

# **RANDOM ASSIGNED COLLABORATIVE WORKING IN A DISTANCE EDUCATION COURSE: EXPERIENCE AND RECOMMENDATIONS OF STUDENTS**

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## **ABSTRACT**

This study aims that to reveal reflections and recommendations of students for collaborative working for a distance education course given blended. In a 6 week summer course, 105 students participated to this case study. Both qualitative and quantitative data were collected to reveal problems, solutions and communication behaviors and recommendations about collaborative working. Results showed that students prefer to face to face communication to develop project and they expect instant facilitation from instructors. Random assignment is created some problems in terms of communication and motivation of group members. Although in this case students used computer mediated communication with their facilitators in very low rates, they suggested that facilitators should trace each steps of group working. As a result for this case because of habit of face to face communication, students need face to face communication both with their group members and facilitator to group working and motivate their peers.

## **INTRODUCTION**

Today technology integration to the educational settings is still an important concern for educators. With the advent of every new technology, educators try to integrate it. Although there have been many technological advances and integration trials, only a few of them can be implemented to the educational settings as intended (Surry & Ely, 2001). One of these new trends is online environment. The popularity of e-learning applications has been increasing. That is the reason why, top 500 companies spend annually 40 billion dollars to the DE programs in the corporate sector (Gunawardena & McIsaac, 2003). However, the turnover of these investments has not met the expectations. One of these underlying reasons is the hope of people that media will enhance learning. In fact media do not directly influence learning. According to Clark (1994), media are just vehicles; however, it is the method that influences learning. Therefore, it is not wrong to say that, using e-learning applications are not a perfect delivery method, so it needs some methodological improvements. One of these improvement can be using collaborative learning approaches, because it facilitates to design learning environment that actively engage students, focused on real world problems, including learning activities in a community.

Collaborative working skills also highly respected while hiring people to both academic and corporate settings. In their studies, Sumuer, Kursun and Cagiltay (2006) investigated the current major competencies looked for in academic and corporate area by analyzing three job lists of web sites of Department of Instructional Systems Technology at Indiana University Bloomington (IST jobs), AECT and Association for the Advancement of Computing in Education (AACE). Study results showed that for both academic and corporation settings, working collaboratively in a team environment, communication skills, and project management are mostly looked competencies looked for by the employers. Also, Roberts (2004) indicated the ability to work effectively in a team environment and computer literacy as the most frequently listed and highly prized of those generic skills in today's world.

While talking about collaboration, the importance of interaction should be highlighted. According to Moore (1998) interaction has three kinds: learner-learner interaction which also associates collaboration between learners, learner-instructor interaction which is thought to increase student motivation and lastly learner-content interaction which refers learners' intellectual process when s/he gains new perspectives or changing understanding.

Although CMC (Computer Mediated Communication) provide interaction among students, between students and instructors in distance education environment, it poses some special challenges to be involved. First of all, as mentioned by Berge (1997) make use of text-based CMC can lead to oral and written communication apprehension, potentially impeding social interaction (as cited in Kreijns, Kirschner, & Jochems, 2003). Moreover, students have a desire to be more engaged and active in learning process with increased interaction. Theoretically all demands of students can be achieved by online collaborative consensus group learning environments. However, students' expectations are not met in these settings, because it demands great time and effort. Apart from these concerns, working with a consensus group makes it more difficult. As it was cited by Dirx and Smith (2004), Brookfield and Preskill view collaborative group approaches as an "emotional battle grounds", because emotional and group dynamics makes it really difficult. Therefore, there should be a paradigm shift in students' minds for establishing well-structured online collaborative consensus group. That shift needs independence to interdependence, subjective to inter-subjective, authority to intimacy. Reaching a consensus in real world problems with no clear solution needs this, because collaborative consensus groups are not the arena of showing individualistic and subjective understanding. Individuation is the key term for these learning environments. In this view student view himself/herself and other members as distinct but interrelated beings. Especially in online setting interaction is not well enough to reach a consensus. Similarly, Yildirim's (2005) research reveals similar results related to collaborative learning. Although collaboration in this research is based on face- to-face, expectations and concerns of students are similar in some points. One of them is difficulty of dividing the work. Changing and different schedules with different work principles cause problems in group. If it is assumed that the work load is divided equally there are emerging many good ideas, but reaching a common point is not that easy (Yildirim, 2005).

