

# Social Networking as Support Tool for Online Teaching and Learning Factors and Contributions

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**Abstract**— Creating a good and stylish online learning for education is always bringing a good response to student especially for long-distance learning. The outcome is clear; which is to expand the capability of online education for all people around the globe by giving them a chance to study wherever they live and work as long they have good Internet access. Immersive learning as we all know consisting of the virtual reality aspect that bring educator and learner closer without having them to leave their place in order to gain knowledge and further their study. This paper studied the requirement to perform immersive learning while characterizing each challenge that we must face to perform a good online learning. We also numbered few technologies that could benefits the online learning either through website or online video conferencing.

**Keywords**- social networking site; online education; internet; facebook; virtual reality;

## I. INTRODUCTION

The demand of higher education is tremendously increased for almost every year as the requirement to continue working while studying is needed for our people. Back in few decades, diploma and bachelor degree is enough for various people to continue to work in industry or any company. But as the time goes by, the requirement for the higher degree such as Masters level and PhD level is critically required for major large organization industries and companies to keep on surviving in their product competitions. The researchers are required for their Research and Development (R & D) department for them to crystallize their product to the finest quality in the market. Hence, their workers is pushed to enhance their skills and welcome more graduates from higher degree levels.

Online learning take place as one of the tool that can be used by the educators to motivate the learners from all over the place regardless their locations. Instead of classroom session that run only once a week, educators can easily maintain their students progress by using online learning as the medium to improve the long-distance students to keep track in their studies. Few papers has mentioned that online learning is the great tool for educators but it requires the educators to maintain and monitoring their online site in order to make sure the students are not lost while performing self-studying in the online site.

The definition of online learning in the perspective of computer science area has to do with the network and preparing the materials to learn in the network. For example, the educators might set up a local server that is connected to the Internet and can be accessed through the website that also has been set up by the educators. The popular learning site until now is by using E-learning system that could benefit the students by downloading notes, performing online quizzes and examination and others.

In this paper, we addresses the related work of online learning in Section 2. Section 3 will describes the social networking site introduction, the technology of online education, and challenges in the technology itself. We also pointed out few elements that could benefits the student when using social networking site as the online learning site in Section 4. In the Section 5, we conclude and give the future direction of this research

## II. RELATED WORK

Online learning could be divided into several categories which is pat of the broader category of distance education. These categories are educational television, online video conferencing, web-based education such as

E-learning system and personal web education. With the improvement of network capabilities, the usage of online learning system is currently expanding and become one of the powerful tools for educators to use as main component for the course subject.

According the INACOL report for the online learning, the Sloan Consortium reported around 700,000 enrollments for online learning, and estimate increasing to more than 1 million enrollments. From this statistics, online learning can be seen as a great tool for educators to use and expand it without even let the student to come across the state to the classroom and having a normal class.

E-learning system meanwhile provides an efficient ways to communicate with the student in term of learning materials. Student just requires downloading the notes and any other materials and performing self-study in the comfort of their house and without even bothering to email the educator. The problem with the E-learning system compared to the personal online site is that most of E-learning system required certificated user (in this case the student from the education organization itself) to log in and download the materials. In certain cases, it can provide guest to view the content and not be able to download it.

Video conferencing meanwhile requires a lot of bandwidth from the network in order to properly functional. Even though the educators might be able to use the university backbone connection, which is very fast and efficient, the student might have slow connection to receive it. It can be a great tool if both parties, which is educators and the students has the right technology for example fiber optic connection and can perform a class without having so called "lagging connection" or worst lost the internet connection. Thus, the online video conferencing is still requiring attention from the network issues by improving it performances. Other than that, the offline video solution can be used to teach the student and embedded it into the website or E-learning site.

The best work around solution is to provide an efficient combination of E-learning system, social networking site with a web-based system that could enhance the relationship between educators and the students. The useful combination of online video that can be put into the online video site such as Youtube or Vimeo and let the students to download it can become beneficial tools for the student.

