

THE USE OF SOCIAL NETWORKING SITES IN EDUCATION: A CASE STUDY OF FACEBOOK AND GOOGLE+

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Abstract:-

The purpose of this research is to find out how Facebook, Google⁺ and Web 2.0 tools create a positive effect when used in education and to investigate teachers' opinions about the Online learning environment. This experimental study was carried out in primary and secondary schools with teachers who use Facebook and Google⁺. The study took six weeks. The teachers attended lessons and accessed materials online and offline, in face-to-face learning environment. Moreover, they were able to co-operate and share information with their colleagues via Facebook and Google+. The study sample consisted of 35 teachers from primary and secondary school who constituted a blended learning group and 36 teachers from primary and high school who formed an online learning group that enrolled in the material development for Facebook and Google⁺ course. These teachers were chosen randomly. The participation was anonymous and the study was carried out amongst volunteered teachers. Data was collected using a 5-point Likert scale questionnaire created by the authors and entitled "Teachers' Opinions about Facebook and Google+ in Education". The survey consisted of 39 positive statements about Facebook and 25 positive statements about Google⁺. It was completed by teachers at the beginning (pre-experience test) and the end of the study (post-experience test). Results show that, if used for educational purposes, Facebook could bring about a positive change in teachers' opinions. Results also indicate that Facebook virtual environment helps teachers to do many activities with online classes, which is not possible to do in schools. Teachers are convinced that this environment helps students not only to improve their team work, but also to improve their learning skills. Based on the findings, recommendations are made about using Web 2.0 in education.

Key Words:- Facebook, Web 2.0 tools, virtual learning environment, social networking

INTRODUCTION

Educational Web 2.0 tools and mobile learning still remain popular today, which is the best sign showing how education has developed with the use of technology. Science and technology are constantly advancing. Online education and technology integrated education are now indispensable. Communication in education is much easier now due to the use of technology. With the use of Internet technology, activities that cannot be done in classrooms could easily be done on social networking websites with the help of smart phones. For example, photos, videos and many more materials can be shared without any limitation in time or place. With the growing

use of social networking websites, the need for communication and information sharing between people is increasing. Thus, social networks are providing an informal education. Development in science and communication technologies has increased even more in the 21st century. This caused the demand for digital products and tools to increase as well. This in turn has had an effect on the educational system. With Web 2.0, different applications have been developed to improve students' awareness, attitudes and skills. Amongst these applications are blogs, social networking websites, and video sharing websites which started to emerge. The first known social

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networking website is Six Degrees. This site was first issued in 1997. Thus, a new means of online communication appeared. This site was the first to allow its users to create profile pages and send messages. In 2004, after the rise of Web 2.0, Internet users met Myspace, Facebook and Bebo. If social networking websites were to be categorized, LinkedIn would be the site for carrier management, LiveJournal for diary keeping, Flickr for photo sharing, and Facebook, Google+, Twitter or MySpace for communication with family and friends. While social networking websites allow users to create open profiles, they also allow them to contact other users on the web. When Facebook was created in 2004, it was first used in Harvard only, and then started to attract people all over the world. Facebook reached more than 12 million users in 2006. This number has risen to **1 billion in 2016**.

According to Maloney [2007], social networking websites support the unity of people by emphasizing their shared interests. Jones et al. [2010] stated that social networking websites are tools that can be used by teachers and students to facilitate education. Bran, Grosbeck and Tiru [2011] conducted a research which showed that students spend most of their time on Facebook communicating with their family and friends, sharing photos and videos, and commenting on posts, but not sharing anything educational. Once a user joins Facebook, profile information of others can be seen depending on the settings they have chosen. Friendships can be made by sending friendship request or a message to the person one wants to add. If that person accepts the friend request, both can be seen on each other's friend lists. Users can also subscribe to the pages they are interested in. These pages are usually dedicated to celebrations, organizations, football teams, celebrities, etc. People who join these groups can easily find

