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## An in-Class Project Model: Active Learning and Effective Participation

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### ABSTRACT

The problems we encounter today in terms of information, technology, and human qualifications have relatively complicated structures. Today information is developing and increasing rapidly and technology is spreading into our daily life in many respects and individuals who can see the relationship between pieces of information, analyze information and synthesize new information, then use synthesized information for solving the problems they encounter are preferred rather than individuals having unrelated memorized pieces of information. In such a process, learning models, in which learners assume responsibility and manage their own learning, learners are active in intellectual and physical terms during learning process, and learners' permanent learning is ensured at the end of the process, become important.

The purpose of the study is to share the "Active Learning and Effective Participation" project as an application model which allows students to be more active in the lesson by taking the responsibility of their own learning. While the project was planned, opinions of students on in-lesson processes were determined through a questionnaire applied on 319 students. The "Active Learning and Effective Participation" project was conducted in Gaziantep College Foundation Private Schools in the fall semester of the 2013-2014 academic year for two months. A total of 627 students participated in the project and students stated their positive opinions on the application of the project at the end of the project. Some of these opinions are as follows: the active learning effective participation project ensures more in-class activity participation, is beneficial for learning the subjects, allows information learned to be permanent and effective, ensures that students talk more in classroom discussions, contributes to studying in cooperation, and increases interest in the subjects, the feeling of curiosity, and questioning skills. The students added that their lessons were more efficient and they developed different points of views thanks to the application. Opinions of teachers also support that efficient and effective results are achieved from the applied project.

**Keywords:** Active learning, effective participation, in-class application model.

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## Sınıf İçi Bir Proje Örneği: Aktif Öğrenme ve Etkin Katılım

### ÖZ

Günümüz bilgi, teknoloji ve insan niteliklerine göre karşılaştığımız sorunlar oldukça karmaşık bir yapıya sahiptir. Bilginin hızla gelişip arttığı, teknolojinin pek çok boyutuyla günlük yaşamımıza girdiği çağımızda, birbiriyle ilişkisiz ezber bilgi parçacıklarına sahip olan bireyler değil, bunlar arasındaki ilişkileri görebilen, bilgiyi analiz edip yeni bilgiler sentezleyebilen ve sentezlediği bu bilgileri, karşısına çıkan sorunların çözümünde kullanabilen bireyler istenmektedir. Böyle bir süreçte ise, öğrenenin kendi öğrenmesinin yönetim ve sorumluluğunu taşıdığı, öğrenme sürecinde hem zihinsel hem de fiziksel yönden aktif olduğu, süreç sonunda kalıcı öğrenmeler sağlandığı öğrenme modelleri daha fazla önem kazanmaktadır.

Bu çalışmanın amacı; öğrencilerin kendi öğrenmelerinin sorumluluğunu alarak ders sürecinde daha aktif olmalarını sağlayan bir uygulama örneği olarak “Aktif Öğrenme ve Etkin Katılım” projesini paylaşmaktır. Proje planlanırken 319 öğrenciye uygulanan anket formu ile öğrencilerin ders içi süreçlere yönelik görüşleri belirlenmiştir. “Aktif Öğrenme ve Etkin Katılım” projesi, 2013-2014 akademik yılı güz yarıyılında, Gaziantep Kolej Vakfı Özel Orta Okulu’nda, iki ay süresince uygulanmıştır. Toplam 627 öğrencinin katıldığı projenin sonunda öğrenciler projenin uygulanmasına ilişkin olumlu görüşlerini belirtmiştir. Bunlardan bazıları: aktif öğrenme, etkin katılım projesinin sınıf içi etkinliklere daha fazla katılım sağlaması, konuları öğrenmede yararlı olması, öğrenilen bilgilerin kalıcı ve etkili olması, sınıf içinde daha fazla söz almayı sağlaması, iş birliği halinde çalışmaya katkı sağlaması, konulara ilgi duymayı, merak duygusu ve sorgulama becerilerini artırdığı biçimindedir. Öğrenciler bu uygulama ile derslerin daha verimli geçtiğini ve farklı bakış açıları geliştirdiklerini de görüşlerine eklemişlerdir. Öğretmenlerden alınan görüşler de uygulanan projeden verimli ve etkili sonuçların alındığını desteklemektedir.

**Anahtar Sözcükler:** Aktif öğrenme, etkin katılım, sınıf içi uygulama örneği.

## INTRODUCTION

Active learning is a state of learning in which students are active in a general sense. It pulls the learner out of the passive audience and observer position, and pulls him/her into the learning. However, it encourages a learner not only simply participating in the learning process but also using intellectual skills, thinking, interpreting information learned, and taking decisions related to the learning process. The learner plays an active role in the learning process, directs his/her own learning, uses his/her high thinking and decision making skills, and cooperates with other learners. A teacher is in a position that facilitates learning in the process and learns together with his/her students.