### III. PREPARE YOUR PAPER BEFORE STYLING

Before you begin to format your paper, first write and save the content as a separate text file. Keep your text and graphic files separate until after the text has been formatted and styled. Do not use hard tabs, and limit use of hard returns to only one return at the end of a paragraph. Do not add any kind of pagination anywhere in the paper. Do not number text heads-the template will do that for you. The definition of Social Network Sites is varies from various field of research [1-9]. Based on the common definition of SNSs, it is a web-based service that has the following properties:-

- A profile page where it can either put into public, semi-public or private according to the user setting
- Add and remove other users – friends list
- Sharing interest – group

Although there are several other items that can be included in the definition of SNSs, but the general ingredient for SNSs is only consisted of three elements above that make the site can be declared as social network sites.

The term of SNSs also can be interchangeable between "Social Network Site" and "Social Networking Site". But, the slightly different among other researcher is how depth the different between the meaning of these two acronyms. However, Social Network Site is almost preferable as the term "Network" is referring to the general meaning of connecting people and things. While the term "Networking" is often referring to the specific problems between computer and human. The scope Social Network Site is far move convenience to use instead of Social Networking Site. But it is no harm for any researchers to use any acronym according to their likes and how they define.

The uniqueness of SNSs is this site allows the users to meet other users that they know in real life. It enables them to articulate and make visible their social networks while getting their friends to find them in the online sites. The truth is not getting unknown person to accept their friends' invitation but rather a place that exists on the web for these groups to discuss something and share something. Although some might want to find new friends, but the original intentions is to connect long distance friends or old friends instead of making new one. Thus, this study has become effectively interesting as the growth of the SNSs is not based on the unknown person, but it is strengthen by the numbered users that already met in real life. Thus, this is where the definition of Social Network Sites (SNSs) is coming from.

The registration process of SNS is quite simple (figure 1). Using an example of facebook.com, the user only needs to put their simple information at first at the main page of facebook.com. By answering these questions, the registration is then completed but only required email activation in order to make sure that the person really exists and not to use SNS to spam other users. Then, when the registration has been validated, the user is able to

add more details about themselves by putting some photos, and proceed to add more friends. Adding friends for the first time is not hard for the SNSs. All the SNS requires is only the access to user address book and sending an email to every single selected address that user choose. Final process is to accept friends that already invited the user from the first place.

The security of SNS is always become trouble for certain users as they do not want some people to notice their behavior or private photos for certain people. Thus, the security of SNS is important and that is why one of the components for SNS is to improve security over time and maintain users to their sites. This is what facebook.com has been trying to improve their security so that the user has their full control of their account. The user has their control regarding who is can and cannot to view their profile in the public. Comments and photos can also become private for certain users according to their security setting and the user is able to view their own profile from the other person perspective.

The truth about SNSs is the profile page that almost every SNS has their own unique way to present it to their customer i.e., a user. Profile page is where it becomes public and can be viewed by all users that search for the friends list. Usually, profile page is not necessary to have more than one page long. In profile page, most of the user friends can actually know what the basic stuff about their friends. This is also including at least one profile photo that already uploaded at the first time the user registered with the system if the user provided the photo. In facebook.com, the user is allowed to add modules (“applications”) that could enhance their profile.

The image shows a screenshot of the Facebook sign-up page. At the top, it says "Sign Up" and "It's free, and always will be." Below this are several input fields: "First Name:", "Last Name:", "Your Email:", "Re-enter Email:", and "New Password:". There is also a "Select Sex:" dropdown menu and a "Birthday:" section with "Month:", "Day:", and "Year:" dropdowns. At the bottom of the form is a green "Sign Up" button. A small link "Why do I need to provide this?" is visible below the birthday fields.

Figure 1 Facebook.com

It is also crucial the SNSs to provide enhance security system to the user so that only the recognizable friends of the user can only traverse through the user friends' list. This is to make sure that unknown people to spamming other users profile page just to get information such as emails and contact numbers. In most SNSs, the securitsetting can enable only certain group of users friends can view parts of the user friends list even though all is the friends of the user.

