in the virtual world. Profile information also can be referred to as a way to present user's achievements [20].

A need to put all the academic achievements in one place leads to a necessity of student's e-portfolio creation. Usually social networking sites do not have e-portfolio as a special tool. In some cases students just use two different tools for blogs and data storing places to create an interpreted e-portfolio [20]. Thus it is important, that students would have enough tools to create a professional e-portfolio and present it on the personal profile.

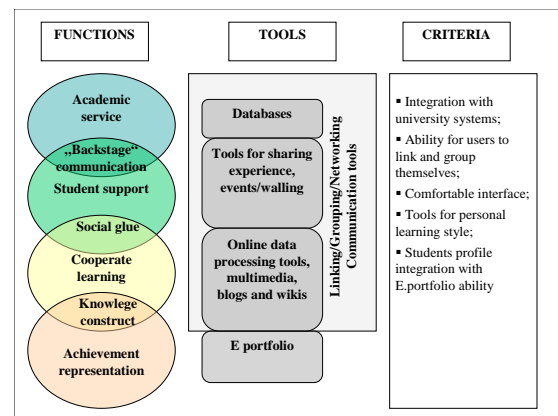Concluding the analysis above, a conceptual model was constructed (see Fig. 1).

Fig. 1. Conceptual model

In the column 'Functions' there are presented four main preferable functions of social networking in higher education, that were distinguished in the literature analysis. These functions merge, creating subfunctions that add extra value to main functions. A need to enable these functions and subfunctions initiate an overlook of specific social networking site tools, is shown in the column 'Tools'. Yet, linking and communication tools are required to most of the functions and are significant in social networking by nature. As may be seen in the column 'Criteria', every tool has compliance criteria that need to be kept in mind when choosing a social networking site.

Conclusions

There are only few scholar papers on a social networking application in higher education subject, mostly based on case studies. Yet, concluding the findings of

literature analysis, four main functions (or possibilities) of social network usage in higher education may be distinguished: academic service support; student support; social and cooperate learning; and achievement representation.

Based on these functions, a conceptual model of social networking in higher education was constructed, based on assumption, that learning software functionality is the most important criterion when choosing a social network for higher education.

Every function requires a specific set of social network site tools, such as events, walling, online data processing tools, multimedia, blogs, wikis and profiles. Yet, the highest importance is its functional compliance with communication and networking tools, to ensure best communication, dissemination and learning performance and support.

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The popularity of social networking sites has led educators to the idea of engaging learners with their studies. After reviewing the potential areas of social network sites employment in higher education, essential social network software tools were composed in a conceptual model. This model covers most popular areas of social networking possibilities in higher education and is generic enough to make it suitable for any higher education organization. Ill. 1, bibl. 20 (in English; abstracts in English, Russian and Lithuanian).

П. Юцявичене, Г. Валинявичене. Концептуальная модель высшего образования на основе социальных сетей // Электроника и электротехника. – Каунас: Технология, 2010. – № 6(102). – С. 55–58.

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Internetinių socialinių tinklų tinklalapių populiarumas paskatino edukologus diskutuoti apie šių tinklapių panaudojimą aukštajame moksle, siekiant sudominti studentus. Apžvelgus mokslinėje literatūroje pateiktus socialinių tinklų panaudojimo aukštajame moksle atvejus, buvo sukurtas koncepcinis modelis, apibrėžiantis pagrindines socialinių tinklų panaudojimo aukštajame moksle sritis, reikalingus įrankius ir kriterijus. Il. 1, bibl. 20 (anglų kalba; santraukos anglų, rusų ir lietuvių k.).