Primary school students tend to be on the move and participate in in-class activities actively due to their development characteristics. The situation can be an indicator that they are willing to learn actively. One of the two main active learning characteristics is that learning occurs via doing action and participation of students (Karakaya, 1997; Keyser, 2000; Lowman, 2000; Pekin, 2000; Açıkgöz, 2000; 2002; Yılmaz, 1995).

According to Prosser and Trigwel (1999), active learning is a learning centered approach and is the most effective way enabling students to learn (cited by Healey and Robberts, 2004). Meyers and Jones (1993) stated that active learning included three factors. These are key components, learning strategies, and teaching researches. Key components of the active learning approach are speaking, listening and writing. It should be ensured that students participate in cognitive activities, make classification, ask questions, combine what they learn, and acquire new information with these three components. The second component of active learning, which is learning strategies, is small groups, cooperative learning studies, case study, demonstration, discussion, problem solving, and daily writing. The third component of active learning that is teaching research is used by the teacher for ensuring active participation by encouraging students. The situation involves making research, talking to people outside the class, using materials such as prepared educational materials, radio and television for education at the same time (Sivan et al., 2000). According to Açıkgöz (2003, 17) active learning is a learning process in which the learner assumes the responsibility of learning process, the learner has the opportunity of making decisions about different aspects of learning process and making self-regulation, and learner's intellectual skills are made to be used via complicated educational processes during learning.

One of the important characteristics of active learning is that it relieves students of learning by memorization. Curiosity, suspicion, and activities such as research, application, and learning by experience take the place of memorization. Flexibility in tasks and intervention should be ensured in learning environment created according to active learning model (Pekin, 2000).

Other characteristics of active learning are creating effective learning process via relieving a student of a passive status, integrating student with real life, and realizing permanent learning (Bayrak, 2000; Demirel, 1999; Açıkgöz 1999; 2003). Key movement points for determining targets of active learning environment are interest, needs, learning speed, and personal characteristics of students (Demirci, 2000).

Determination of targets means that students use high level cognitive proficiencies such as analysis, synthesis, and assessment, and develop their problem solving skills together with affective skills (Allen, 1995; Bonwell & Eison, 2001; Seeler, 2000). According to Demirel (1999), process assessment should be made considering process more than product while determining an objective in active learning. Açıkgöz (2000; 2003) focuses on the idea of active learning being a model developing during process and indicates that targets should be determined considering process not the product in active learning. Active learning includes activities such as planning and reviewing of the learning process by student. The student is an active member of the learning process; learning is an evolving process; therefore, interaction of a student with the environment and activities improving his/her learning skills during learning process gain importance.

Since the student is eclectic in active learning positioning the student at the center of the learning process, many techniques, methods, strategies, and materials can be used, and they vary according to level, targets and subject of lesson (Demirel, 1999; Karakaya, 1997; Keyser, 2000; Lowman, 2000; Açıkgöz, 2002; Yılmaz, 1995). However, the most important one is concentrating on learning by activities in compliance with theoretical approaches (Pekin, 2000).

Sivan et al. (2000) stated that the active learning approach created curiosity in students in addition to increasing students' successes, and increased using and developing information, independent learning skills as well as future planning skills. Newmann and Wehlage (1991) mentioned that social relations during student centered education were important for increasing student successes in the classroom. They indicated that students acquired high level information and skill, and their successes increased since they learned by mutual interactions in classes in which social support was high. Similarly, in the studies conducted with the active learning approach, Robson (1998) concluded that students learned more easily and effectively receiving the support of each other.

The purpose of the study is to share the "Active Learning Effective Participation" project as an application model which allows students to be more active in lesson taking the responsibility of their own learning.

## **METHOD**

### **Model of the Study**

This study was conducted according to the survey method. The survey method consists of studies, in which opinions of participants regarding the subject or an event and their interests, skills, abilities, attitudes and similar characteristics are determined (Büyüköztürk et al. 2009:231). This study was conducted in the Fall semester of the 2013-2014 academic year.

### **Study Group**

The study group consists of a total of 627 students studying in the 5<sup>th</sup>, 6<sup>th</sup>, and 7<sup>th</sup> grades at the Gaziantep College Foundation Private Schools during the 2013-2014 academic year.