Another important criterion for SNS is a mechanism to leave instant message on the friend profile page is developed. This mechanism has also been enhanced from time to time where the user is able to leave instant message on the profile page instead of sending email through ordinary email system. The response is almost real-time where within a few seconds, if the other users online, the feedback can be sent directly just like the instant messaging service such as Yahoo!™ Messenger and Windows Live™ Messenger. There is also private message system that enables the user to leave private message instead of public message in the profile page.

Instead of all criteria mentioned above, most of SNSs has very own features that actually have opportunity to attract users to use their SNS site. Some SNSs support limited mobile interactions (e.g., Facebook.com, MySpace, and Cyworld). Some of them is only limited to the research, teaching and learning SNSs (e.g., italki.com, TeachStreet.com, and Academia.edu). Until now, nearly more than hundreds of SNSs has been established according to the user needs and requirements.

While the designation of SNSs is to bring all people together, one of the drawbacks of SNSs is that it soon becomes a homogeneous population's site where only group of people with only same interests will be gathered into one place. They're most likely to stay into their group and having activities with their own group. Some might have multiple groups but the effects of this homogeneous group are soon to become very large. The only possible solution is to make sure that all people is keep on doing different interest and meet different type of people.

#### IV. COMBINATIONAL TECHNOLOGY

SNS can be used together with the E-Learning system by providing an application that could link to the E-Learning site. The student and educators must have the SNS account for example facebook.com account. Then, by using an application that already targeted for facebook.com, the educators and students can link to the E-learning system and finds any notes and learning materials. Instead of that, video also can be embedded using Facebook.com given that the educators can provide a video of his or her teaching for the student to watch at any

time. This requires the educators to fully use the technology on the web in order to teach the student in the 21<sup>st</sup> century. The primitive method of teaching session is no longer the only approach to make sure the student learn and grab what they have learned. Figure 2 shows the methodology that can be developed for the online learning system.

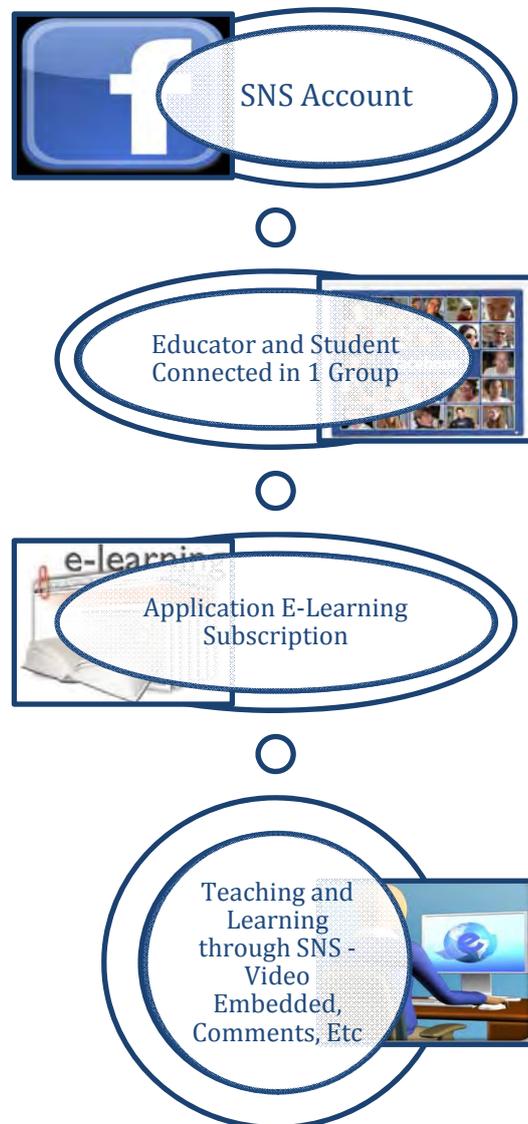


Figure 2 The Framework

## V. CONCLUSION AND FUTURE WORK

The combination of various technology in the network could benefit both parties in online learning. Compared to the stand alone version of the online learning site. The combination will works together as a large system and improve the connection between educators and the learners (students). Few future works has still need to be done such as the development of the SNS application targeted to the E-Learning system. The application should able to take care of login problem where the student only need to use their SNS account to login and then download their notes and learning materials without ever use their institution matric ID.

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