

**PERCEPTIONS OF AN ACTIVE LEARNING  
EXPERIMENT IN SMALL-TEAM ENVIRONMENT**

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**ABSTRACT**

Team-based learning, is a learner-centred, instructor-directed strategy that incorporates class-based teamwork and assessment to enhance active learning and critical thinking. The aim of this study is to analyze the perceptions of Business Administration students who have been actively involved in an active team based learning course. With this aim; sophomore students have been asked about their perceptions about team-based learning both in the beginning and at the end of the semester after attending a 'Multinational Corporations' course. An average of 35 students have answered the questions based on how they feel about having small team environment and student taught lectures as part of the method of delivering a course, about whether they have the abilities to evaluate text, develop a lecture, make a presentation, apply theory to a specific case and present a topic to the class. The results indicate that perceptions of students change about team work, they also develop skills required to work in small teams, particularly presentation and lecture developing skills. The results of the study provide us information on how to develop new skills and methods to increase the efficiency and effectiveness of small-team members.

**Keywords:** team learning, active-learning, business administration; small-team environment

**1. Introduction**

"Active Learning" is anything that students do in a classroom other than merely passively listening to an instructor's lecture. Examples of "active learning" activities include class discussion, think-pair-share; learning cell, short written exercise, collaborative learning group, student debate, reaction to a video, small group discussion, class game and learning by teaching.

It should be emphasized that it is a model of instruction that focuses the responsibility of learning on learners. Active learning shifts the focus from the teacher and her delivery of course content to the student and his active engagement with the material. Through active learning techniques and modeling by the teacher, students shed the traditional role as passive receptors and learn and practice how to apprehend knowledge and skills and use them meaningfully.

This method of learning was popularized in the 1990s by its appearance on the Association for the Study of Higher Education (ASHE) report (Bonwell and Eison, 1991). According to the report, in order to learn, students must do more than just listen: They must read, write, discuss, or be engaged in solving problems. It relates to the three learning domains referred to as knowledge, skills and attitudes (KSA), and that this taxonomy of learning behaviors can be thought of as "the goals of the learning process" (Bloom, 1956). In particular, students must engage in such higher-order thinking

tasks as analysis, synthesis, and evaluation. In accordance with this understanding, active learning engages students in two aspects – doing things and thinking about the things they are doing (Bonwell and Eison, 1991).

In order to learn the perceptions of students on active learning and evaluate themselves on the basis of “doing things and thinking about the things they are doing”, a survey study has been conducted among sophomore Business Administration students attending a one semester ‘Multinational Corporations’ course. The active learning activities used during the semester were a combination of class discussion, collaborative learning group and learning by teaching methods. Students have been asked about their perceptions about team-based learning in the beginning and at the end of the semester. This attempt has been reported as the first active learning experience by the students. The main purpose of this study is to analyze the perceptions of students of a private university in İstanbul / Turkey who have been actively involved in an active team learning course.

## 2. Literature Review

Excellence in teaching is becoming an essential avenue for faculty members to produce a competitive advantage for their colleges (McKeachie, Pintrich, Lin, & Smith, 1986). Many different teaching methods have been developed within the past 30 years for the need to improve teaching approaches. In management education, variations of active learning include experiential learning (Kolb, 1984), problem-based learning (Miller, 2004), participative learning (Mills-Jones, 1999) and cooperative learning (Johnson, Johnson, & Smith, 1991). We will briefly describe active learning and some other related teaching approaches that are commonly categorized as active learning.

**Active Learning.** Active learning is a broadly inclusive term, used to describe several models of instruction that hold learners responsible for their own learning. The leaders in the field of active learning, Bonwell and Eison (1991) have contributed heavily to its development and to the acceptance of active learning as a viable approach. Active learning encompasses various practices, such as short writing exercises in class, facilitating small-group discussions within the larger class, incorporating survey instruments, quizzes, and student self-assessment exercises into the course, leading laboratory experiments, taking field trips, and using debates, games, and role play (Bonwell & Eison, 1991; Ebert-May, Brewer, & Allred, 1997; Sarason & Banbury, 2004).

Bonwell and Eison (1991) suggest that active learning provides the following benefits: students are more involved than in passive listening; students are engaged in activities such as reading, discussing, and writing; student motivation is increased; students can receive immediate feedback; and students may engage in higher-order thinking, such as analysis, synthesis, and evaluation. In order to have a positive effect on students, the management educator must apply the principles of active learning to the practical setting of the classroom. Auster and Wylie (2006) suggest that four dimensions are necessary to create a systematic approach to promote active learning in the classroom: context setting, class preparation, class delivery, and continuous improvement. Context setting refers to creating an open and relaxed atmosphere for learning in the classroom. Class preparation involves thought, planning, and creativity before the class session. Class delivery refers to the implementation of the planned lesson in the classroom. Continuous improvement entails seeking and using feedback concerning the teaching approach.