### **Data Collection Instruments**

As a data collection instrument, the questionnaire developed by the investigators for the purpose of determining the opinions of parents on the application after the application period was used in the study. Furthermore, at the end of the study the reading tracking table prepared for the purpose of determining how many hours of reading was actualized in total was utilized.

### **Process Steps**

Following the planning of the project to be applied, a questionnaire was conducted to 319 students for the purpose of determining opinions of students on in-lesson process. Information on the project was given to students participating in the study in October. The project was applied by the students in the study group during November and December. At the end of December, a questionnaire was applied to students for assessing the effect of the applied project. Data obtained by applying the questionnaires were analyzed numerically, presented in the form of tables and then interpreted.

## **FINDINGS AND INTERPRETATIONS**

In this section of the study, there are research findings and interpretations regarding the findings. The data collected from the students under the scope of the study were grouped and presented in the form of tables. Also, some opinions of teachers of classes where the project was applied were demonstrated.

While performing planning about the project, it was decided to start with determining what the opinions of students on in-lesson processes were. Accordingly, Table 1 shows opinions of students on the lesson process that are attempted to be determined with the questionnaire form applied to 319 students.

**Table 1.** Distribution of students' opinions on the lesson process prior to implementing the project

	YES	PARTLY	NO
1) Do you participate in in-class activities?	245	71	3
2) Do you give answers to the questions of your teachers?	249	70	0
3) Do you ask questions you have difficulty in solving to your teacher?	190	112	17
4) Do you get excited when you talk in discussions?	110	100	109
5) Do you have anxiety for giving wrong answers?	122	124	73
6) Do you want to talk more in classroom discussions?	177	97	45
7) Do you think asking questions in classes has an effect on learning the subject?	267	39	13
8) Does asking questions increase your attention to the lesson?	239	58	22
9) Does not participating effectively in the lesson make you unhappy?	182	73	64
10) Do you think that students highly participating in the lesson are more successful?	182	86	51
11) Do you think that time passes more quickly when you participate in the lesson?	255	36	28
12) Are you annoyed when your classmates ask more questions?	55	98	166
13) Do you want that everyone in the class participate in the lesson effectively?	249	55	15
14) Does asking questions in the lesson allow you to express yourself better?	248	51	20
15) Is participating in the lesson related to whether or not you are interested in the lesson?	184	70	65
16) Does the manner of the presentation of the teacher influence your participation in the lesson?	253	33	33

As demonstrated in Table 1, most of the students stated that they participated in in-class activities, answered questions of the teacher, asked the questions they had difficulty in solving, and wanted to talk in classroom discussions much more. On the other hand, they expressed that asking questions in the classroom was effective in learning the lesson and increased attention to the lesson, students highly participating in the lesson were more successful, time passed more quickly when they participated in the lesson, and asking questions in the lesson allowed them to express themselves better.

Students were provided to be more active in the lessons during the application of the “Active learning effective participation” project. Students were provided the opportunity to engage in effective group work. Also, it was ensured that students were continuously in the center of the subjects asking questions in different classes and answering questions. Many topics were discussed in discussion groups formed by students. Therefore, students attempted to structure their knowledge by actively participating in the lesson through the support and guidance of the teacher during the project.

Following the project application lasting for two months; a questionnaire form was created to determine the opinions of students. Table 2 shows data obtained from the form.

**Table 2.** Distribution of students' opinions after the implementation of the project

	YES	PARTLY	NO
1) Did the active learning and effective participation theme ensure that you participated in in-class activities much more?	363	158	104
2) Was it beneficial for learning the subjects?	412	103	112
3) Did it enable you to learn through performance and experience?	385	122	120
4) Was information you learned permanent and effective?	364	167	96
5) Did it ensure that you to talked more often in classroom discussions?	263	240	122
6) Did it contribute to drawing your attention during the lesson?	325	171	131
7) Were the applied method and techniques effective?	325	173	127
8) Did it contribute to working in cooperation?	377	121	127
9) Did it increase your curiosity?	347	159	120
10) Did it increase your desire to be interest in the subjects?	376	129	121
11) Did it contribute to the development of your inquisitive ability?	342	179	107
12) Do you think that lesson time passed more effectively?	356	156	114
13) Did it contribute to the development of different points of views?	350	150	124
14) Do you think that lesson time passed more enjoyably?	323	165	138
15) Is participating in the lesson related to whether or not you are interested in the lesson?	356	147	129
<b>Total</b>	<b>5264</b>	<b>2340</b>	<b>1792</b>

As shown in Table 2, students stated that the "Active Learning Effective Participation" project provided much more participation in in-class activities, was beneficial for learning subjects, ensured learning through performance and experience, ensured that learned information was permanent and effective, and ensured students talked in lesson discussions more often.

