

INFLUENCE OF SOCIAL NETWORKING SITES ON COLLABORATIVE LEARNING IN COMPUTER NETWORKS

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Abstract

Social Networking has become one of the most important parts of our daily life as it enables us to communicate with a lot of people. Social Networking sites are created to assist in online networking. By using the internet and social media for academic purposes, students learn much more than they can in a classroom and their ability to access, analyze, retain and share information improve dramatically. The use and overuse or misuse of the social networking sites undergoes serious discussions at different levels. So it is necessary to analyze the opinion of educationists like, Teacher Educators on the influence of Social Networking Sites in Collaborative Learning in Computer Networks. For this 50 teacher educators were selected. The findings showed that most of the teacher educators believe that Social Networking Sites improve the quality of education; Majority of the teacher educators enquire to the students about the sites used by them. From this study, it is urgent that Awareness programs in computer network based education should be conducted in Training colleges and teacher educators should create blog, websites and encourage collaborative learning through social media. Teachers and teacher trainees should be given training for the above said purpose.

Key words: *Social Networking Sites, Collaborative Learning, Ask an Expert Mentorship, Tutor Support, Peer Interaction, Structured Group Activity, Access to Network Resources, etc.*

Introduction

Social Networking sites are created to assist in online networking. Their sites are generally communities created to support a common theme. Since the creation of social networking sites such as my space, LinkedIn and Face book, individuals are given opportunities to meet new people and friends in their own and also in the other diverse communities across the world. Social media offer new ways for academics to use the internet to communicate and share information. It provides an effective platform for developing the power of reasoning and expression. Social media includes the ability and the facility to discuss, create, co-operate on, share and modify information in text, image, audio and video forms among users of social networking websites such as Face book, Twitter, Flickr, You Tube, LinkedIn, Pinterest, My Space and a host of other similar sites. Social media is a platform for interactions, conversations, searching, creating and sharing.

Social Networking Sites

Social Networking has become one of the most important parts of our daily life as it enables us to communicate with a lot of people. In early days people cannot think about social networking because, in those days science was not so advanced, but due to advancement of technology over the period of time people has become very much accustomed to this particular method of socializing. It is also a platform where our creations thoughts are presented to a huge lot of masses. Social Networking is very informative, entertaining and it also aware as about various situations or events which are going on in the society or in the world at large. It facilitates us to also enhance our viewpoints as enables us certain interactive learning activities also and are the most important and unstrained parts of human lives in the modern times. Today, students of college can use the social media to their advantage in many different ways. They can use social networking sites to connect with people from their study or work group and interact with peers or teachers directly. By using the internet for academic purposes, students learn much more than they can in a classroom and their ability to access, analyze, retain and share information improve dramatically.

Collaborative Learning

The concept of collaborative learning strategy, the grouping and the pairing of students for the purpose of achieving on academic goal has been widely researched and advocated throughout the professional literature. The term collaborative learning strategy refers to an instruction method in which student at various performance levels work together in small groups toward a common goal. The student's are responsible for each ones learning as well as their own .Thus the success one group helps other students to be successful. Collaborative learning strategy permits the students instructions to make good use of new information technologies. It involves a variety of educational approaches involving joint intellectual effort students, or students and teachers together.

In collaborative endeavors students inevitably encounter difference and must grapple with recognizing and working with it. Students bring multiple perspectives to the class-room-diverse backgrounds, learning styles experiences and aspirations. Teachers cannot assume one size-fit all approach. When students work together on their learning in class, we get a direct and immediate sense of how they are learning and what experiences and ideas they bring to their work. The diverse perspectives that emerge in collaborative activities are clarifying. They are illuminating for our students as well. The present study of the investigator aims to identify the collaborative learning experiences in social networking sites among graduate students. Six main types of learning approaches are found in educational computer networks (Harasim et al. 1994); (a) ask-an-expert, (b) mentorship (c) tutor support, (d) peer interaction, (e) structured group activity (f) access to relevant information.