other people with shared interests and contact them to organize events. There are several ways of communicating via Facebook. For example, users can send each other private messages. Sending private messages is just like sending e-mails. These messages can only be seen by the user they are sent to. Other studies show positive results related to the psychological status relations of the students with communication and social skills. Valenzuela, Park and Kee's [2009] research shows that using Facebook raises life satisfaction and social confidence. Ellison, Steinfield & Lampe's [2007] study confirms that users make friendships with people they don't know only to communicate with more people and expand their entourage. As Tufekci's [2008] findings show, students usually use social networking websites to share things, send emails and read blogs. Nowadays, Facebook and the use of Web 2.0 tools need to be explored for educational purposes.

1.1. Related Research

With the invention of Web 2.0, several social networking websites have been set up. One of the most popular social networking websites is Facebook. Facebook is a website that aims at allowing people to communicate with their friends and share information with each other. On the 4th of February 2004, Facebook was created by Harvard university student Mark Zuckerberg and was first opened to the use of Harvard University students. It started to gain active participation all over the world since 2006. On Facebook social networking website, photos can be shared as well as personal user information. By joining groups on Facebook, users can increase their popularity. Even though there are many social networking websites such as Twitter, Google+, MySpace and Friendster, Facebook is more often used for educational reasons by students in higher education. For example, in the United States of America, 90% of Facebook users are

degree students. With that, Facebook is gaining popularity among the English speaking students every day. It is enough to have an email address to join Facebook. According to Lampe, Ellison and Steinfield [2007], Facebook forms fall into four categories: control forms, sharing forms, preference forms, and communication forms. Control forms allow the users to choose their sex and institutional locations. Sharing forms allow users to indicate their location and educational information and enable them to communicate with others. Preference forms enable users to define personal interests and identifications on profile pages. Preference form consists of the following elements: about me, interests, favorite music, favorite films, favorite TV shows, favorite books, and political views. Communication form consists of offline post address, email address, instant messaging name, relationship status, and birth date. Every user has the right to upload photos and change them whenever they want. Users can also use the Wall tool. Wall tool is shown on the profile page. It is similar to notifications. Using this tool, users can share short messages, photos and videos; their friends can also use this tool to share posts. Wall tool can also be used as a birthday calendar. Friends can maintain close relationships with the help of this tool. Users can also use the “poke” function to communicate with the person they want. Events tool helps to notify people about the event they are to join. Chat function allows users to communicate with each other using instant messages. Instant messaging helps to maintain relationships between people. Apart from these, Timeline tool allows people to see friends' shared information and interests. Studies done on Facebook usually investigate the negative effects it can bring. For example, the inappropriate photos that students share. Other studies connect the time students spend on Facebook with the dropping performances in their lessons. However, students and teachers

haven't been investigated in these studies. Facebook creates a powerful education environment for teachers and students due to the powerful network structure it presents and its added online educational tool. However, in order to use these tools in the best possible way, rearrangement of the environment must be done. Nowadays, people at any age are joining Facebook social networking website and sharing information with others.

2. Purpose of the Study

The purpose of this research is to find out the effects Facebook has on education if used for educational purposes and to investigate teachers' opinions about the formed learning environment.

In order to achieve these aims, the authors have sought to answer the following

Questions:

- What are the teachers' opinions regarding the use of Facebook and Google+ in education?
- Did the teachers change their opinion about the usefulness of Facebook in education in end of the study?

3. Methods

3.1. Setting

This experimental study was carried out with primary and secondary education teachers using Facebook Google+. The study took six weeks. The teachers attended lessons and accessed materials online and offline, face-to-face. Thanks to Facebook and Google+, they were able to co-operate and share information with their friends.