Numerous studies have shown that introducing active learning activities before, rather than after lectures or readings, results in deeper learning, understanding, and transfer. The degree of instructor guidance students need while being “active” may vary according to the task and its place in a teaching unit. In an active learning environment learners are immersed in experiences within which they are engaged in meaning-making inquiry, action, imagination, invention, interaction, hypothesizing and personal reflection (Cranton, 2012).

**Team-based Learning.** Team learning is the process of working collectively to achieve a common objective in a group. In the learning organization context, team members tend to share knowledge and complement each other's skills. If there is no commitment and effort from team members then working and learning from team work may fail. This is why teams should be given free will to act especially in the learning organization context. It is the use of learning teams to enhance student engagement and the quality of student or trainee learning. The disciplines of team learning are; dialogue and discussion, conflicts and defensive routines, and practice. Team Based Learning has been suggested to help students who seem uninterested in subject material, do not do their homework, and have difficulty understanding material. Team based learning can transform traditional content with application and problem solving skills, while developing interpersonal skills. Team based learning in education can also be important for developing skills and abilities that are useful for businesses, organizations, careers, and industries where many projects and tasks are performed by teams. Learning how to learn, work, interact, and collaborate in a team is essential for success in this kind of an environment.

According to a study done by the Washington University School of Medicine, individuals who learned through an active team based learning curriculum had greater long-term knowledge retention compared to a traditional passive lecture curriculum. Controlled studies of initial implementations of team learning have shown increases in student engagement and mixed results for other outcomes (Norbert *et al.*, 2009).

As far as we know, there is no other research in the literature on active learning perceptions of the Turkish students, therefore one of the aims of this study is to fill this gap in the literature.

### **3. Methodology**

The survey and methodology used in this study follows the study of Jones *et al.* (2012). The questions were related to the structure and delivery style of the courses as well as the ability of the students to perform relative to the individual and team expectations within the courses. Students were asked to assess their feelings and perceptions about the small-team environment, whether they were eager, unconcerned or anxious. An open-ended response part was provided to collect perceptions of the greatest potential or realized benefits and the greatest obstacles related to the course delivery format. Data collection is made both in the first week of the course and the last week before the final examination. As there was no mechanism to identify which students completed the pre- and post-exposure survey instrument, the data were analyzed as independent groups.

'Multinational Corporations' (MAN 391) is a 3 hours course each week, taught in one 2-hour blocks on Tuesday, and a single, 1 hour, on Wednesday. Rather than using traditional learning approach; students were divided into teams of 5 or 6 students based on their GPA averages; thus balancing levels of academic performance among the teams. With this distribution technique, the grade point average among the teams varied only +/- 0.3 based on a 4.0 scale.

Every week began with the student-team presentations on 2-3 related topics and cases, with question and answer time held after each presentation. Every week, each one of the six student teams presented mini-lectures to the class on their assigned topic. All students were expected to listen, make recommendations and provide feedback to the team. All team members received the same grades. Every team has 20-25 minutes to present and 5-10 minutes for the problems and discussions about its presentation. At the end of the semester, professor graded the presentations which comprised 20% of the final grade.

Assessment of a student performance included two midterms which counted 40% of the final grade and an essay type final examination, which counted 40% of the final grade. In order to foster a more cooperative team working environment, it was announced that if the grade of even one member is below 50, none of the team members would get a passing grade for the second midterm.

#### 4. RESULTS

36 students attended the Multinational Corporations course in the spring 2014 semester. Prior to the delivery of the courses, the majority of students reported being eager (56%) about experiencing this learning method while others reported being unconcerned (11%) or anxious (33%) (Table 1). Students reported a relative increase in anxiousness related to working in small teams after completing the courses, those who were eager dropped to (21%), unconcerned rose to (27%) and anxious increased to 52% of the students.

Interestingly when they were required to evaluate their skills, those who did not think they had the skill to make presentations, develop a lecture, apply theory to a specific case, present a topic to the class at the beginning of the semester stated they developed those skills during the semester.