In this context, this study aims to find out problems of computer mediated communication in a distance education course, which is given blended, with respect to students' point of view. At the meantime, this study touched upon students' suggestions about problems that they mentioned were manifested. Research questions of the study are;

- What strategies and tools students use to communicate with group members when they know each other before and do not know before
- What are the problems of collaborative working with unknown or known group members in a blended course
- What are the recommendations of students for collaborative working in a blended course

## **METHOD**

This case study used both qualitative and quantitative approaches for both collecting and analyzing data. In this part sampling, procedure and data collection will be mentioned briefly.

### **Sample**

In summer school totally 105 students enrolled distance education course and they were participants of the study. Students were differentiating from grade 1 to 4. Most of students were from department of computer education and engineering, also there were students from social sciences, engineering and educational sciences. Although this course is a must for computer education students, for other students it is elective.

### **Instruments**

Firstly a reflection was given to the students as an assignment for proposing their experiences and recommendations about group working. Answers were sent by email to facilitators. Interviews also conducted with 24 students. Interview questions are related to group working; problems, solutions, advantages and disadvantages of groups, their recommendations, and generally course. Lastly an attitude scale which was developed Center for the Study of Learning & Performance (CLSP, 2006) was implemented to the students at the end of the semester. This scale includes 54 likert-type questions. However in this study, we gave only means of a few questions which seem related to our findings from qualitative data.

### **Data Collection Procedure**

Department of Computer Education and Instructional Technology opened a blended distance education course which was given a 6 week summer school. Students came to class two hours in a week. All materials are provided on a learning management system. Each Friday students took a quiz by e-mail; it was delivered at 12 pm and collected at 12 am. Also students have assignments each week, and they had to put their assignments on their personal websites. These assignments might be a PowerPoint slide or html page about related topic of week. There was also a forum on which students discuss the questions of the week which was asked by instructor each week. These discussions also provided students extra points. Students took a midterm and a final exam face to face. As a project they had to develop a short course by distance education. Although all assignments were made individually, for final project instructor made them groups. These groups were grouped randomly, some groups included students at different departments and some of them are in the same department. For each group a forum were formed on learning management system. To make use these forums instructor gave extra points. There were three facilitators in course and they took different groups to facilitate, they used msn to communicate groups and individuals in these groups. There were no face to face meetings with facilitators. At last week, students were asked their experiences and group workings in this course and they submit this assignment by e-mail. During the last two weeks interviews related to group working and course were conducted with students at different groups, totally 24 interviews were completed. Last week also an attitude scale was sent students by e-mail,

### **Data Analysis Procedure**

For all reflections and interviews content analysis method were used to find common points of students' problems, expectations and recommendations. Attitude scale is only used to validate qualitative data so some items which is supposed to overlap qualitative implications. To give findings reflections and interview data analyzed in five category; advantage and disadvantage of group working when they know each other or do not know group members, communication tools and strategies, problems, solutions and recommendations for group working for instructors or group members.

## **FINDINGS**

In this part we will present students opinions about advantage and disadvantage of group working, how they communicate, problems with group members, solutions for these problems and recommendations of them.

### **Advantage and Disadvantage**

In interviews, among 24 interviewees only 3 students were stated they know group members before. Other students stated whether s/he did not know or know only one member of group before. Most of students complained about group members which they were made to work. In interviews 11 students stated this problem. Because this course is must for some students and elective for some, each student did not show the same attention for group working and assignments. Students who grouped with their friends stated that it was advantaged because they know each others' skills. On the other hand two of the students stated that making group with unknown people is advantaged because they feel that they have to do their tasks on time. Students stating disadvantages are in groups which including students do not know each other. They especially stated that communication is difficult when all students do not use communication tools frequently. In reflections content analysis revealed seven main recommendations of students and one of them is using communication tools easily and frequently. One of them write "*...in order to do a good group work first thing is communication*" while another student suggests to "*...manage a synchronous method like chat, video conferencing or face-to-face interaction to discuss the project details*". Another disadvantage they stated is that because they do not know other students' reactions about their ideas they hesitate to put their opinions flexibly.

