

ANNOUNCEMENT

EDULEARN10, the annual International Conference on Education and New Learning Technologies will be held in Barcelona (Spain), on the 5th, 6th and 7th of July, 2010.

The main objective of the conference is to promote and disseminate the experiences in New Technologies and E-learning applied to Education in all fields and disciplines.

EDULEARN10 will be a unique International Forum for those who wish to present their projects and discuss the latest innovations and results in the field of New Technologies in Education, E-learning and methodologies applied to Education and Research.

This conference will be held at international level. The attendance of more than 500 delegates from 65 different countries is expected.

We would like to invite you to submit your abstracts and to contribute to EDULEARN10 (in person or virtually) in order to share your results in educational experiences and technological methodologies applied to Education and Research. The deadline for abstracts submission is the **1st of April 2010**.

Two ISBN publications will be produced with all the accepted abstracts and papers. They will serve as a database of innovation projects in Education and New Learning Technologies.

In addition to the technical issues of the conference programme, our website provides you with tourist information on the city of Barcelona, unique for its cultural, artistic and historical richness, lovely surroundings and nice beaches of the well-known "Costa Brava".

We look forward to seeing you in Barcelona!

The Organising Committee.

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THE IMPACT OF SENSE OF CLASSROOM COMMUNITY ON LEARNERS' PARTICIPATION IN SOCIAL NETWORKS

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Abstract

Nowadays the usage of social networks in online learning implementations has been increasing like in other areas. However, there are few research findings about the usage and effects of these sites. Implementations in the online learning environments; the participation of learners is a complex process so the most fundamental issue is to find out the way on how to encourage the learners' engagement. Since realizing the most effective online learning depends on active participation of all students. This research not only examines how feeling identification in a social group paves the way of learners' enthusiasm and success but also defines what cases affect the learners' participation to the online learning. For this purpose, 60 learners who took part in online learning were distributed into two groups, as experimental and control groups. The learners who were in the experimental group participates both in learning on line atmospheres and in social networks via Facebook. The students in control group only took part in online learning environment. The research tool called "Sense of Classroom Community Index" applied for the students who were in experimental and control groups. An achievement test with 30 questions for an ICT lesson applied for both the experimental and control group and the results show that the learners who were in experimental group were more successful than the ones in control group. This research study shows the way the learners' engagement can be encouraged to the learning online implementations which have been rising drastically.

Keywords: Social networking, sense of classroom community, online learning.

1. INTRODUCTION

Today, it is seen that the popularity of the social networks increased in all of the sections but in the young target audience in particular. The membership-based internet communities, such as Facebook, MySpace, Friendster, LiveJournal, LinkedIn and Bebo, enable the individuals to make sharing and communication from different ways. The social networks are important in terms of revealing the meaning and ways of realization of the interaction in the information epoch as well. The preferences of the users are main determinants in the social network websites which are designed in order to realize the social interaction in the virtual environments. The increased interest towards the social network websites also makes it necessary to research the community behaviors in the online environments. A lot of studies which are carried out on this area are intensified on the young target audience (Boyd, 2008; Ellison et al., 2006).

While the early period social network websites such as Classmates.com, SixDegrees.com present very limited opportunity for connecting the individuals to each others, the new generation social websites such as MySpace.com, <Facebook.com, and Friendster.com have become the areas which are called "media convergence" by Henry Jenkins. The development of the social network websites is also closely related with the development of the web applications. The transition from Static Web 1.0 to dynamic Web 2.0 also became effective on the formation of the participatory culture.

This new generation which is revealed by the participatory culture based on the Web 2.0 applications is also called M or Generation Media or the Millennials. Particularly when it is taken into consideration that the persons who were born in the years 1980 and 1990 are better in using the technology, the computers became the usual components of their daily lives for the Generation M learners. (Oblinger, 2003). Sharing and cut-and-paste are among the most known things in this new world (DeVoss & Porter, 2006; DeVoss & Rosati, 2002; Moore Howard, 2007; Oblinger, 2003; Ritter, 2005).

The usage and popularity of the social network websites varies from country to country. It is seen that MySpace is widely used in USA, Orkut is widely used in Brazil and India, Friendster is widely used in Pacific Islands, Mixi is widely used in Japan, Hi5 is widely used in Latin America, and Bebo is widely used in United Kingdom, New Zealand and Australia. In Turkey, Facebook is widely used with regard to usage and popularity.