3.2. Participants

The study sample consisted of 35 teachers from primary school and high school with blended group and 36 teachers from primary school and high school with online group, who were enrolled in the Material Development for Facebook course. These teachers were chosen randomly from primary and secondary education establishments. The

average age of the participants was 35, with blended group consisting of 82.9% (29 people) females and 17.1% (6 people) males. Online teacher group of was formed of 75.0% (27 people) females and 25.0% (9 people) males. The questionnaire was anonymous and was carried out among volunteered teachers.

3.3. Instruments

Data was collected from a questionnaire created by the authors entitled “Teachers' Opinions about the use of Facebook and Google+ in Education”: It consisted of 39 positive statements about Facebook that had to be assessed using five-point Likert scale where 5 points were assigned to “strongly agree”, 4 to “agree”, 3 to “neutral”, 2 to “disagree”, 1 to “strongly disagree”. The questionnaire was completed by teachers at Uttar Pradesh DIET and central school India. The Use of Social Networking Sites beginning (pre-experience test) and the end of the study (post-experience test). The validity of the questionnaire was reviewed by a panel of 25 educational technology experts and selected items were revised based on the experts' comments and recommendations.

3.4 Data Analysis

Each teacher completed a pre- and post-experience test in order to express their opinions about the usefulness of Facebook in education. Descriptive analysis was conducted, and a paired sample *t*-test was used in order to compare pre-experience and post-experience test means

4. Application

4.1. Preparation of the Facebook Virtual Classroom Environment

While Facebook virtual class environment was being designed, groups and Facebook pages were created. Thanks to their Facebook pages, students who joined virtual learning environment showed improvement in academic performance. Facebook powerful

Profile tools gave a chance for the teachers to make friends with each other. The teachers also shared a lot of information with their colleagues on profile pages. Thus, contribution to education has increased due to these sharings. Facebook Photo tools made lessons more interesting by giving the opportunity to create photo albums, share photos and make comments. Several learning materials have been added to the environment with the help of Facebook Wall tools. Thanks to this tool, news, videos, photos, notes, and questions suitable to lesson subjects were shared. With the help of Events tools, attendance of inside and outside classroom events could be planned and compared by the teachers. Using Chat tools, member teachers were able to chat with each other online. This way, they could get support concerning their lessons instantly. In addition to these, environment was enriched with Web 2.0 tools. PowerPoint materials and documents were added to the environment through the adding and sharing function of the groups. Teachers also were able to share their own homework in the groups. This way the teachers could contribute to others by sharing the documents they created or the ones they found helpful. Online lessons were added and actualized by wiziq.com site's virtual classroom tools. Teachers made their presentations online thanks to this tool. Video materials were added to the environment by the use of youtube.com website's sharing features. Evaluation of student performance was made and forwarded to the students by wiziq.com website's question asking tools. At the end of lessons, surveys were done by using Facebook's Questions tools and forwarded to the students. Getting back notifications improved lessons. In addition, , students contributed by making comments about each other's materials using Facebook's Like button and Comment tool.