Students also stated about the implemented project that it drew their attention during the lesson, applied method and techniques were effective, it increased curiosity and desire to be interested in subjects, it developed questioning skill, and contributed to working in cooperation. Following all these positive opinions, students mentioned that class time passed more enjoyably and effectively, and it contributed to the development of different points of views.

According to obtained data, it is understood that students are pleased with the application process of the active learning effective participation project. The fact that the lesson passes enjoyably, students are in the position of productive and active individuals who produce ideas and question information while teachers are in the guiding position is considered to be effective on this outcome. Students' being active



in the lesson time contributed to their learning enjoyably and effectively. Active learning can be interpreted such that application of the effective participation project has a positive effect on learning – teaching process.

The effect of the active learning model on the learning and teaching process is a subject that is examined by other investigators. In this context, Boas (1989) reached a judgment that primary school students were interested in and curious about activities done in the active learning environment. Lunenberg and Volman (1997) reached a conclusion that adult students in the active learning process should establish a connection between materials about the lesson and real life themselves. McNeal (2001) emphasized that small group activities in the active learning environment and class assessment technique in university philosophy lectures had positive contributions to learning process.

Opinions of some teachers contributing to the project implementation are as follows:

*S.O.:* Thanks to the “Active Learning, Effective Participation” project, even students who don’t like coming to the fore, refrain from his/her friends or consider participating in the lesson unnecessary start to talk in discussions and ask questions. But the most interesting and striking factor is that this becomes a pattern of students after a while. This study also allowed me to realize the fact: request for approval. The “+”, “-“ list prepared for noting and observing students that talk in classroom discussions drew the attention of students and ensured that they participated in the lesson. The students took the list so seriously although we emphasized many times that “+” or “-“ had no effect on the pass grade, accordingly this situation demonstrated the extent that students needed a positive approach (feeling of being successful in a subject). Since the need was met, interests of students on the class increased and they used such statements as “The lesson was so enjoyable.” or “The lesson passed too quickly.” frequently. The other positive aspect of the study is that students write questions about the subject in small papers at the end of each class. Because, I get the opportunity of realizing and making up deficiencies of students about the subject as well as understanding to what extent they mastered the subject. I want to add here that I am glad to be in the project. Although the project was completed, I decided to maintain it in all my classes because I obtained so much efficiency. This decision also pleased the students. As long as I am a teacher, I will continue to use it. Thank you.

*N.B.:* All students talked in classroom discussions and participated in the lesson effectively in the “Active Learning, Effective Participation” project. Students who were silent, introverted, didn’t want to participate in the lesson or were uninterested in the lesson exhibited more positive attitude to the lesson with the project we applied. Since each student had to talk in classroom discussion at least once in the lesson, uninterested students participated in the lesson and they became interested in time, this continued voluntarily. Thanks to the “+” and “-“ charts, students started to compete with one another. I think the activity affects the friendship of students positively. Self-confidences of the students who were introverted, shy and refrained from their friends increased when they

*started to be active and talk in the class. This self-confidence reinforced links between their friends. They started to express themselves better.*

*M.Ö.: "It is an application of keeping teachers alive and making students active. Sometimes even a small trigger can be effective on learning. Since students participate in the lesson actively with the project, dialog between the student and teacher improves more and more. The student learns with pleasure as s/he adds something from himself/herself. It is very good particularly for motivating students who have very short attention spans to the lesson.*

## CONCLUSION AND SUGGESTIONS

The following conclusions were obtained from the application of the Active Learning, Effective Participation project conducted for ensuring more active participation of students in the lesson:

The Active Learning, Effective Participation project

- Ensured student participation in in-class activities much more,
- was beneficial for learning the subjects,
- ensured students learn through performance and experience,
- ensured that knowledge learned by students was permanent,
- ensured students to talk more often in the classroom discussions,
- contributed to drawing attention during the lesson,
- contributed to working in cooperation,
- improved feelings of curiosity, interested, and inquisitive abilities of students,
- enabled the lesson to pass more efficiently,
- contributed to the development of different points of views, and
- ensured that the lesson passed more enjoyably.

The following recommendations can be developed depending on these conclusions obtained from the application of the project:

- Students' more effective and permanent learning can be achieved by ensuring that they are active in all lessons and participate actively in the lessons.
- Practical training can be provided to teachers for ensuring that students are more active in the classes.
- Reaching targets of the lesson can be compared in cases when students participate in the lessons and when they don't.

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