1. *Ask an Expert-Learning* net works facilitates access, local or global, to subject area experts (scientists, writers, professionals etc.).Teachers first establish a list of experts willing to undertake this role and set up a set of procedures for undertaking that activity. Students send questions to the expert on a given area and obtain responses in a few days. The main benefits of this model are quick access to up-to-date relevant information and the positive feedback of receiving an answer.
2. *Mentorship* – mentorship is a time-honored educational approach.
3. *Tutor Support*–Learners at all level can be provided with tutoring to support educational activities..
4. *Peer Interaction*–Peer interaction is based on principles of collaborative learning, and has been effective in online environments.
5. *Structured Group Activity*–This is a curriculum-based approach designed to be implemented within deadlines for submissions and responses.
6. *Access to Network Resources*-Global networks such as the Internet, provide access to online databases and archives (data files), libraries, as well as to thousands of special interest forums, on topics ranging from nuclear physics to environmental issues.

The first three approaches require online resource persons such as mentors, experts, and instructors to support student work. The latter three are student-centered.

Objective

1. To analyze the opinion of Teacher Educators in the influence of Social Networking Sites in Collaborative Learning in Computer Networks with respect to Gender, Locality and Type of Management.

Methodology of the Study

Descriptive survey method is employed to find out the opinion of teacher educators. 50 teacher educators of these colleges of teacher education also were selected for collecting the opinion of teacher educators. The tool used for this study is titled “Opinionnaire on the Use of Social Networking Sites”. The investigator mainly used the descriptive statistics such as, Mean, Percentages, Standard Deviation, Graphical Representation etc. for data analysis. The differential analysis were made with the help of ‘t’ test and ANOVA using the SPSS version 20.

Analysis and Findings

The main objective of the present study is to analyze the opinion of Teacher Educators in the influence of Social Networking Sites in Collaborative Learning in Computer Networks with respect to Gender, Locality and Type of Management. Apart from the descriptive analysis with respect to the responses of teacher educators, the difference in the means of scores of opinion among Teacher educators in the sub samples based on locality (Urban and Rural), (Male and Female) Type of Management of Training colleges (Aided, UCTE and Unaided) were also found out. The investigator used descriptive

analysis and inferential statistical techniques such as the Test of Significance for large independent samples, two tailed test (t-test) and Analysis of Variance (ANOVA) for calculating the difference. Table 1 presents the opinion of teacher educators on social networking sites.

Table 1

Analysis of the opinion of Teacher educators on the influence of Social Networking Sites in Collaborative Learning used in Computer Networks

Items	No. and % of response			
	Yes	%	No	%
Do you consult experts through Social Networking Sites to understand the things related to lessons for preparation of the class?	31	77.5	9	22.5
Do you consult experts through Social Networking Sites to understand details on topic?	29	72.5	11	27.5
Do you understand different concepts related to topic by corresponding with scientist like Dr. A.P.J. Abdul Kalam through Social Networking Sites	14	35	26	65
Do you share information that gained from experts through Social Networking Sites?	27	76.5	13	32.5
Do you use Social Networking Sites to understand most relevant information about subject through Social Networking Sites?	34	85	6	15
Do you believe Social Networking Sites improve the quality of education?	35	87.5	5	12.5
Do you discuss the doubts that arise during group discussions in class with your online mentor?	17	42.5	23	57.5
Do you store the pictures that are provided by online mentors and use it according to needs?	36	90	4	10
Do you enquire to the students about the sites used by them?	35	87.5	5	12.5
Do you search for research done by others on websites and understand them?	34	85	6	15
Do you use YouTube to download and use classes of eminent persons?	23	57.5	17	42.5
Do you receive study material required for teaching with the help of internet tutor?	34	85	6	15
Do you suggest study related sites to students?	30	75	10	25
Do you collect relevant pictures from Social Networking Sites for educational purpose?	24	60	16	40
Do you use teaching materials provided by tutors to clear educational doubts?	20	50	20	50
Do you use Social Networking Sites to connect with people of same areas of research?	19	47.5	21	52.5
Do you get an opportunity to do self-analysis while you take part in small group discussions?	27	67.5	13	32.5
Do you share ideas with other college teachers through Social Networking Sites?	30	75	10	25
Do you share ideas with others through Social Networking Sites?	28	70	12	30
Are you a recognized member of any social networking site?	18	45	22	55
Do you have online communication with teachers working in foreign universities?	0	0	0	0
Do you post pictures and video clips related to topic?	18	45	22	55
Do you spend free time with your online friend?	24	60	16	40
Do you help students to do outside classroom activities by using Social Networking Sites?	32	80	8	20
Do you believe that the use of Social Networking Sites improve educational aspiration of college students?	24	60	16	40