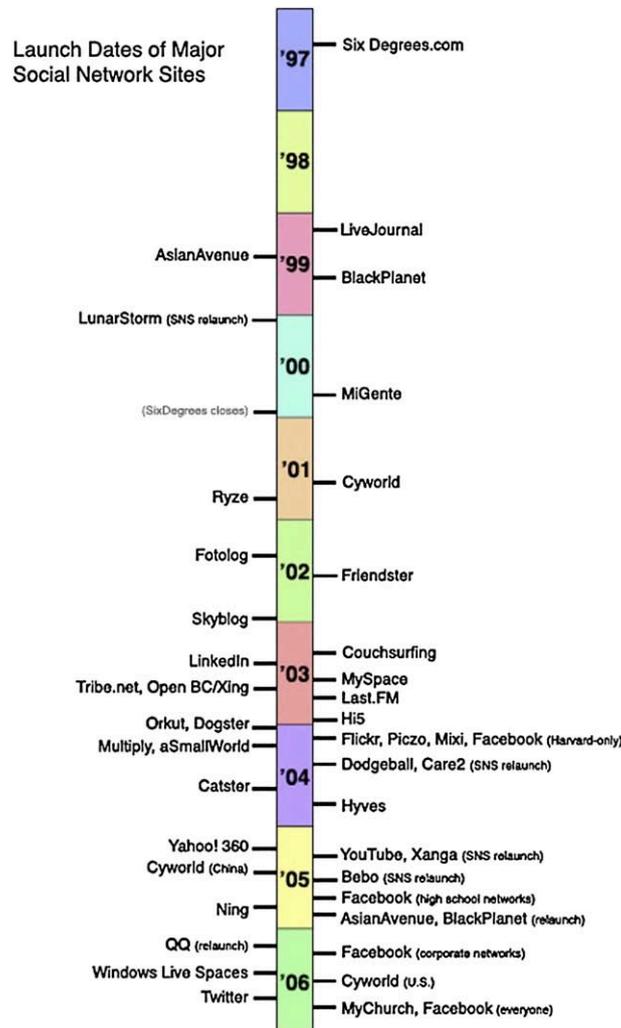


Figure 1. Timeline indicating the launch dates of social networking sites (Boyd & Ellison, 2007)

The number of questions which should be answered by us, as instructors, also increases in this new world in which the usage of not only the online educational applications but also the social network websites increases. The most important one of these questions is how to ensure the student participation. Taking into consideration the fact that the student participation is essential in the realization of learning, the way of realizing this in the online learning environments appears as an important research question.

1.1. Learner Participation

The participation online is one of the most important matters in the online learning environments as an inherent part of learning (Wenger, 1998). How to encourage the learners for the participation (Bento & Schuster, 2003) v and how to ensure this through the computer mediated communication in particular take part among the continuing controversial subjects in the literature (Harasim, 1989; Haythornthwaite, 2002; Leidner& Jarvenpaa, 1995). In some researches, the participation is measured as interaction with peers and teachers and it is determined that it has positive influences on the learning process (e.g., Fredericksen, Picket, Shea, Pelz, & Swan, 2000; Hiltz, Coppola, Rotter, Turoff, & Benbunan-Fich, 2000). At the same time, it is also found out that the participation is effective

on the learner satisfaction (Alavi & Dufner, 2005), and retention rates (Rovai, 2002). How to conceptualize the online participation is quite different as well.

According to Davies and Graff (2005) who examined the online participation and grades, the access to the group and communication areas by the students is used in representing the participation level. Hrastinski (2008) argued the applications as directed at the conceptualization of the online student participation by means of starting from the areas of interest. According to this, Hrastinski (2008) determined that the researchers' perception of the complexity of online participation is very different.

Table 1. Conceptions of online learner participation (Hrastinski, 2008)

Level		No. of papers	Percent of papers
1	Participation as accessing e-learning environments	1	3
2	Participation as writing	10	28
3	Participation as quality writing	9	25
4	Participation as writing and reading	2	6
5	Participation as actual and perceived writing	2	6
6	Participation as taking part and joining in a dialogue	12	23
Total		36	100

As determined by Hrastinski (2008) the different researches used the different criteria in the conceptualization of the online student participation. The classification of the studies which are carried out concerning the online student participation in terms of the type of communication, method and unit of analysis are presented in the Table-2.

Table 2. Reviewed articles by type of communication, method and unit of analysis (Hrastinski, 2008)

	No. of papers	Percent of papers
Type of communication		
Asynchronous	28	78
Synchronous	4	11
Mixed	4	11
Method		
Quantitative	13	36
Qualitative	3	8
Mixed	20	56
Unit of analysis		
Quantity of messages or units	27	75
Message or unit quality	17	47
Learner perceptions	14	39
Message lengths	7	19
System accesses or logins	3	8
Read messages	3	8
Time spent	3	8
Total	36	100

As it is seen in the Table-2, the ways of taking up the online participation experimentally are realized in very different directions in the studies which are examined by Hrastinski (2008).