### **Communication Tools and Strategies**

In interviews students stated that they use instant message programs, forums, e-mail, and mobile phone to communicate each other. On the other hand although they use these programs frequently, for an efficient division of labor they stated they need more and frequently face to face meetings. Actually interview showed that students held at least two face to face meetings which were mostly held in face to face course hours. However they stated they need more face to face meetings, actually they wanted their friends as group members to be able to make face to face meetings. One student stated in reflections "*...meet with each other regularly because time can be problem to make project effectively*" and another student stated that "members in the project group should gather together regularly to talk about the new milestones in the project", and another "*they should try to "catch" other group members at exams or lessons*".

Forum provided by LMS was used in very low rate because students find it very slow. However some of them stated that forums are useful to meet first time and taking communication information of each other. In communication most of time all group members did not participate all meetings in face to face or in chat environment. In this situation, most groups stated they confined with members they find. Or they because some groups divided tasks at the beginning of project, they thought that they did not need to communicate with each other.

### **Problems in Groups**

For group working, problems can be categorized as communication problems and unmotivated group members. Unmotivated group members especially are students taking course elective. Some of these members never participated group working. However, because of this situation some willing students loose their motivation, or they try to make unmotivated students work with them and they spend lots of efforts and time.

Another problem was communication problems as stated before. Although all students have opportunities of using instant message, e-mail communication, some of students did not use these tools to communicate with group members. However most of students implied face to face communication to solve communication problems. In this situation it seems that students were not ready to conduct their project by computer mediated communication tools.

### **Solutions of problems found by Group**

For unmotivated students, group members preferred to eliminate these students and continue with other group members, while some of them preferred to try these students to motivate. One student stated that “we do not think that to give this project other members which we did not communicate” while implying that they eliminate other group members, while another student stated that *“we had a communication problem, we had never meet because whenever we decide to meet, one of us have other stuffs and he could not come”* and he continues to state *“we decide make decisions with available group members and then share with other members”*. In some groups for example only one student took all responsibilities apart from some little tasks. When communication is problem, available students decide new tasks and they shared with other members, so they did not wait for other members.

### **Recommendations of Students**

Recommendations of students take important part of this study, because we seek to find some solutions based on students’ opinions. At the end of the course it was asked to students to make recommendations to the future students of the course and from the conducted questionnaire and the interview some items were derived. The recommendations were gathered around on the five items, these are: choosing group members by student, using communication tools appropriately, time management, the need for making face to face meetings, and instant communication with instructor.

#### ***Choosing group members by student***

The important portion of the students recommended that distance students should construct their groups and requires chance to choose their group members. For instance a student stated that *“If the students are compulsory to prepare a group project they should be allowed to form their groups and to choose project title so they can easily make a work plan and they can prepare better projects”* and the other one recommended that *“They should choose the students with whom they are acquainted. If they do not have their telephone number it may really be a problem to communicate, because people sometimes reply you mails very late and even they may not reply. And if you don’t know the qualifications of each person task distribution may also be a problem. I wish we would have the opportunity to select our group members, it would be easier to communicate, and task distribution would be well. At least at the beginning of the semester if there are people who want their groups to be randomly chosen, others would have to opportunity to choose their group members.* In attitude scale also the average of “I prefer to choose the students I work with” item is 4.56. On the other hand according to attitude test it can be said that most of student learn to work with different people in a time, because “I prefer to choose the students I work with” item’ average is 3.60.

#### ***Using communication tools appropriately***

In the course, some communication tools; chat rooms, forums, e-mail, were served to the students in order to use for communicate each other and the instructor. Most of the students recommended using the communication tools appropriately, because majority of the students did not know each other so it is the good way to use the communication tools to form an effective interaction environment. For instance a student stated that

*“...communicating is the most important problem in group works. If distance education students want to overcome communicating problems they should often follow course communicating tools such as forum to inform about new situations. Also group members should give to each other their phone number, email address and chat address. If they do this when any group member meet new problem s/he can easily reach other members.”* and the other added that *“As an experienced distance learner I can suggest students to always communicate with each other. Because communication is very important for group working and they can prepare their group project very easily.”*