Do you know podcast service is used a tool for teachers or administrators to communicate curriculum assignments and other information with parents and the community?	34	85	6	15
Have you notice the students discuss the things related to the topic which they have found out from Social Networking Sites with other children in the class?	18	45	12	55
Have you notice the student to your college do Collaborative Learning with students of other universities through Social Networking Sites?	31	77.5	9	22.5
Do you encourage students to participate in online peer group discussions?	14	35	16	65
Do you post the argument topics in networking sites?	36	90	4	10
Does Social media helps in sharing, discussion and modifying ideas for research work?	28	70	12	30
Do Social Networking Sites give a sense of real world and broaden the educational community?	28	70	12	30
Do you watch educational film through Social Networking Sites?	17	42.5	13	32.5
Do you take part internet telephone conferencing, video conferencing, web conferencing through Social Networking Sites?	22	55	18	45
Do you use social networking technology to upload their site for effective classroom instruction?	12	30	28	70
Do you use podcasting lectures and course notes through online for their students?	17	42.5	23	57.5
Do you feel your research findings are enhanced by discussion with teachers from foreign universities?	21	52.5	19	47.5
Do you feel that there is an increase in your studying capacity if use social net working sites?	26	65	14	35
Do you use Social Networking Sites to aid in teaching profession?	27	67.5	13	32.5

The table 1 shows that with respect to the component 'ask an expert and mentorship' (1-14 questions) 31 (77.5%) of the teacher educators suggested that consult experts through Social Networking Sites to understand the things related to the lessons for preparation of the class and 9 (22.5%) do not consult experts through Social Networking Sites to understand the things related to the lessons for preparation of the class, 29 (72.5%) of them said that consult experts through Social Networking Sites to understand details on topic and 11 (27.5%) do not consult experts through Social Networking Sites to understand details on topic, 14 (35%) of them opinion that corresponding with scientist like Dr.A.P.J. Abdul Kalam through Social Networking Sites and 16 (65%) do not corresponding with scientist like Dr. A.P.J. Abdul Kalam through Social Networking Sites, 27 (67.5%) recommended that share information that gained from experts through Social Networking Sites and 23 (22.25%) do not share information that gained from experts through Social Networking Sites, 34 (85%) suggested that use Social Networking Sites to understand most relevant information about subject through Social Networking Sites and 6 (15%) do not use Social Networking Sites to understand most relevant information about subject through Social Networking Sites.

35 (87.5%) teacher educators believe that Social Networking Sites improve the quality of education and Five (12.5%) teacher educators do not believe Social Networking Sites improve the quality of education, 17 (42.5%) suggested that they discuss the doubts that arise during group discussions in class with online mentor and 23 (57.5%) do not they discuss the doubts that arise during group discussions in class with online mentor, 36 (90%) said that they store the pictures that are provided by online mentors and use it according to needs and 4 (10%) do not store the pictures that are provided by online mentors and use it according to needs.

35 (87.5%) teacher educators opinioned that they enquire to the students about the sites used by them and 5 (12.5%) do not enquire to the students about the sites used by them, 34 (85%) said that search for research done by others on websites and understand them and 6 (15%) do not search for research done by others on websites and understand them, 23 (57.5%) of them opinion that use YouTube to download and use classes of eminent persons and 17 (42.5%) do not use YouTube to download and use classes of eminent persons, 34 (85%) said that they receive study material required for teaching with the help of internet tutor 6 (15%) do not receive study material required for teaching with the help of internet tutor, 30

(75%) suggest study related sites to students and 10 (25%) of them do not suggest study related sites to students, 24 (60%) said that collect relevant pictures from Social Networking Sites for educational purpose and 16 (40%) do not collect relevant pictures from Social Networking Sites for educational purpose.