In this study, in which it is tried to determine the influence of the "sense of classroom community" on the student participation and success in the online learning environments, the type of communication is specified as mixed; method quantitative; unit of analysis learner perceptions.

2. METHODOLOGY

The field of the study is composed of the students of the Department of Computer and Education Technologies of the Faculty of Education of Firat University; and its sample is composed of 60 students that took part in the online learning environments previously. 30 students having internet access at home are specified as test group and 30 students are specified as control group. The preferences of the students concerning the environments which they want to be present are taken as basis in forming the test and control groups. The research is performed in 8 weeks in the coverage of

the Communication and Technology course. A success test which is composed of 30 items is developed in the coverage of the research and the reliability coefficient of the success test is specified as .79. **Moodle** is used as the online learning environment and Facebook is used as the social network environment.

In addition to this, "Classroom Community Index" which is developed by Rovai (2002) is used in the study. The Classroom Community Index is a self-report instrument consisting of 40 items, requiring a response on a 5-point Likert-scale ranging from strongly agree to strongly disagree. Scores on the questionnaire range from 0 – 160, with low scores reflecting a weak sense of community and high scores reflecting a strong one. The questionnaire also features four subscales of spirit, trust, interaction and learning with 10 items measuring each and scores ranging from 0 to 40. Rovai (2002) reports a high degree of face validity of the instrument, in that the items appear to measure what is needed to assess community. Internal consistency estimates using Cronbach's alpha as reported by Rovai (2001) reached .96 for the total scale, .90 for the spirit subscale, .84 for the trust subscale, .84 for the interaction subscale and .88 for the learning subscale.

3. FINDINGS AND COMMENTS

45 percent of the participants are male (n=27) and 55 percent are female (n=3). 46.7 percent of the participants forming the test group are male and 53.3 percent are female; and 43.3 percent of the participants forming the test group are male and 56.7 percent are female (Table-1).

Table 1. Gender of the participants

	Experimental		Control	
	f	%	f	%
Male	14	46,7	13	43,3
Female	16	53,3	17	56,7
Total	30	100,0	30	100,0

64.6 percent of the participants spend time in internet for 2-3 hours and 35.4 percent for 3-4 hours. The data concerning the purposes of using internet by the participants are presented in the Table-2.

Table 2. Internet Usage Aims of the Participants

	f	%
Education	11	18,3
Shopping	5	8,3
Entertainment	17	28,3
Communication	18	30,0
Get Information	9	15,0
Total	60	100,0

The participants use the internet mostly for communication (30%), entertainment (28.3%), education (18.3%), obtaining information (15%) and shopping (8.3%). The social network websites which are most frequently used by the participants are given in the Table-3.

Table 3. Mostly used social networks of the participants

	f	%
Facebook	49	81,7
Myspace	3	5,0
Friendster	2	3,3
Hi5	3	5,0
Orkut	3	5,0
Total	60	100,0

The results concerning the independent groups t test performed to determine whether there are significant differences among the groups in terms of success are presented in the Table-4.

Table 4. Independent groups t test result

Groups	n	\bar{X}	S	sd	t	Significance level
Experimental	30	64,53	6,19	58	3,74*	p<.000
Control	30	58,53	6,21			
Levene test value= .054 Significance level=.818						

*p<.05 significance

According to the result of the independent group's t test performed, it is found out that the test group which is present in the online environment-social networks is more successful than the control group which is present only in the online environment. At this point, it is considered beneficial to look at the sense of classroom communities of the groups (Table-5).

Table 5. The data regarding the sense of classroom community of the groups

	n	Range	Min	Max	\bar{X}	Median	S
Experimental	30	19	66	85	77,10	78,00	4,38
Control	30	16	62	78	69,90	69,50	4,16

As it is seen in the Table-5, the average sense of classroom community of the test group (n=30) is 77.10. The median 78 and its proximity to the arithmetic mean indicate that the participants are close to the normal distribution. When the average attitude point 77.10 is calculated over 5, it counts 3.85. The average attitude point of the control group (n=30) is 69.90. When the average attitude point 69.90 is calculated over 5, it counts 3.49. According to this, it could be said that the test group which is present not only in the online environment but also in the social networks has more positive sense of classroom community than the control group. The results of the independent group's t test performed to determine whether there is any difference among the groups in terms of the sense of classroom community are presented in the Table-6.