### ***Time management***

About timing issue students gives valuable recommendations. They think that in the distance education environment timing is very important. They think that a distance education course requires much more time than the traditional one. About the timing issue students stated that *“Although any DE course gives flexibility at time or location, students should make a schedule, arrange their time well and work with a good will”* another student added *“Although all group members may not be seen each other, they should be aware of their responsibilities and they should do them. The work can be divided to each group members. If there is a situation, all members should their work on time. If not, the time to give project will be late”,* and another stated that *“In order to be successful in group working, the distance education students should study regularly. They should not delay the given tasks and should start immediately to work on them. They should have the responsibility of the others, because, a problem in one module will cause the abnormality in all other modules.”*

### ***Making face to face meetings***

Students think that making a face to face meeting with the group members is needed. They think that without meeting face to face we could not overcome above the communication and thinks that only communication on the online platform may result different problems and recommended and gave evidence that *“...First they must contact with them by mail and then I strongly suggest arranging a face-to-face meeting. This is very important because after this meeting the group will be more responsible”* or *“I think face-to-face communication is a must for the project of this course. If communication is achieved, team work automatically takes place in the group”* and another stated that *“I suggest them to do by meeting face to face if they can. Also before doing an assignment, all members firstly search about the subject and when they come together they can use these knowledge, by the help of this method their work will finish very quickly.”*

### ***Instant communication with instructor***

Students think that the distance education environments should be served to the willingness students, because they think that to be motivated and to carry on this motivation in the distance education environment is not an easy issue so in this point they think that instructor and the assistants of the course should keep the students warm. They think to conduct the assignments from distance is not an easy issue, because the student may go ahead in a wrong so the students recommended that *“...there should be facilitators or consultants available for groups and the groups should be controlled often”* and another states in interview as *“...assistant should gather, incline and guide groups”*.

## **CONCLUSION AND DISCUSSION**

In the study it is aimed to show the problematic sides of a case study which is constructed on case of random assigned collaborative working in a distance education course. On this issue at the end of the study, according to the students experience on this case, we requested the students' recommendations. The stated problems are very valuable for previous studies so it can be said that understanding the problems deeply in the distance education environments nature, and finding solutions to these problematic issues will give chance to construct more powerful and successful collaborative working environments in the distance education platform.

Study showed that students' problems are especially related to communication and if they do not know each other before the course they meet more communication problems even is they use communication technologies in daily life. When they work with group some of them want to instant facilitation with assistants of course to make group work on time and regular. Face to face communication is most preferred one for group working although they have lots of communication tools provided by course or individually, on the other hand they also suggested using communication tools frequently. Although groups with unknown members have some trouble with working for project, they completed their projects at the end, and they found a solution to communication or unmotivated group members.

In this case because students number is high and facilitator numbers is a few, students expectation were not met as they expect, however it would be useful if facilitator trace each steps of groups, so that reveal problems and suggest solutions. Although assistants used chat program to communicate all groups, students did not facilitate enough. So it can be suggested that making face to face meetings to regulate group working is important to enough facilitation, for example in chat environment a few group arranges teleconferencing to meet their facilitators. In a distance course, especially first meeting of students should be held by instructors or facilitators, because students hesitate to take first step to communicate and meet each other.

In an online or blended course, if a collaborative working is needed, it is almost impossible to gather friends in a group, so it is unavoidable to make random groups. However it can be said that to allow students to form their groups is highly suggested, and on the other hand it is needed to provide a well constructed collaborative learning environment to students. The assigned projects would be convenient to work on collaboratively. However, if not possible to make groups without random assignment, it can be suggested to control each step and motivate students to work collaboratively and to make these facilitators should learn about students' skills, pre-knowledge and working behaviors as much possible as they can to make enough guidance.

As a conclusion, in online environment students expects guidance for each kind of working or assignment and they need face to face communication to work as group. Students' recommendations should be regarded to reach effective group working, so students can be made to reflect their opinions and problems for group working. Facilitators are key points to take first step and to motivate students collaboratively. Lastly, further studies can reveal how students work collaboratively when groups meet face to face with students.

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