Statements	Blended Group Pre-experience test		Blended Group Post-experience test		Online Group Pre-experience test		Online Group Post-experience test	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
1. Facebook is an important tool in education	3.08	.95	4.42	.50	3.02	.90	4.26	.50
2. Facebook is a supportive tool to be used in lessons because of its addable materials.	3.48	1.01	4.62	.46	3.25	1.01	4.47	.51
3. Having lessons on Facebook develops team work skills.	3.22	.91	4.57	.65	3.11	.94	4.55	.61
4. Having lessons on Facebook helps one's personal development.	3.28	.95	4.45	.50	3.36	.89	4.33	.45
5. Facebook increases students' success if used in lessons.	3.17	.92	4.31	.67	3.05	.92	4.63	.55
6. Using Facebook helps to support my own branch.	3.17	.95	4.42	.55	3.19	.96	4.56	.57
7. Chat function enables sharing information with our colleagues	3.25	.97	4.57	.50	3.25	.93	4.23	.51
8. Students can see others' views about their homework and projects, and this increases their interest in lessons	3.37	1.06	4.42	.55	3.48	.110	4.58	.49
9. Facebook makes learning more enjoyable.	3.51	.97	4.57	.50	3.44	1.12	4.63	.48
10. My colleagues' profile pages help me to get to know them better.	3.40	.94	4.54	.50	3.25	1.08	4.47	.45
11. Students' profile pages help me to get to know them better.	3.22	.95	4.48	.55	3.47	.94	4.23	.76
12. Being in contact with students on Facebook increases their motivation.	3.25	1.06	4.60	.65	3.61	.93	4.01	.62
13. Tagging my colleagues in helpful posts helps them to learn more.	3.40	.94	4.51	.49	3.22	.95	4.11	.52
14. Sharing extra resources related to students' homework increases their motivation.	3.40	1.02	4.51	.50	3.11	.92	4.22	.55
15. Using Post tools to share news that I have read in the newspapers helps me to inform students about what is going on around the world	3.31	.95	4.63	.48	3.12	.91	4.55	.50
16. Using the notes tool on Facebook to share information helps people to learn more.	3.28	.92	4.48	.50	3.27	.95	4.47	.55
17. Using Facebook's Notes tools to share scientific studies contributes to students' development	3.25	.91	4.42	.60	3.30	.94	4.41	.55
18. Using Facebook makes it convenient to access subject materials.	3.34	.93	4.57	.50	3.25	.95	4.50	.56
19. Adding subject materials to Facebook increases students' interests in lessons	3.31	.96	4.40	.50	3.27	.93	4.58	.50
20. I take my colleague's views into consideration when I share educational posts.	3.17	.98	4.42	.55	3.08	.94	4.61	.49

Table (A): Pre-experience and post-experience test results regarding opinions about the usefulness of Facebook in education

4.2. Implementation

After the aims and targets of the study were established, a pre-test was applied to the teachers before starting lessons on Facebook Virtual Classroom to find out their opinions about the learning environment. Teachers got access to Facebook's different tools such as photos, videos, questions, file sharing, events, status, and share tools in their six weeks of training. During the course, teachers who have used the application were involved in sharing requests about the lessons every week in the environment and attain them to other applicants to get their comments, so that they could improve their own work. Teachers also adapted to Facebook application tools as they had to create their own pages and groups at the end of the course. In this environment, teachers had shared photos, videos, questions, files, events and statuses related to the homework they were given. While sharing these, they used the benefits of the sharing tools and Web 2.0 tools. All sharing, comments, and likes came as notifications. Therefore, each teacher had over 1000 notifications on his/her account. This way, they had an idea about what others did and improved their own posts.

5. Result and Discussion

In table (A) presents the pre-experience and post-experience test means and standard deviations. The mean scores of the pre-experience and post-experience test were compared using a paired-samples t-test.

In [Tab. A], after the course, teachers in both groups stated that Facebook was an important tool for education, a supportive learning environment for lessons where they

could share educational materials. It develops the team-working skills; helps one's personal development; could increase the students' successes; could be helpful for both teachers and students when used as a supportive material in lessons; allows to share information between colleagues' could make students show more interest in lesson; could make learning more enjoyable; helps teachers and students to know each other better via the profile pages; could increase students' motivation by allowing them to communicate with each other; encourages colleagues to learn more; could increase students' will to learn by sharing extra resources about their homework; helps students to find out what goes on in the world through daily news; enables them to share information about scientific studies.

6. Conclusion

In conclusion and despite the limitation of the sample size, this study has, nevertheless, suggested that there is a place for SNSs in education. It has shown that many of the Brazilian students were, in fact, using SNSs informally to complement their course activities. Perhaps, SNSs may play a bigger role in the lives of students' living in regional areas where access to learning resources are not always easy or long distance becomes an issue. SNSs may suit these students' needs because they are free and easy to use. However, not all Brazilian students were members of SNSs nor used them to discuss their studies. Perhaps, what is needed is to develop awareness among such groups that SNSs may be used as a learning tool.

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