Table 6. Independent groups t test result of the groups regarding the sense of classroom community

Groups	n	\bar{X}	S	sd	t	Significance level
Experimental	30	77,10	4,38	58	6.52*	p<.000
control	30	69,90	4,16			
Levene test value=.036 Significance level=.849						

*p<.05 significance

According to this, the significant difference is determined in favor of the test group among the groups in terms of the sense of classroom community. In addition to this, the arithmetic means and standard deviations concerning the sense of classroom community points of the groups are given in the Table-7.

Table 7. Arithmetic means and standard deviations concerning the sense of classroom community points of the groups

Items	Experimental			Control		
	n	\bar{X}	S	n	\bar{X}	S
I feel that students in this course care about each other	30	4,20	,40	30	3,46	1,00
I feel that I am encouraged to ask questions	30	3,96	,55	30	3,40	,77
I feel connected to others in this course	30	3,63	,76	30	3,00	,58
I feel that it is hard to get help when I have a question	30	3,30	,74	30	3,40	,85
I do not feel a spirit of community	30	3,23	,93	30	3,50	,86
I feel that I receive timely feedback	30	3,76	,77	30	3,20	,84
I feel that this course is like a family	30	3,73	,90	30	3,10	,92
I feel uneasy exposing gaps in my understanding	30	3,73	1,01	30	3,00	1,11
I feel isolated in this course	30	3,06	1,04	30	3,80	,55
I feel reluctant to speak openly	30	4,06	,58	30	3,03	,80
I trust others in this course	30	3,26	,69	30	3,16	1,05
I feel that this course results in only modest learning	30	3,93	,94	30	3,00	,90
I feel that I can rely on others in this course	30	3,53	,93	30	2,63	,85

I feel that other students do not help me learn	30	4,03	,92	30	3,80	,80
I feel that members of this course depend on me	30	4,00	,69	30	3,53	1,04
I feel that I am given ample opportunities to learn	30	3,83	,83	30	2,10	,60
I feel uncertain about others in this course	30	3,00	1,41	30	3,60	,77
I feel that my educational needs are not being met	30	3,60	,77	30	3,76	,81
I feel confident that others will support me	30	4,03	,55	30	3,73	1,14
I feel that this course does not promote a desire to learn	30	2,96	1,03	30	3,63	,88

The situations in which the test group which is present not only in the online learning environment but also in the social networks has high level of sense of classroom community are stated by items as follows.

- Feeling that students in this course care about each other ($\bar{X} = 4,20$),
- Encouraged to ask questions ($\bar{X} = 3,96$),
- Connected to others in this course ($\bar{X} = 3,63$),
- Receive timely feedback ($\bar{X} = 3,76$),
- This course is like a family ($\bar{X} = 3,73$),
- Feeling reluctant to speak openly ($\bar{X} = 4,06$),
- Feeling that this course results in only modest learning ($\bar{X} = 3,93$),
- Feeling that I can rely on others in this course ($\bar{X} = 3,53$),
- Feeling that members of this course depend on me ($\bar{X} = 4,00$),
- Given ample opportunities to learn ($\bar{X} = 3,83$),
- Feeling confident that others will support me ($\bar{X} = 4,03$).

While the control group which takes part only in the online learning environment feels insulated ($\bar{X} = 3.80$), it does not feel having sense of classroom community ($\bar{X} = 3.50$). The feeling of confidence for the others are in unstable level in the test ($\bar{X} = 3.26$) and control ($\bar{X} = 3.16$) groups. The test group students think that mostly other students do not help their learning ($\bar{X} = 4.03$). The control group students believe that the course does not give rise to any learning desire ($\bar{X} = 3.63$).

4. CONCLUSION

The student participation is one of the most primary factors affecting these applications today that the online learning applications become widespread. It is fact that the arguments concerning how to realize the student participation in the online learning environments continue in particular. In this study, the "sense of classroom community" is taken up and examined as a factor affecting the student participation in the online learning environments. As a result of the research, it is revealed that the "sense of classroom community" affected the student participation and success. The student participation is taken up and examined with its complicated dimensions by a lot of researchers. The most important result, which is obtained from this study, is the necessity of integrating the social networks which are intensively used by the young people in particular in their daily lives with the online learning environments. In this respect, the online student participation is to continue the communication and interaction with the other individuals in realizing the learning process. In particular, it could be stated based on the research findings that using the social networks in terms of forming the "sense of classroom community" in the online learning environments is considerably useful and it is determinant on the student success.

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