With respect to the component 'tutor support and peer interaction' (15-25 Questions) 20 (50%) teacher educators use teaching materials provided by tutors to clear educational doubts and 20 (50%) do not use teaching materials provided by tutors to clear educational doubts, 19 (47.5%) of them use Social Networking Sites to connect with people of same areas of research and 21 (52.5%) do not use Social Networking Sites to connect with people of same areas of research, 27 (67.5%) said that get an opportunity to do self-analysis while you take part in small group discussions 13 (32.5%) do not get an opportunity to do self-analysis while you take part in small group discussions.

30 (75%) teacher educators suggested that they share ideas with other college teachers through Social Networking Sites and 10 (25%) do not share ideas with other college teachers through Social Networking Sites, 28 (70%) said that share ideas with others through Social Networking Sites and 12 (30%) do not share ideas with others through Social Networking Sites, 18 (45%) said they are a recognized member of any social networking site and 22 (55%) not member of any social networking site, 0 % of the teacher educators do not online communication with teachers working in foreign universities.

18 (45%) teacher educators opinioned that they post pictures and video clips related to topic and 22 (55%) do not post pictures and video clips related to topic, 24 (60%) said that they spend free time with online friend and 16 (40%) do not spend free time with your online friend, 32 (80%) suggested that they help students to do outside classroom activities by using Social Networking Sites and 8 (20%) do not suggested that they help students to do outside classroom activities by using Social Networking Sites, 24 (60%) believe that the use of Social Networking Sites improve educational aspiration of college students and 16 (40%) do not believe in this statement.

34 (85%) teacher educators said that they know podcast service is used a tool for teachers or administrators to communicate curriculum assignments and other information with parents and the community and 6 (15%) do not know podcast service is used a tool for teachers or administrators to communicate curriculum assignments and other information with parents and the community, 18 (45%) recommended that they notice the students discuss the things related to the topic which they have found out from Social Networking Sites with other children in the class and 22 (55%) do not notice the students discuss the things related to the topic which they have found out from Social Networking Sites with other children in the class, 31 (77.5%) said that they have notice the student to their college do Collaborative Learning with students of other universities through social net working sites and 9 (22.5%) do not notice the student to their college do Collaborative Learning with students of other universities through social working sites, 14 (35%) they encourage students to participate in online peer group discussions and 16 (65%) do not encourage students to participate in online peer group discussions.

With respect to the components 'structured group activity and access to network resources' (26-40 Questions) 36 (90%) post the argument topics in networking sites and 4 (10%) do not post the argument topics in networking sites, 28 (70%) believe Social media helps in sharing, discussion and modifying ideas for research work and 12 (30%) do not believe Social media helps in sharing, discussion and modifying ideas for research work, 28 (70%) agree Social Networking Sites give a sense of real world and broaden the educational community and 12 (30%) do not agree Social Networking Sites give a sense of real world and broaden the educational community,

17 (42.5%) teacher educators said that they watch educational film through Social Networking Sites and 13 (32.5%) do not watch educational film through Social Networking Sites, 22 (55%) take part internet telephone conferencing, video conferencing, web conferencing through Social Networking Sites and 18 (45%) do not take part internet telephone conferencing, video conferencing, web conferencing through Social Networking Sites, 12 (30%) said that they use social networking site for effective classroom instruction and 28 (70%) do not use social networking site for effective classroom instruction,

17 (42.5%) recommended that they use podcasting technology to upload their lectures and course notes through online for their students and 23 (57.5%) they do not use podcasting technology to upload their lectures and course notes through online for their students, 21 (52.5%) said that they feel their research findings are enhanced by discussion with teachers from foreign universities and 19 (47.5%) do not feel their research findings are enhanced by discussion with teachers from foreign universities, 26 (65%) feel that there is an increase their studying capacity if use social net working sites and 14 (35%) do not feel that there is an increase their studying capacity if use social net working sites, 27 (67.5%) said that they use social networking sites to aid in teaching profession and 13 (32.5%) do not use Social Networking Sites to aid in teaching profession.