**Table 1. Survey Results of Unrelated Samples**

| Item<br>(n = 36)   | (n = 33) | Pre-exposure, % | Post-exposure, % |
|--|----------|-----------------|------------------|
| How do you feel about having the small team environments as part of the method of delivering a course? |          |                 |                  |
| Anxious  |          |                 | 3352             |
| Unconcerned  |          |                 | 1127             |
| Eager  |          | 5621            |                  |
| How did you feel about having student taught lectures as part of the method of delivering a course?    |          |                 |                  |
| Anxious  | 5646     |                 |                  |
| Unconcerned  |          | 19              | 30               |
| Eager  |          | 25              | 24               |
| I have the ability to critically evaluate text and determine the key points for a presentation.        |          |                 |                  |
| Disagree   | 4230     |                 |                  |
| Unsure   |          | 53              | 12               |
| Agree  |          | .05             | 58               |
| I understand how to develop a lecture based upon the outline of the text.                              |          |                 |                  |
| Disagree   | 4415     |                 |                  |
| Unsure   | 4742     |                 |                  |
| Agree  |          | 942             |                  |
| I am able to apply theory to a specific case.  |          |                 |                  |
| Disagree   | 56       | 15              |                  |
| Unsure   |          |                 | 3339             |
| Agree  |          |                 | 1146             |
| I have the ability to present a topic to the class   |          |                 |                  |
| Disagree   | 479      |                 |                  |
| Unsure   |          | 44              | 42               |
| Agree  | 949      |                 |                  |

Results based on the written feedback to the open ended survey questions reveal that; on the pre-exposure, most of the students think that the greatest benefit of this course is to learn teamwork procedures and apply it to the course (Table 2 ). Their basic expectation from a team



based course was that this experience will effect their work life positively and they have the expectation that different and creative ideas will make the course more attractive.

Unexpectedly, on the post-exposure; majority of the students were dissatisfied about teamworking, and contrary to their first ideas, teamwork during the course didn't work out as they expected. They think that they were unable to get enough information and efficiency from the course. At first; lack of communication was expected to be the greatest obstacle of small team learning format; and it turned out to be the real case. Most of the students complained about lack of communication and also they stated that the results should be better if they had the right to compose their own teams. When their overall attitude toward the small team learning format is asked; they are also dissatisfied. At first; they claimed that they are so curious and excited about small team learning format; but at post-exposure they found this format useless, because of lack of participation and responsibility among the team members.

| Questions  | Responses  |  |
|--|--|--|
|  | Pre-Exposure   | Post-Exposure  |
| What would you anticipate being the greatest <b>benefit</b> that you would realize utilizing the small team learning format?       | Learning to work with others<br>Real life experience<br>Taking responsibility  | Not effective  |
| What would you anticipate being the greatest <b>obstacle</b> that you would encounter utilizing the small team learning format?    | Poor teamwork, freeriding<br>Incapable team members  | Poor communication<br>Freeriders   |
| What would you anticipate being the greatest benefit that you would realize utilizing the <b>student taught lecture</b> format?    | Better communication within students, Common Language<br>More fun, creative<br>Prep. for real life                     | Improved presentation skills   |
| What would you anticipate being the greatest obstacle that you would encounter utilizing the <b>student taught lecture</b> format? | Poor lecture qualifications of the student due to poor English and self confidence                                     | More anxiety, harder to learn, requires harder work                        |
| How would you characterize your <b>overall attitude</b> toward the small team learning format?                                     | Not sure but likes to experience, first experience, has doubts on the effects on grades. Wants to choose team members. | Not happy due to coordination problems within the group, but still useful. |

While compilation and assessment of objective data is ongoing; anecdotal feedback from students indicated that students are not comfortable with performing team-based learning and do not possess enough information about the course because of some problems of being team. One of the most important responses on the problems of team-based learning was with responsibility allocation within the team. This problem was a negative shift in students' perceived attitude toward the small team learning format and caused ineffectiveness in course. Some students, especially high GPA students raised complaints about the unequal distribution of effort among team members. They argue that, some people avoided responsibility which caused dissatisfaction. The other stated reason of ineffectiveness is that the team consists of different people who do not recognize each other.

## 5. Conclusion

The results of this study open a new path of research in integrating small team-based learning into a management course. Overall; although students reported dissatisfaction and decreased motivation towards team work, the survey results also reveal that they have developed many skills. The main aim of the active learning method has been achieved, team-based learning can be seen as a valuable instructional method. The results of this first attempt reveal that more detailed, further research is needed to examine the motivation of students, possible effects of the team-based learning on preparing students to work life, the relation between perceived results and actual results particularly for the y-generation.

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