Difference in the opinion of Urban and Rural Teacher educators on the influence of Social Networking Sites on Collaborative Learning used in Computer Networks

The investigator formulated the null hypothesis (H₀) to find out the difference in the opinion of teacher educators among Urban and Rural Teacher educators. Ho: 1) "There exists no significant difference in the Means of scores of an opinion in the influence of Social Networking Sites on Collaborative Learning used in Computer Networks among Urban and Rural Teacher Educators". For this, the investigator analyzed and interpreted data using inferential statistics namely the Test of Significance for the large independent sample, two Tailed test ('t') in order to find out the difference in the means of scores. The value of 't' was set as 2.58 at 0.01 level of significance and also 1.96 at 0.05 level of significance. Table 2 is presented below.

Table 2

The difference in the opinion of Teacher Educators on the influence of Social Networking Sites on Collaborative Learning used in Computer Networks based on Locality

Variable and sub-components	Locality	N	M	SD	df	t	p
Ask an Expert	Urban	24	1.95	1.83	48	2.56	0.014@
	Rural	26	3.15	1.46			
Mentorship	Urban	24	1.96	1.16	48	1.00	0.320@
	Rural	26	2.31	1.28			
Tutor Support	Urban	24	4.33	1.99	48	1.73	0.089@
	Rural	26	5.27	1.82			
Peer Interaction	Urban	24	2.50	1.66	48	0.98	0.332@
	Rural	26	3.00	1.91			
Structured Activity	Urban	24	4.08	1.74	48	1.63	0.108@
	Rural	26	4.92	1.87			
Access to Network resources	Urban	24	3.71	2.18	48	0.86	0.392@
	Rural	26	4.27	2.39			
Collaborative Learning together	Urban	24	20.5	8.17	48	1.83	0.072@
	Rural	26	20.0	8.63			

@ Not significant at .05 level

It is obvious from the table that the obtained 't' value 1.83 is less than the table value 1.96 at 0.05 of significance, with the degree of freedom 48 (N=50). On the basis of this, the null hypothesis titled "There exists no significant difference in the Means of scores of an opinion in the influence of Social Networking Sites on Collaborative Learning used in Computer Networks among Urban and Rural Teacher Educators" is accepted.

Discussion of the Results

The main objective of the study was the influence of Social Networking Sites on Collaborative Learning used in Computer Networks among the teacher educators based on gender, locality and type of management. There is significant difference between the means of scores of the influence of Social Networking Sites on Collaborative Learning used in Computer Networks among the teacher educators

based on gender and there is no significant difference in the means of scores the influence of Social Networking Sites on Collaborative Learning used in Computer Networks among the teacher educators based on locality and type of management with respect to ask an expert, mentorship, tutor support. Peer interaction, structured group activity, access to network resources.

Major Findings and Conclusions of the Study

- Most of the teacher educators suggested that they consult experts through Social Networking Sites to understand the things related to the lessons for preparation of the class.
- Majority of the teacher educators consult experts through Social Networking Sites to understand details on topic.
- Most of the teacher educators are not corresponding with scientist like Dr.A.P.J. Abdul Kalam through Social Networking Sites.
- Large number of teacher educators recommended that share information that gained from experts through Social Networking Sites
- Majority of the teacher educators suggested that use Social Networking Sites to understand most relevant information about subject through Social Networking Sites
- Most of the teacher educators believe that Social Networking Sites improve the quality of education
- Majority of teacher educators do not discuss the doubts that arise during group discussions in class with online mentor.
- Greater part of the teacher educators stores the pictures that are provided by online mentors and use it according to needs.
- Majority of the teacher educators enquire to the students about the sites used by them.
- Large number of teacher educators said that search for research done by others on websites and understand them.
- Greater part of the teacher educators use YouTube to download and use classes of eminent persons.
- Most of the teacher educators said that they receive study material required for teaching with the help of internet tutor.
- Majority of the teacher educators suggest study related sites to students and said that collect relevant pictures from Social Networking Sites for educational purpose.
- Half of the teacher educators use teaching materials provided by tutors to clear educational doubts.
- Large number of teacher educators does not use Social Networking Sites to connect with people of same areas of research.
- Greater part of the teacher educators gets an opportunity to do self-analysis while you take part in small group discussions.
- Most of the teacher educators suggested that share ideas with other college teachers through Social Networking Sites
- Majority of the teacher educators share ideas with others through Social Networking Sites.
- Large numbers of teacher educators are not a recognized member of any social networking site.
- All teacher educators have no communication with teachers working in foreign universities.
- Greater part of the teacher educators do not post pictures and video clips related to topic.
- Majority of the teacher educators spend free time with online friend.
- Large number of teacher educators helps the students to do outside classroom activities by using Social Networking Sites.
- Most of the teacher educators believe the use of Social Networking Sites improve educational aspiration of college students.

- Greater part of the teacher educators know podcast service is used a tool for teachers or administrators to communicate curriculum assignments and other information with parents and the community.
- Majority of the teacher educators do not notice the students discuss the things related to the topic which they have found out from Social Networking Sites with other children in the class.
- Large number of teacher educators notice the student their college to do Collaborative Learning with students of other universities through social net working sites.
- Most of the teacher educators do not encourage students to participate in online peer group discussions.
- Greater parts of teacher educators post the argument topics in networking sites.
- Majority of the teacher educators believe Social media helps in sharing, discussion and modifying ideas for research work.
- Large numbers of teacher educators agree Social Networking Sites give a sense of real world and broaden the educational community.
- Greater parts of teacher educators watch educational film through Social Networking Sites.
- Majority of the teacher educators do not take part internet telephone conferencing, video conferencing, web conferencing through Social Networking Sites.
- Large number of teacher educators not use social networking site for effective classroom instruction.
- Most of the teacher educators do not use podcasting technology to upload their lectures and course notes through online for their students.
- Greater parts of teacher educators feel their research findings are enhanced by discussion with teachers from foreign universities.
- Majority of the teacher educators feel that there is an increase their studying capacity if use social net working sites.
- Majority of the teacher educators use social networking sites to aid in teaching profession.
- Opinions of the Teacher Educators on the influence of Social Networking Sites on Collaborative Learning used in Computer Networks of urban and rural areas are same.

Suggestions for Improving Educational Practices

The investigator has listed below a few educational implications emerged from the present study.

1. Awareness programs in computer network based education should be conducted in Training colleges.
2. Teacher educators should create blog. Teacher trainees should be given opportunities for collecting study materials from the blog.
3. All teacher educators should take online classes through Social Networking Sites.
4. Teacher educators must introduce educational sites for their teacher trainees.
5. The study revealed that the opinion of the teacher educators in the influence of Social Networking Sites on collaborative learning is high among male than female. Special attention should be given for giving training on the use of social networking sites on collaborative learning among female teacher educators.

Suggestions for Further Research

- The study can be extended to the state level taking sample from various districts.
- A study can be conducted to find out the reasons for the difference between the influences of Social Networking Sites on collaborative learning used in computer networks among other professional based on socio-demographic variables.
- A study can be conducted to find out the opinion of teachers at different levels on the influence of Social Networking Sites on collaborative learning used in computer networks with respect to the chances of including this system in non-formal education mode.

- An experimental study can be conducted to prepare the instructional materials for social networking sites and to test the effectiveness of these materials in different educational levels.
- A comparative study can be conducted among higher education students of different international universities to find out the innovative practices with respect to the use of social networking sites in different part of the world.
- An online study can be conducted to find out the reasons for finding out the variety of use of Social Networking Sites in different teaching-learning situations among teacher trainees, teacher educators and researchers, and teacher at higher levels of learning.

Conclusion

The present study on the opinion of teacher educators on the influence of Social Networking Sites on collaborative learning used in computer networks among teacher trainees and teacher educators of Kottayam District, throws light on the fact that the social networking sites influence on collaborative learning in computer networks to some extent, not in the expected level. The investigator would feel gratified if the findings of the present study would lead to a better understanding of the importance of the educational and academic use of Social Networking Sites on collaborative learning used in computer networks among the future teachers and the present teaching community.

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